



MINISTRY OF EDUCATION

Clothing and Textiles for Senior High Schools

TEACHER MANUAL



YEAR ONE



NATIONAL COUNCIL FOR
CURRICULUM & ASSESSMENT
OF MINISTRY OF EDUCATION

MINISTRY OF EDUCATION



REPUBLIC OF GHANA

Clothing and Textiles

for Senior High Schools

Teacher Manual

Year One



**NATIONAL COUNCIL FOR
CURRICULUM & ASSESSMENT
OF MINISTRY OF EDUCATION**

CLOTHING AND TEXTILES TEACHER MANUAL

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CONTENTS

LIST OF FIGURES	VIII
INTRODUCTION	1
ACKNOWLEDGEMENTS	4
SUMMARY SCOPE AND SEQUENCE	11
SECTION 1: UNDERSTANDING CLOTHING CONCEPTS AND PRINCIPLES FOR PERSONAL GROOMING	13
Strand: Psychosocial Aspect of Clothing	13
Sub-Strand: Understanding Concepts and Principles of Clothing	13
Sub-Strand: Understanding Concepts and Principles of Clothing	13
Week 1: Understanding the Concept and Classification of Clothing	16
Focal Area 1: Concept of Clothing	16
Focal Area 2: Classification of Clothing	22
Week 2: Purpose of Clothing and Techniques for Clothing Care and Maintenance	27
Focal Area 1: Reasons for wearing clothes	27
Focal Area 2: Ways/techniques for caring and maintaining clothing	30
Week 3: Interpretation and Importance of Care Labels in Clothing	34
Focal Area 1: Information on care labels	34
Focal Area 2: The Importance of Good Clothing Care Labels	39
APPENDIX A: GROUP PROJECT WORK	44
APPENDIX B: PORTFOLIO ASSESSMENT	46
SECTION 2: WARDROBE PLANNING AND APPEARANCE MANAGEMENT: PRINCIPLES AND PRACTICES	48
Strand: Psychosocial Aspect of Clothing	48
Sub-strand: Wardrobe Planning and Appearance Management Practices	48
Sub-strand: Wardrobe Planning and Appearance Management Practices	48
Week 4: Wardrobe Planning and Its Role in Clothing Management and Personal Identity	50
Focal Area 1: Concept of wardrobe and wardrobe planning	50
Focal Area 2: Wardrobe Planning and Practical Application	56
Week 5: Good Grooming and Factors that Promote Good Grooming	60
FOCAL AREA 1: The Concept of Good Grooming	60
FOCAL AREA 2: Examine the factors that promote good grooming	62
SECTION 3: UNDERSTANDING THE PROPERTIES AND APPLICATIONS OF FIBRES AND FABRICS IN TEXTILES	68
Strand: Textiles in Clothing	68
Sub-Strand: Characteristics of Fibres and Fabrics Functionality	68

Sub-Strand: Characteristics of Fibres and Fabrics Functionality	68
Week 6: Classification and Testing of Textile Fibres	70
FOCAL AREA 1: The concept of fibres	70
FOCAL AREA 2: Test for the characteristics of fibres	75
Week 7: Investigate the absorbency, durability and elasticity of different fabric types	78
Focal Area 1: Absorbency, durability and elasticity of different fabric types	78
FOCAL AREA 2: How the properties of fibres influence the selection of fabrics for specific purposes	80
APPENDIX C: MID-SEMESTER EXAMINATION (1ST SEMESTER)	84
SECTION 4: UNDERSTANDING FIBRES AND FABRICS IN CLOTHING CONSTRUCTION	86
Strand: Textiles in Clothing	86
Sub-strand: Fibres and Fabrics in Clothing Construction	86
Sub-strand: Fibres and Fabrics in Clothing Construction	86
Week 8: Relationship Between Fibres, Fabrics, and Their Properties in Garment Making	88
Focal Area 1: Categorise and relate fibres to fabrics used in garment making	88
Focal Area 2: Properties of common fabrics and how they influence fabric selection for different clothing styles	93
Week 9: Experimental Analysis and Evaluation of Fabric Performance in Clothing Construction	98
Focal Area1: The absorbency, durability and elasticity of different fabric types through simple experiments	98
Focal Area 2: Advantages and disadvantages of different fabrics in clothing construction	102
SECTION 5: MASTERING SEWING TOOLS, TECHNIQUES AND GARMENT CONSTRUCTION	106
Strand: Clothing and textiles production technology	106
Sub-strand: Clothing Construction Processes	106
Week 10: Classification and Proper Use of Sewing Tools and Equipment	109
Focal Area1: Classification of sewing tools, equipment according to their functions	109
Focal Area 2: Appropriate handling and maintenance of sewing tools and equipment	116
Week 11: Compare types of sewing machine and other sewing tools in terms of function and use	118
Focal Area: Comparing hand sewing machine and other sewing tools in terms of function and use	118
Week 12: Identification and Application of Sewing Notions and Basic Stitches in Garment Construction	124
Focal Area 1: Common Sewing Notions	124
Focal Area 2: The concept of stitches	125
Week 13: Classification and Application of Stitches in Clothing Construction	128
Focal Area 1: Categorisation of stitches based on their functions	128
FOCAL AREA 2: How to make samples and functions of stitches	131
Week 14: Make Sample Stitches	133
Focal Area: Make samples of stitches	133

Week 15: Identification and Construction of Seams in Garment Making	136
Focal Area 1: Concept of seams	136
FOCAL AREA 2: Make samples of selected Seams	139
Week 16: Make samples of selected Seams	143
FOCAL AREA: Make samples of selected Seams	143
Week 17: Application and Evaluation of Edge Finishes in Garment Construction	146
Focal Area 1: The concept of edge finishes	146
FOCAL AREA 2: Strength and appearance of different edge finishes in clothing construction	150
APPENDIX D: END OF SEMESTER EXAMINATION (1ST SEMESTER)	154
APPENDIX E: INDIVIDUAL PROJECT WORK	156
SECTION 6: TECHNIQUES OF FULLNESS, OPENINGS AND FASTENINGS IN FASHION DESIGN AND GARMENT CONSTRUCTION	158
Strand: Clothing and Textiles Production Technology	158
Sub-Strand: Fashion Design and Garment Construction Technology	158
Week 18: Techniques for Creating and Applying Fullness in Garment Construction	161
FOCAL AREA 1: Arrangement of fullness in clothing construction	161
FOCAL AREA 2: Make samples of fullness used in clothing construction	164
Week 19: Fullness Techniques and Their Effect on Garment Fit and Appearance	167
FOCAL AREA 1: Make samples of fullness used in clothing construction	167
FOCAL AREA 2: The impact of fullness techniques on the fit and appearance of garments	169
Week 20: Types and Construction of Garment Openings	171
Focal Area 1: The concept of garment openings	171
Focal Area 2: Construction of selected types of garment openings	174
Week 21: Garment Openings and Their Application in articles	179
FOCAL AREA 1: Construction of selected types of garment openings	179
FOCAL AREA 2: Factors that influence the suitability different openings on articles	180
Week 22: Fasteners and Their Application in Garment Construction	183
Focal Area 1: Types and Applications of Fasteners	183
FOCAL AREA 2: Techniques for Attaching Fasteners	185
Week 23: Techniques for Attaching Fasteners Securely and Neatly	188
FOCAL AREA: Techniques for Attaching Fasteners	188
Week 24: Evaluate the durability and aesthetic appeal of different fasteners in garment design	191
FOCAL AREA: Evaluating the Durability and Aesthetic Appeal of Fasteners in Garment Design	191
APPENDIX F: MID-SEMESTER EXAMINATION (2ND SEMESTER)	195
APPENDIX G: END OF SEMESTER EXAMINATION (2ND SEMESTER)	196

LIST OF FIGURES

Figure 1: Clothes	23
Figure 2: Accessories	24
Figure 3: Cosmetics	25
Figure 4: Protective clothes	27
Figure 5: Adornment	28
Figure 6: Modesty	28
Figure 7: Group Identity	29
Figure 8: Techniques for Caring and Maintaining Clothes (Source: Pinterest.com)	31
Figure 9: Care Labels/ Tags	34
Figure 10: Care Symbols and Instructions	36
Figure 11: Forms of wardrobe (Source: Pinterest)	51
Figure 12: Sitting Posture	62
Figure 13: A balanced Diet	62
Figure 14: Regular Exercise	63
Figure 15: Rest and Relaxation	63
Figure 16: Personal Hygiene	64
Figure 17: Environmental Hygiene	64
Figure 18: Jewellery Care	65
Figure 19: Terminologies in Fibres	70
Figure 20: Pictures and Description of Fabric Construction Terminologies	88
Figure 21: Measuring Tools	110
Figure 22: Cutting Tools	111
Figure 23: Marking Tools	111
Figure 24: Stitching Tools	112
Figure 25: Fitting Equipment	113
Figure 26: Pressing Tools	114
Figure 27: Storage Equipment	115
Figure 29: Types of Sewing Machines	122
Figure 29: Sewing Notions	125
Figure 30: Samples of Stitches	126
Figure 31: Examples of Edge Finishes	148
Figure 32: Methods of Arranging Fullness	163
Figure 33: Types of Openings	173
Figure 34: Samples of Fasteners	186

INTRODUCTION

The National Council for Curriculum and Assessment (NaCCA) has developed a new Senior High School (SHS), Senior High Technical School (SHTS) and Science, Technology, Engineering and Mathematics (STEM) Curriculum. It aims to ensure that all learners achieve their potential by equipping them with 21st Century skills, competencies, character qualities and shared Ghanaian values. This will prepare learners to live a responsible adult life, further their education and enter the world of work.

This is the first time that Ghana has developed an SHS Curriculum which focuses on national values, attempting to educate a generation of Ghanaian youth who are proud of our country and can contribute effectively to its development.

This Teacher Manual for Clothing and Textiles covers all aspects of the content, pedagogy, teaching and learning resources and assessment required to effectively teach Year One of the new curriculum. It contains this information for the first 12 weeks of Year One, with the remaining 12 weeks contained within Book Two. Teachers are therefore to use this Teacher Manual to develop their weekly Learning Plans as required by Ghana Education Service.

Some of the key features of the new curriculum are set out below.

Learner-Centred Curriculum

The SHS, SHTS, and STEM curriculum places the learner at the center of teaching and learning by building on their existing life experiences, knowledge and understanding. Learners are actively involved in the knowledge-creation process, with the teacher acting as a facilitator. This involves using interactive and practical teaching and learning methods, as well as the learner's environment to make learning exciting and relatable. As an example, the new curriculum focuses on Ghanaian culture, Ghanaian history, and Ghanaian geography so that learners first understand their home and surroundings before extending their knowledge globally.

Promoting Ghanaian Values

Shared Ghanaian values have been integrated into the curriculum to ensure that all young people understand what it means to be a responsible Ghanaian citizen. These values include truth, integrity, diversity, equity, self-directed learning, self-confidence, adaptability and resourcefulness, leadership and responsible citizenship.

Integrating 21st Century Skills and Competencies

The SHS, SHTS, and STEM curriculum integrates 21st Century skills and competencies. These are:

- **Foundational Knowledge:** Literacy, Numeracy, Scientific Literacy, Information Communication and Digital Literacy, Financial Literacy and Entrepreneurship, Cultural Identity, Civic Literacy and Global Citizenship
- **Competencies:** Critical Thinking and Problem Solving, Innovation and Creativity, Collaboration and Communication
- **Character Qualities:** Discipline and Integrity, Self-Directed Learning, Self-Confidence, Adaptability and Resourcefulness, Leadership and Responsible Citizenship

Balanced Approach to Assessment – not just Final External Examinations

The SHS, SHTS, and STEM curriculum promotes a balanced approach to assessment. It encourages varied and differentiated assessments such as project work, practical demonstration, performance assessment, skills-based assessment, class exercises, portfolios as well as end-of-term examinations and final external assessment examinations. Two levels of assessment are used. These are:

- Internal Assessment (30%) – Comprises formative (portfolios, performance and project work) and summative (end-of-term examinations) which will be recorded in a school-based transcript.
- External Assessment (70%) – Comprehensive summative assessment will be conducted by the West African Examinations Council (WAEC) through the WASSCE. The questions posed by WAEC will test critical thinking, communication and problem solving as well as knowledge, understanding and factual recall.

The split of external and internal assessment will remain at 70/30 as is currently the case. However, there will be far greater transparency and quality assurance of the 30% of marks which are school-based. This will be achieved through the introduction of a school-based transcript, setting out all marks which learners achieve from SHS 1 to SHS 3. This transcript will be presented to universities alongside the WASSCE certificate for tertiary admissions.

An Inclusive and Responsive Curriculum

The SHS, SHTS, and STEM curriculum ensures no learner is left behind, and this is achieved through the following:

- Addressing the needs of all learners, including those requiring additional support or with special needs. The SHS, SHTS, and STEM curriculum includes learners with disabilities by adapting teaching and learning materials into accessible formats through technology and other measures to meet the needs of learners with disabilities.
- Incorporating strategies and measures, such as differentiation and adaptative pedagogies ensuring equitable access to resources and opportunities for all learners.
- Challenging traditional gender, cultural, or social stereotypes and encouraging all learners to achieve their true potential.
- Making provision for the needs of gifted and talented learners in schools.

Social and Emotional Learning

Social and emotional learning skills have also been integrated into the curriculum to help learners to develop and acquire skills, attitudes, and knowledge essential for understanding and managing their emotions, building healthy relationships and making responsible decisions.

Philosophy and vision for each subject

Each subject now has its own philosophy and vision, which sets out why the subject is being taught and how it will contribute to national development. The Philosophy and Vision for Clothing and Textiles is:

Philosophy: The next generation of Clothing and Textiles professionals will be empowered through observation, curiosity, innovation and exposure to practically related concepts and opportunities that leverage hands-on activities. Emphasis will be placed on the creative use and application of scientific principles in textile science, garment construction, fashion design and

sustainable clothing practices within a learner-centred environment. This approach aims to prepare individuals for further education and/or seamless transition into the world of work.

Vision: A learner equipped with skills and competencies to create innovative clothing designs, develop textile products, establish and manage fashion industries that contribute meaningfully to the socio-economic development of Ghana.

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SUMMARY SCOPE AND SEQUENCE

S/N	STRAND	SUB-STRAND	SENIOR HIGH SCHOOL								
			YEAR 1			YEAR 2			YEAR 3		
			CS	LO	LI	CS	LO	LI	CS	LO	LI
1.	Psychosocial Aspect of Clothing	Understanding concepts and Principles of clothing.	2	2	6	2	2	5	1	1	3
		Wardrobe Planning and Appearance Management practices.	2	2	4	2	2	4	1	1	3
2.	Textiles in Clothing	Characteristics of Fibres and Fabrics Functionality.	2	2	4	2	2	4	1	1	4
		Fibres and Fabrics in Clothing Construction.	2	2	4	2	2	6	-	-	-
3.	Clothing and Textiles Production Technology	Clothing Construction Processes	3	3	11	2	2	6	1	1	3
		Fashion Design and Garment Construction technology.	3	3	9	3	3	10	1	1	3
Total			14	14	38	13	13	35	5	5	16

Overall Totals (SHS 1 – 3)

Content Standards	32
Learning Outcomes	32
Learning Indicators	89

SECTION 1: UNDERSTANDING CLOTHING CONCEPTS AND PRINCIPLES FOR PERSONAL GROOMING

Strand: Psychosocial Aspect of Clothing

Sub-Strand: Understanding Concepts and Principles of Clothing

Learning Outcome: *Select and use clothing suitable for various occasions.*

Content Standard: Demonstrate knowledge and understanding of the concept of clothing, reasons for wearing clothes, care and maintenance.

Sub-Strand: Understanding Concepts and Principles of Clothing

Learning Outcome: *Apply knowledge and understanding of clothing care techniques and skills in interpreting care labels to ensure the proper maintenance and longevity of clothing.*

Content Standard: Demonstrate knowledge and understanding to analyse care label information on various techniques for maintaining garments quality.

Hint



- Assign **Group Project** by **Week 2**. This should be submitted after Week 10. Refer to Appendix A at the end of section 1 and Teacher Manual and Assessment Toolkit pages 27–29 for more information on Project-Based Assessment.
- Assign **Portfolio Assessment** for the Academic Year by **Week 3**. Portfolio should be submitted by Week 22. Refer to Appendix B at the end of section 1 and the Teacher Assessment Manual and Toolkit pages 22–25 for more information on how to organise Portfolio Assessment.

INTRODUCTION AND SECTION SUMMARY

The section aims to develop learners' understanding of the psychosocial aspects of clothing, supporting them to make informed, respectful and practical choices about what they wear and how they care for it. Key areas of focus include understanding the concept, classification and purposes of clothing, the factors that influence clothing selection and the importance of proper clothing care and maintenance. Learners are guided to explore cultural, environmental and personal factors such as climate, fashion trends, religion, family budget, occupation, age and gender that shape clothing choices in their communities.

The section also highlights the multiple functions of clothing—from protection and modesty to adornment, communication of identity and expression of mood or status emphasising that

clothing is not only functional but also a powerful cultural and social tool. Additionally, lessons develop practical skills in interpreting care labels, applying proper laundering, ironing, mending and storage techniques to extend the life and quality of garments.

The minimum competencies required include the ability to identify and classify different types of clothing, analyse factors affecting clothing selection, discuss the purposes of clothing in society and demonstrate knowledge of appropriate clothing care and maintenance. Learners will appreciate the role of clothing in expressing identity and culture and develop responsible attitudes toward personal hygiene and sustainable clothing use.

The weeks and indicators covered by the section are:

Week 1: Explain the concept of clothing and classify clothes under various categories.

Week 2: Discuss the reasons for wearing clothes and analyse various ways/techniques for caring and maintaining clothing.

Week 3: Analyse information on clothing care labels and discuss the importance of good clothing care labels.

SUMMARY OF PEDAGOGICAL EXEMPLARS

This section employs a variety of pedagogical exemplars to make lesson delivery engaging, participatory and learner-centred. A few of the pedagogical approaches used include **Talk for Learning**, **Group or Collaborative Learning**, **Experiential Learning**, **Structured Talk for Learning** and **Problem-Based Learning**. For example, learners are encouraged to brainstorm ideas, share personal experiences, analyse clothing classification and factors influencing clothing selection and investigate real-life clothing care techniques. Group work tasks promote collaboration, critical thinking and inclusive participation through activities such as concept mapping, poster creation, simulations and multimedia presentations. Structured talk activities supported by realia, pictures, care labels and charts help to anchor abstract ideas in familiar, practical contexts.

Teachers are, however, expected to explore and apply other pedagogical exemplars suitable for each focal area, rather than limiting themselves to those explicitly mentioned. In addition, teachers are encouraged to incorporate cross-cutting issues such as **Gender Equality and Social Inclusion (GESI)**, **Special Educational Needs (SEN)**, **Social and Emotional Learning (SEL)**, **21st Century Skills**, **Core National Values** and **ICT** into lesson delivery to make learning more interactive, inclusive and learner-centred.

ASSESSMENT SUMMARY

The assessment framework for this section ensures that learners are evaluated on both their theoretical understanding and their practical application of key concepts related to clothing. The assessment strategy aims to validate learners' knowledge of the concept, classification, functions and selection of clothing, as well as their understanding of appropriate clothing care and maintenance techniques.

It also seeks to measure learners' ability to analyse factors that influence clothing choices, appreciate cultural and social contexts, and apply appropriate methods for laundering, ironing, mending and storing garments. Practical assessments encourage learners to interpret care label instructions accurately, demonstrate stain removal or mending skills and create visual displays that classify different clothing items.

Teachers are encouraged to vary their assessment strategies to accommodate learners at different Depth of Knowledge (DoK) levels and with diverse experiences. Assessment tasks should be aligned with learning activities, learning indicators and pedagogical exemplars to create synergy across the curriculum. Specific examples of assessment tasks including individual written exercises, group presentations, interviews, demonstrations and community-based research have been outlined in the section to guide teachers in delivering meaningful, relevant and inclusive assessment experiences.

WEEK 1: UNDERSTANDING THE CONCEPT AND CLASSIFICATION OF CLOTHING

Learning Indicators

1. *Explain the concept of clothing*
2. *Classify clothes under various categories*

FOCAL AREA 1: CONCEPT OF CLOTHING

Clothing refers to anything worn or carried on the body to enhance or alter one's appearance. This includes garments, accessories, cosmetics, hairstyles and even complete body coverings. Within a particular culture, members often adopt similar styles of clothing to express identity and social norms.

The History of Clothing

From ancient times, clothing has served the primary purpose of covering the body. Early forms of clothing included body painting, leaves, tree bark and animal skins. In pre-historic times humans migrated from tropical areas to colder regions, they sought ways to keep warm and began using available natural materials such as animal hides, leaves and tree bark for protection.

Eventually, they developed the ability to spin fibers into yarns and weave them into fabrics. During the Stone Age, people fashioned garments from animal skins and laced them together with needles made of bone, thorn, ivory and string-like tendons from animals. By the later part of this era, sewing evolved into a form of artistry. The Magdalenian women, for instance, used needles not only to sew but also to decorate their garments with geometric designs.

As human creativity and technical skills progressed, people began to produce improved tools and new materials. In the Medieval period, fabric weaving became common, and garments were stitched using finer tools. Around 1670, steel needles were invented, significantly advancing sewing techniques. The first pair of scissors was reportedly invented by a shepherd for clipping animal wool. When an affordable method of producing steel emerged in 1856, scissors became more widely available.

A major turning point came in 1830 when Elias Howe invented the sewing machine, revolutionising garment production by making it faster and more efficient. In 1889, the Singer Sewing Machine Company introduced the first sewing machine with an electric motor, further transforming the industry.

Today, we live in an era dominated by machine and industrial sewing. Sewing has evolved from a domestic craft into a global industry providing employment opportunities. Notable clothing production companies include Marks and Spencer in the UK; Sharp Looks and Nice Shape in Cape Coast; J. T. Collection in China; Nallen Fashion and MKOG in Accra and Awura Abena Fashion in Kumasi, Ghana.

Types of Clothing

1. Casual Clothing

Description

Casual clothing refers to garments worn in relaxed, informal settings. These clothes are comfortable, easy to wear and do not follow strict dress codes. The focus is on freedom of movement, convenience and personal expression.

Uses

- Daily activities (home, market, town)
- Informal social gatherings
- Weekend wear
- School or campus (in casual institutions)

Examples

- T-shirts and tank tops
- Jeans, leggings, and cargo pants
- Casual shirts and blouses
- Sneakers, flat sandals, slip-ons
- Simple cotton dresses and skirts
- Shorts and joggers

2. Formal Clothing

Description

Formal clothing is designed for official, ceremonial or dressy occasions. These clothes are usually tailored, made from quality fabrics and adhere to specific fashion standards or cultural expectations. They are often worn to show respect or professionalism.

Uses

- Job interviews and office work
- Religious ceremonies and services
- Weddings, funerals, graduations
- Official events and award ceremonies

Examples

- Suits (jacket and trousers/skirt)
- Dress shirts, ties, waistcoats
- Blazers and tailored pants
- Evening gowns, ball gowns
- Court shoes, brogues, heeled sandals
- Traditional formal wear (e.g. agbada, kente wrap, sari)

3. Work or Occupational Clothing

Description

These are clothes specifically designed to suit a person's occupation. They may serve protective, hygienic or identity purposes and are often required as uniforms in many professions.

Uses

- Indicating one's job role (e.g., nurse, chef, police)
- Ensuring safety (construction workers, welders)
- Maintaining hygiene (in health or food sectors)
- Promoting brand or team identity

Examples

- Nurse uniforms and scrubs
- Lab coats for doctors/scientists
- Chef jackets and aprons
- Overalls for factory or construction workers
- Security or military uniforms
- Airline cabin crew uniforms

4. Protective Clothing

Description

Protective clothing includes garments that safeguard the wearer from harm or harsh conditions. These clothes are made using durable, often specialised materials to reduce risk.

Uses

- Protection from weather (cold, rain, sun)
- Hazardous environments (fire, chemicals, machinery)
- Infections (in hospitals or labs)
- Sporting or industrial safety

Examples

- Raincoats and waterproof boots
- Helmets and gloves
- Firefighter suits and heat-resistant wear
- Lab goggles, aprons, face shields
- Bulletproof vests, reflective vests
- Masks and disposable gowns

5. Sportswear / Activewear

Description

This type of clothing is tailored for physical activity. It supports body movement, reduces friction, absorbs sweat and keeps the wearer comfortable during exercise or sports.

Uses

- Sports (football, basketball, athletics, swimming)
- Exercise and gym activities
- Dance, yoga, jogging
- Casual or athleisure wear

Examples

- Tracksuits and joggers
- Leggings and gym tops
- Sports bras and compression shorts
- Jerseys and team kits
- Sneakers, running shoes, trainers
- Swimwear, rash guards

6. Traditional or Cultural Clothing

Description

These are garments that represent a person's culture, heritage, tribe or religion. They are often worn during traditional events, festivals or religious observances. Each ethnic group or region has its own styles and meanings attached to traditional wear.

Uses

- Cultural celebrations and ceremonies
- Weddings and funerals
- Religious holidays and festivals
- Representing one's identity and pride

Examples

- Kente cloth (Ghana)
- Dashiki and smock (West Africa)
- Sari (India), Kimono (Japan)
- Agbada (Nigeria), Kaftan (North & West Africa)
- Boubou, Hijab, Abaya
- Beaded accessories and traditional caps

7. Party or Occasion Wear

Description

Party wear refers to fashionable clothing selected for celebrations or festive gatherings. These outfits are often bright, stylish, colourful and sometimes elaborate.

Uses

- Birthdays, weddings, anniversaries
- Graduation parties and dinner dates
- Religious feasts and family celebrations

Examples

- Sequinned or lace dresses
- Elegant kaftans and peplum tops
- Designer agbada or senator suits
- High heels and jewellery
- Dress shirts and fitted trousers
- Handbags, shawls and caps

8. Maternity Clothing

Description

Maternity clothes are specially designed to provide comfort and flexibility for pregnant women. They are adjustable and made from stretchable fabrics to accommodate a growing belly.

Uses

- Comfort during pregnancy
- Reducing pressure on the waist and abdomen
- Making nursing easier postpartum (in nursing wear)

Examples

- Maternity dresses with empire waistlines
- Stretchable maternity jeans and trousers
- Wrap tops and nursing bras
- Smocked blouses
- Maternity leggings and skirts

9. Festival / Costume Clothing

Description

These are garments worn for fun, entertainment or to portray characters during performances, celebrations or holidays.

Uses

- Drama and stage performances

- Costume parties and Halloween
- Cultural dances and school plays
- Carnivals and parades

Examples

- Superhero costumes
- Traditional dancer outfits
- Clown suits and masks
- School mascot costumes
- Animal and cartoon-themed clothes

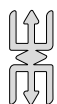
Learning Tasks

1. Explain the concept of clothing and list examples of clothing items.
2. Observe different types of clothing and describe each one as well as their uses.

Pedagogical Exemplars

Talk for Learning Approaches

- Brainstorm/Brain-write to explore on the meaning of clothing. Using the responses come up with the correct meaning of clothing.
- Use think-pair-share/mingling; discuss history of clothing, using sticky notes/A4 sheet/exercise books/jotters to jot down silent points and present.



Note

*Encourage all learners to participate, share and accept each other's views respectfully.
E.g., Clothing is anything worn or carried on the body to modify personal appearance.*

Structured Talk for Learning

Observe realia/charts/pictures/video of different types of clothing, list and describe each one and possibly say their uses to aid understanding.

Key Assessment

DoK Level 1: Identify early materials used for clothing.

DoK Level 2

1. Explain why casual clothing is preferred for weekend wear.
2. Describe two features that make formal clothing suitable for official events.
3. What makes protective clothing important for workers in hazardous environments?
4. Identify two differences between sportswear and sleepwear.
5. Why is traditional clothing important during cultural ceremonies?
6. Give two reasons work uniforms are used in professional settings.

7. How does party or occasion wear differ in design from casual wear?
8. State two features of outerwear that make it suitable for cold weather.

DoK Level 3

1. Discuss why sportswear should not be used as formal wear.
2. Suggest suitable clothing types for a construction worker and justify your choice.
3. Evaluate the importance of wearing traditional clothing during national celebrations.
4. Propose reasons why maternity clothing should use stretchable fabrics.
5. Compare the uses of undergarments and sleepwear in terms of personal comfort.
6. Analyse why protective clothing needs to be made from durable materials.
7. Design a suitable clothing plan for someone attending a wedding and explain your choices.
8. Suggest reasons why outerwear is necessary for travel in varying climates.

FOCAL AREA 2: CLASSIFICATION OF CLOTHING

Clothing acts as a silent form of communication, conveying messages about the wearer even before they speak. It serves various functions and is used in different ways, making it essential to understand how to use it appropriately to fully benefit from its purposes.

Classification of Clothing

Clothing can be categorised based on their purposes as follows

Clothes	Cosmetics	Accessories
Underwear or Undergarments Innerwear or Inner Garments Outerwear or Outer Garments Sleepwear	Pomade Powder Perfume Body Paint Artificial Eyelashes Artificial Nails	Headdress Jewellery Neckwear Footwear Belts Carried Objects Hosiery Eyeglasses or Spectacle

a. Clothes

- **Undergarments:** These are foundation garments worn directly on the skin beneath other clothing. They include items like corsets, panty girdles, panties, brassieres, boxers and singlets. Since they are in close contact with the body and require frequent washing, they should be made of strong, breathable and absorbent fabrics like cotton to ensure hygiene and comfort. Synthetic ones like nylon, though cheap, are less ideal in warm climates as they can cause skin irritation.
- **Inner Garments:** These are worn over undergarments and beneath outerwear. Common types include shirts, blouses, vests, camisoles, tube tops, undershirts, tank tops, waistcoats, slips and chemises. The fabric should be comfortable, climate-appropriate, and allow freedom of movement. In Ghana's warm weather,

they are less commonly worn except by those in air-conditioned environments, like office workers or clergy.

(Note: A blouse or shirt is considered an inner garment when a coat or jacket is worn over it.)

- **Outer Garments:** These are visible clothing items like T-shirts, jackets, dresses, slit and kaba, trousers, shirts and blouses, worn over inner and undergarments. They communicate a person's identity and style. The fabrics used should be strong, suit the garment's design and be easy to care for.
- **Sleepwear:** These clothes are specifically for bedtime, such as Pyjamas, nightgowns, nightdresses, nightshirts, babydoll, sleep shirts, onesies, jumpsuits, robe, dressing gown. Fabrics should be soft, breathable and washable. The styles should prioritise comfort and allow free body movement.



Figure 1: *Clothes*

b. Accessories

Accessories enhance or complete an outfit. Smart accessory choices can elevate simple clothing. Versatile colours like black, white or brown are economical since they match various outfits.

- **Headdress:** Items worn on the head, such as hats and scarves. Hats provide both style and protection, while scarves can add elegance and be styled in creative ways.
- **Neckwear:** Includes scarves and ties worn around the neck. They should coordinate with the main outfit in both colour and fabric texture.
- **Jewellery:** Crafted from materials like gold or beads, jewellery is worn on various body parts to accent clothing. It should be subtle for everyday use but can be bold for formal events.
- **Footwear:** Protects and decorates the feet. Footwear should match the climate and outfit, and be appropriate in weight and material.
- **Belts:** Worn around the waist for fit or decoration. Available in many materials and styles, belts can add balance and interest to an outfit.
- **Carried Objects:** These include handbags and purses, which are both functional and fashionable. Materials and decoration choices allow for personal expression.

- **Hosiery:** Includes socks and stockings. Cotton is best for tropical climates. Synthetic types like nylon may be widely available but are not breathable and can cause discomfort.
- **Gloves:** Used for both fashion and protection. Brides often wear stylish gloves, while functional gloves are used for tasks like washing or gardening.
- **Eyeglasses:** This includes prescription glasses and sunglasses. Apart from vision correction and eye protection, they also serve as fashion accessories.



Figure 2: Accessories

c. Cosmetics

Cosmetics are products used to enhance or change the appearance of the face, body or skin. They can also help to maintain cleanliness and protect the skin from environmental damage.

- **Pomade:** A hair and skin gel that moisturises and can contain sun protection. It comes in various types suited for different skin needs.
- **Powder:** Used on the face or body, it comes in shades that match different skin tones. Talcum is non-staining; face powders may be waterproof and long-lasting.
- **Perfume:** Adds a pleasant scent to the body. Subtle scents are more appreciated than strong, overpowering ones. Apply directly to skin, not clothing to avoid stains.
- **Lipstick/Lip-gloss:** Used to enhance the lips' appearance. Lipstick adds color, while gloss adds shine and moisture. Choose shades that complement your skin tone and outfit.

- **Eye Shadow:** Applied to the eyelids to enhance eye appearance. Light colours are ideal for nighttime, dark ones for daytime. Use to adjust how large or small the eyes appear.



Figure 3: *Cosmetics*

Casual / Informal Wear

Casual or informal wear refers to clothing designed for comfort, ease and relaxation. These garments are typically worn at home, during leisure activities or for non-formal events where there is no strict dress code. They allow freedom of movement and are often made from soft, breathable fabrics that enhance comfort throughout the day. Casual wear reflects a relaxed lifestyle and can vary depending on personal style and weather conditions.

Examples of casual wear include T-shirts, shorts, trousers, blouses, casual jackets, jeans, polo shirts and simple dresses.

Formal / Occasional Wear

Formal or occasional wear comprises garments that are worn for special events, official ceremonies and professional settings. These clothes are usually more refined, stylish and sometimes carry cultural significance. They are often made with finer fabrics and tailored designs to reflect elegance, respect and decorum appropriate for the occasion.

Examples include suits, smocks, slit and kaba, kaftans, agbada and formal gowns.

Formal or occasional wear is commonly used for events such as weddings, dinner parties, religious services (such as church or mosque), cultural festivals, state functions and in professional workplaces where formal dressing is expected.

Learning Tasks

1. Identify and describe the different types of clothing, including undergarments, inner garments, outer garments and sleepwear.
2. Research and categorise examples of accessories and their functions in dressing.
3. Explore various cosmetic products, their uses and appropriate application techniques.

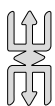
Pedagogical Exemplars

Group work

In groups, learners surf the internet, text and other sources to identify the various classifications of clothing and present it in class.

E.g., Classification as

- **Under/foundation garment** – corsets, panty girdle, panties, brassier, boxers, singlet
- **Inner garment** – shirts, blouse (a shirt/blouse becomes an inner garment when a coat is worn over it).
- **Outer garment** - Shirt, blouse, T-shirt, jackets, dress, slit and kaba
- **Casual/informal** - T-shirt, shorts, trousers, blouse, jackets, dress, etc.
- **Formal/Occasional wear** – Suit, Smock, Slit and Kaba, Kaftan, (all these can be worn to some of these events: wedding, dinner, church, mosque, festivals and workplaces).



Note

Learners, use different ways/modes of presentations such as: Oral presentations, audio and video productions, photographic essays, simulations or skits.

Key Assessment

DoK Level 1: What are the main classifications of clothing?

DoK Level 2: How can accessories enhance or complete an outfit? Provide examples.

DoK Level 3: Why is it important to choose appropriate clothing and accessories for different events?

DoK Level 4: Classify at least three clothing items under various categories. Create a visual display to demonstrate the categories of clothing. This may be in albums, a chart or posters. The work is to be exhibited for a gallery walk and appraisal.

Hint



*The recommended assessment mode for week 11 is **Individual Class Assessment (class exercise)**. See Teacher Assessment Manual and Toolkit pages 63– 65 for more information on how to organise Individual Class Exercises.*

WEEK 2: PURPOSE OF CLOTHING AND TECHNIQUES FOR CLOTHING CARE AND MAINTENANCE

Learning Indicators

1. Discuss the reasons for wearing clothes
2. Analyse various ways/techniques for caring and maintaining clothing

FOCAL AREA 1: REASONS FOR WEARING CLOTHES

Clothing serves several vital roles in society. Primarily, it functions to protect the body, uphold modesty and enhance personal appearance through adornment. However, clothing also communicates identity, mood, social status and can even serve to attract others or create specific impressions.

1. Protection

- **Physical Protection:** Clothing shields the body from harsh weather, insect bites and physical harm. For example, farmers wear boots against snakebites, healthcare workers wear protective gear in operating theatres and soldiers wear camouflage and bulletproof vests for safety.
- **Psychological Protection:** Certain garments and accessories are worn for ritual or spiritual protection. For instance, traditional priests may wear specific garments for ceremonies, while charms and amulets like talismans and beads are believed by some to ward off evil or attract strength.



Figure 4: Protective clothes

2. Adornment

Clothing decorates and beautifies the body, enhancing one's appearance. The colours, styles, and added accessories such as jewellery, makeup and fashionable footwear are used to improve personal image. This need to beautify is the foundation of the fashion industry.



Figure 5: *Adornment*

3. Modesty

Modesty relates to societal norms about covering certain parts of the body. What is considered modest varies across cultures and contexts. For example, Muslim women wear veils in public for modesty, while in other cultures, minimal clothing may not cause embarrassment. The Ghanaian tradition emphasises covering the body from above the chest to the knees, especially for women.



Figure 6: *Modesty*

4. Communication and Identity

Clothing communicates important messages about individuals:

- **Mood Expression:** Clothing often reflects a person's emotional state. For instance, dark colours and black attire symbolize mourning, while white and bright colours signify joy and victory.
- **Group Identity**
 - **Occupational Identity:** Uniforms and specific attire indicate one's profession. For instance, police and military personnel can be easily distinguished by their uniforms and insignia.

- **Associational Identity:** Members of groups or associations wear common styles or colours. A tailor's association might use a specific batik print.
- **Cultural Identity:** Traditional clothing styles help identify a person's cultural background, such as a Ghanaian wearing kente or a Nigerian woman in boubou and headgear.
- **Family Identity:** Families may use specific clothing, beads or tattoos for identification, especially during ceremonies like funerals.
- **Status Identification:** Clothing indicates one's social rank. Chiefs, queens and professionals often wear distinguished attire and accessories that show their authority or level in society.



Figure 7: *Group Identity*

5. Impression Creation

The way one dresses can create either positive or negative impressions. A well-dressed criminal might be mistaken for a businessperson, while a modest but morally upright student who dresses inappropriately might be judged unfairly. Clothing influences how people are perceived, especially during first encounters like meeting in-laws or job interview.

6. Attraction

Clothing is also used to grab attention. Examples include clergy using symbolic collars, workers in red protest bands or Santa Claus in festive outfits. These appearances are designed to communicate messages or evoke public interest.

Learning Tasks

1. Identify the primary functions of clothing.
2. Identify and describe three types of identity that can be communicated through clothing.
3. Give examples of how clothing offers protection.
4. Explain how clothing can express a person's emotional state.

Pedagogical Exemplars

Talk for Learning Approaches: Using think-pair-share/mingling; discuss reasons for wearing clothes using sticky notes/A4 sheet/exercise books/jotters to present your responses. E.g., Protection, Adornment, Mood expression

Structuring talk for learning: Use realia, pictures or charts, posters, power point presentation to depict reasons for wearing clothes for whole class discussion.

Key Assessment

DoK Level 2: How does adornment differ from protection in the functions of clothing?

DoK Level 3: In what ways can clothing be used to indicate social status or group membership?

FOCAL AREA 2: WAYS/TECHNIQUES FOR CARING AND MAINTAINING CLOTHING

Caring for and maintaining clothing

Proper care and maintenance of clothing are essential to extending the life of garments, keeping them looking attractive and ensuring they serve their purpose over time. By applying the right techniques, individuals can reduce wear and tear, preserve fabric quality and avoid unnecessary spending on replacements. Taking care of clothing is not only economical but also promotes sustainable living.

Key techniques for effective clothing care

Clothing care involves a series of steps and habits that, when consistently followed, protect clothes from damage and enhance their appearance. These techniques include:

- **Reading care labels:** Every garment comes with a care label that provides instructions for washing, drying, ironing and overall maintenance. Following these guidelines helps prevent shrinkage, colour fading or fabric distortion.
- **Sorting garments before washing:** Clothes should be grouped according to colour (dark, light, white), fabric type (delicate, sturdy), and level of soiling. This prevents colour transfer and ensures each item receives appropriate treatment.
- **Choosing the right drying method:** Some fabrics are best air-dried to maintain their shape and texture, while others may tolerate machine drying on low or medium heat. Over-drying can damage fibres and reduce clothing lifespan.
- **Stain removal:** Stains should be treated immediately using the correct methods and products for the fabric type and nature of the stain. Prompt action increases the chances of complete stain removal without damaging the fabric.

In addition to these general guidelines, four main techniques are widely used in the daily care and upkeep of clothing:

Washing

This involves removing dirt, sweat and other residues from garments. Hand washing is ideal for delicate fabrics like silk and lace, while machine washing is suitable for sturdier materials

such as cotton and denim. It is important to choose the correct water temperature and detergent based on the fabric type to avoid damage.

Ironing

Ironing smooths out wrinkles and restores the neat appearance of garments. Each fabric type requires a specific temperature setting—for example, cotton needs high heat, while synthetic fabrics require a cooler setting. Using a steam iron or pressing cloth can help prevent scorching and shine.

Mending

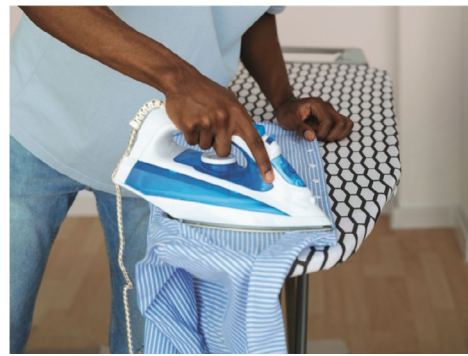
Regular mending helps restore damaged clothing to a wearable state. Common mending practices include sewing on missing buttons, repairing torn seams and patching small holes. This practice supports sustainability and personal responsibility while extending the garment's usefulness.

Storage

Proper storage is vital in preserving the shape, colour and texture of clothing. Items should be folded or hung depending on their structure, heavy knitwear is best folded, while suits, dresses, and blazers should be hung using sturdy hangers. Clothes should be stored in clean, dry and well-ventilated spaces to prevent mould and insect damage.



washing



ironing



mending



storage

Figure 8: Techniques for Caring and Maintaining Clothes (Source: Pinterest.com)

2. Care and Maintenance of the Wardrobe

Wardrobe care goes beyond the clothing itself. It encompasses the way the wardrobe is organised and maintained. A tidy, well-maintained wardrobe not only helps preserve the condition of garments but also makes it easier to select outfits, encourages proper hygiene and promotes a sense of personal pride.

Best Practices for Wardrobe Maintenance

- **Mindful purchasing:** Choose garments made from durable, quality materials. Avoid excessive buying and focus on items that are versatile, long-lasting and suitable for your lifestyle.
- **Careful laundering and ironing:** Clothes should be cleaned and pressed following garment-specific instructions. Avoid overcrowding during washing or storing to maintain garment shape and quality.
- **Rotating clothing:** Regularly rotate clothes to ensure all items are used. This prevents some garments from being worn out quickly while others are forgotten and unused.
- **Being cautious with cosmetics and skincare products:** Apply perfumes, lotions and makeup before dressing to avoid staining. These products can damage fabrics and leave permanent marks.
- **Prompt stain removal:** Knowing how to treat different stains (oil, ink, wine, etc.) effectively helps preserve the appearance of garments and prevents long-term damage.

3. Proper Storage of Clothing

How clothing is stored directly affects how long it remains in good condition. Inappropriate storage methods can cause fabric deterioration, misshaping and even permanent damage.

Storage Tips for Longevity and Appearance

- **Use quality hangers:** Select hangers that suit the shape and type of clothing. Wide-shouldered or padded hangers are ideal for jackets and coats to maintain their structure. Avoid using wire hangers as they may distort the garment's shape.
- **Know when to fold or hang:** Fold knitted items like sweaters to prevent them from stretching out. Hang tailored items like blazers and trousers to retain their crisp lines and avoid deep creases.
- **Seasonal storage:** For out-of-season garments, use breathable storage bags or boxes. Store them in cool, dry places to prevent exposure to heat, moisture or insects. Avoid using plastic bags that trap humidity and lead to mildew growth.
- **Special protection for delicate garments:** Clothes meant for special occasions, such as gowns and suits, should be stored in garment bags to shield them from dust, light and damage.

Learning Tasks

1. Analyse various ways/techniques for caring and maintaining clothing.
2. Research various ways/techniques of caring for and maintaining clothing in real-life situations

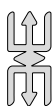
Pedagogical Exemplars

Talk for Learning

- Share personal experiences on how to care for clothes.
- Use the think-square-share method to identify the various ways/techniques for caring and maintaining clothing (using sticky notes/A4 sheet/exercise books/jotters). E.g., Washing, ironing, mending, proper storage.
- Encourage learners to respect each other's views on the various ways of caring and maintaining clothing based on their cultural background, etc.

Group Work

In mixed ability/gender groups, analyse the pros and cons of the various ways/techniques for caring and maintaining clothing and present it in class using charts/pictures/power point presentation/concept map, etc.



Note

Stress the value of responsibility and cleanliness in maintaining clothes.

Key Assessment

DoK Level 2: Discuss at least three ways/techniques for caring for and maintaining clothing.

DoK Level 3: Analyse various ways/techniques people in the community use to care for and maintain their clothing and outline their merits and demerits.

DoK Level 4: Interview at least two people in your community on how they care for and maintain their clothing. Encourage groups to present their findings using different models including demonstration.

Hint



*Assign **Group Project** by **Week 2**. This should be submitted after **Week 10**. Refer to **Appendix A** at the end of section 1 and **Teacher Manual and Assessment Toolkit** pages 27–29 for more information on **Project-Based Assessment**.*

WEEK 3: INTERPRETATION AND IMPORTANCE OF CARE LABELS IN CLOTHING

Learning Indicators

1. Analyse information on clothing care labels
2. Discuss the importance of good clothing care labels

FOCAL AREA 1: INFORMATION ON CARE LABELS

A **care label** is a small tag or label attached to garments that provides essential information about how to properly clean, maintain and handle the fabric. These labels help consumers make informed decisions about caring for their clothes, ensuring that the garments last longer, maintain their appearance and perform well over time.



Figure 9: Care Labels/ Tags

Information on Clothing Care Labels

The care-labelling rule, which is internationally accepted, requires clothing manufacturers and importers to attach permanent care labels to their products. The label contains information on the fibre type, fibre content, brand name, country of origin, the manufacturer's registered number (RN) and ironing temperature, dry cleaning, drying and bleaching instructions.

Labels help to make better clothing choices based on clothing care requirements for instance, if it is indicated on the label that a pair of shorts is to be dry cleaned and you need a pair of shorts for sports, buying what you have seen in the shop will not be a good choice for sportswear.

Care labels also enable you to avoid damage as a result of improper care of the clothing. In addition, care labels serve as a warranty. If the garment is damaged during laundering, after all prescribed care instructions have been followed, you can return it to the retailer or the manufacturer for either a replacement or money refund. Finally, they provide information about the manufacturer. Manufacturer's RN or WPL (Registered Number or Work Permit Label) are identification numbers of the garment label which can be used to track them.

Below are the main components typically found on care labels, along with their significance:

1. Fibre Content

This section of the label specifies the type(s) of fabric used in making the garment for example, **100% cotton**, **70% polyester / 30% wool** or **85% viscose / 15% linen**.

- Knowing the **fibre composition** helps the user understand how the fabric is likely to behave during washing, drying, ironing or wearing.
- For instance, cotton tends to shrink if washed in hot water, while polyester is more resistant to wrinkling and shrinking.
- It also assists in identifying whether the garment is breathable, stretchable, delicate or durable.

2. Care Symbols and Instructions

This section includes **internationally recognised care symbols** or written instructions that guide users on how to clean and maintain the garment. Each symbol represents a specific care method.

- **Washing:** Indicates how the garment should be washed-machine wash, hand wash or not to be washed at all. Some labels may also indicate recommended water temperature (e.g., cold, warm or hot).
- **Bleaching:** Tells whether bleach can be used. For example:
 - A triangle symbol means any bleach is acceptable.
 - A triangle with lines means only non-chlorine bleach.
 - A crossed-out triangle means do not bleach.
- **Drying:** Offers guidance on how to dry the garment tumble dry, line dry, drip dry or dry flat. The symbol may also indicate the correct heat setting for tumble drying.
- **Ironing:** Shows the maximum heat that can be applied when ironing, represented by one to three dots (one dot for low heat, three dots for high). A crossed-out iron means do not iron.
- **Dry-cleaning:** Indicates whether the garment can be dry-cleaned and may include letters (e.g., “P” or “F”) to show the types of solvents that are safe to use. A crossed-out circle means do not dry-clean.



Figure 10: Care Symbols and Instructions

These instructions are essential in preventing common issues like shrinkage, colour fading, fabric damage or misshaping.

3. Manufacturer and Country of Origin

This part identifies the **brand or manufacturer** of the garment and the **country where it was produced**. While often overlooked, this information is helpful for several reasons:

- It enables consumers to **trace the origin** of the product.
- It may suggest a certain level of **quality** or **ethical standards**, depending on where and how the garment was made.
- It helps with **customer service** queries or when seeking **product replacements**.

4. Size and Lot/Style Number

The label also includes the **size of the garment**, which helps in determining the fit (e.g., S, M, L, XL, or numerical sizing like 10, 12, 14). In some cases, it may also list:

- **Lot or style numbers**, which are useful for:
 - Managing **inventory** in retail settings.
 - Reordering or replacing items.
 - Identifying garments within a collection or brand line.

This information ensures that customers get consistent sizing and styling, especially when shopping for uniforms or bulk orders. Care instructions on care labels mainly consist of symbols and words. Illustrations of care symbols and their meanings are presented below.

Analysis of Attaching Care Labels/Notes/Tags to Clothing Articles

Advantages of Attaching Care Labels/Notes/Tags to Clothing Articles

1. Guidance for Proper Care

Care labels provide essential and detailed instructions on how to handle garments. These instructions may include washing (machine or hand wash), drying (tumble or line drying), ironing, bleaching and dry-cleaning. When followed correctly, these guidelines help preserve the shape, colour and texture of the garment, extending its lifespan.

2. Prevention of Fabric Damage

Properly interpreting and adhering to care instructions can help consumers avoid common issues such as shrinking, colour bleeding, pilling, or fabric distortion. This ensures that clothing maintains its original quality and appearance over time.

3. Informed Consumer Decisions

Care labels often indicate the fibre content (e.g., 100% cotton, polyester blends) and place of manufacture. This information allows consumers to make thoughtful purchasing decisions based on their fabric preferences, sensitivities (e.g., allergies) or ethical considerations related to product origin.

4. Promotes Safety

Some garments especially for children or specialised wear like nightgowns or uniforms carry safety warnings such as “Keep away from fire.” These safety-related instructions help protect users from potential harm and ensure appropriate garment usage.

5. Encourages Responsible Purchasing

Labels allow buyers to assess whether a garment suits their lifestyle or household conditions. For example, a person without access to dry-cleaning services may choose not to purchase a “dry-clean only” item, helping reduce waste and promote sustainable fashion choices.

6. Legal and Trade Compliance

For clothing manufacturers, especially those involved in international trade, care labels help meet legal standards and regulatory requirements in different markets. This transparency builds consumer trust and supports ethical business practices.

Cons/Disadvantages of Attaching Care Labels/Notes/Tags to Clothing Articles

1. Discomfort or Skin Irritation

Some care labels are made from rigid or synthetic materials that can cause itchiness or discomfort when they come into direct contact with the skin. This is particularly common in areas like the neck, back or waistline.

2. Aesthetic Interference

Depending on placement and size, labels can affect the visual appeal of certain garments—particularly those made from sheer, delicate, or body-fitting fabrics. In some cases, the label may be visible through the fabric, disrupting the design.

3. Likelihood of Removal

Many users cut off labels due to irritation, bulkiness or visibility, often discarding important care information in the process. This can lead to incorrect garment care, resulting in damage such as shrinkage, colour fading, or fabric breakdown.

4. Language and Symbol Limitations

Care labels often use symbols or languages that may not be familiar to all consumers. Without proper education or reference, these instructions may be misinterpreted, defeating their intended purpose.

5. Environmental Concerns

Labels and tags made from plastic or synthetic materials contribute to environmental pollution when discarded. Moreover, the production of these materials may not align with eco-friendly manufacturing practices.

6. Increased Production Costs

For clothing brands, especially small-scale or artisanal designers, adding multilingual, high-quality care labels may increase overall production costs. This can be a burden, particularly when exporting to regions with strict labelling requirements.

Learning Tasks

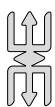
1. Identify the key elements found on a care label.
2. Illustrate and label a sample care label, including symbols and their meanings.
3. Explain the importance of reading and following care labels.

Pedagogical Exemplars

Talk for Learning

- Share personal experiences on how you laundered your clothes without considering care labels attached to your clothes.
- Use the think-pair-share method to identify care notes on various articles.

Group Work: In mixed ability/gender groups, analyse the pros and cons of attaching care labels/notes/tags to clothing articles and present it in class using charts/pictures/power point presentation/concept map, etc.



Note

Encourage learners to respect each other's views during group presentations

Key Assessment

DoK Level 1: List the different types of care instructions typically found on clothing labels.

DoK Level 2: Describe how care labels help consumers make informed decisions about garment use and maintenance.

DoK Level 3: Investigate how improper care can damage clothing and suggest preventative measures

FOCAL AREA 2: THE IMPORTANCE OF GOOD CLOTHING CARE LABELS

The Importance of Good Care Habits

Maintaining good care habits for clothing is essential for hygiene, comfort and the longevity of garments. Keeping clothes clean, fresh and healthy to use at all times not only enhances personal appearance but also promotes general well-being.

Why Good Care Habits Matter

Good care habits help to

- 1. Maintain Cleanliness of Clothing and the Body**

Wearing clean clothing ensures that dirt, sweat, and bacteria do not accumulate on the body, reducing the risk of skin irritation and illness.

- 2. Maintain Freshness of Clothing**

Regular washing and airing of clothes help to keep them smelling fresh and free from unpleasant odours caused by sweat and environmental exposure.

- 3. Prolong the Lifespan of Clothing**

Clothes that are properly cared for—washed, dried, ironed and stored appropriately—tend to last longer and retain their original quality and appearance.

- 4. Prevent Body Odour**

Wearing clean clothes, especially undergarments, helps control body odour, which results from bacteria breaking down sweat.

- 5. Prevent Skin and Hair Infections**

Dirty clothes, especially those worn close to the skin, can harbour bacteria and fungi, leading to infections such as rashes or ringworm if not cleaned regularly.

Examples of Good Care Habits

To ensure clothing remains in good condition and contributes positively to personal hygiene, the following care habits should be practised consistently:

- 1. Regular Changing of Underwear**

Undergarments such as panties, singlets, chemises and brassieres are worn directly on the skin and absorb sweat and body oils. They should be changed after each use to prevent infections and unpleasant odour.

2. Frequent Changing and Washing of Handkerchiefs

Handkerchiefs are used to wipe the face, nose or hands and can accumulate dirt and germs. They must be washed regularly preferably after each use to maintain hygiene.

3. Washing and Sun-Drying of Undergarments, Towels and Handkerchiefs

Regular washing, followed by drying in direct sunlight, helps kill bacteria and keeps fabrics fresh. Sunlight acts as a natural disinfectant.

4. Airing of Lightly Worn Clothes and Footwear

Clothes and shoes that have been worn but are not dirty can be aired to remove moisture and odour. This practice keeps garments fresh and reduces the frequency of washing, which can wear out fabric over time.

5. Preventing Wrinkling of Clothes

Keeping clothes free from wrinkles enhances their appearance and reflects a neat and tidy personal image. Ironing also helps kill lingering bacteria in fabrics.

6. Practising Proper Storage

Clothes that are not in use should be stored properly hung or folded neatly in clean, dry spaces. Proper storage protects garments from dust, insects and mildew, while also allowing easy access and preserving their shape and colour.

The Importance of Care Labels in the Care of Clothing and Household Articles

1. Proper care and maintenance of clothing and household textiles help preserve

- **Their Appearance:** Regular maintenance ensures that textiles, whether clothing or household items, retain their original colour, texture and structure. Proper care prevents fading, discoloration and fabric wear, which can make items look aged or damaged.
- **Functionality:** Clothes and household textiles are designed with specific functions in mind, from providing warmth to offering aesthetic value. Proper care preserves the functionality of these items, ensuring they serve their intended purpose effectively for a longer time.
- **Longevity:** By following proper care instructions, textiles last longer, saving money in the long run. Fabrics that are treated correctly maintain their strength, elasticity and appearance, ensuring they don't degrade prematurely.

2. Care labels are one of the most reliable tools for achieving proper care

Care labels are crucial in guiding users on how to properly care for textiles. They serve as a reliable reference for cleaning, maintaining and storing garments. Their accuracy and detailed instructions minimise guesswork and reduce the chances of improper handling that could lead to damage.

3. Found on most ready-made garments and textile items

You will often find care labels sewn into or attached to ready-made garments and textile products. These labels are ubiquitous in the textile industry, helping consumers ensure that the items are handled appropriately. The presence of care labels on a wide range of products reflects the importance of preserving quality across various fabrics.

4. Provide specific instructions on how to clean, maintain and store clothing properly

Care labels outline step-by-step instructions regarding the most suitable cleaning methods (e.g., hand wash, machine wash, dry clean), the appropriate temperature settings, drying instructions (air dry, tumble dry), and storage recommendations (folding, hanging). This level of detail ensures the user understands exactly how to extend the life of their garments or household textiles.

5. Following care label instructions

- **Helps prevent damage to fabrics:** Ignoring or misinterpreting care instructions can cause fabrics to shrink, stretch, fade or degrade. Care labels provide the necessary guidelines to avoid such damage, ensuring that garments and textiles maintain their integrity.
- **Maintains the original quality and look of the garment over time:** When instructions are followed, the garment or household item retains its shape, colour and overall appeal. This means that the original design and quality are preserved, allowing the item to look as good as new even after multiple uses or washes.

6. For ready-to-wear garments

- **Care labels give guidance on proper handling:** Ready-made garments come with pre-established care instructions based on the fabric type and construction. These labels are designed to guide the user on how to handle the item properly to avoid compromising the quality of the fabric or garment.
- **Instructions are tailored to the fibre type, fabric construction and intended use:** A wool sweater, cotton shirt or silk blouse all have different care requirements. Care labels are designed to reflect the specific needs of different materials, ensuring the garment's fibres, construction and intended use are considered in the care process.

7. For custom-made or home-sewn items

- **Users must apply personal knowledge of**
 - **Textile science:** Understanding the properties of different fibres (natural vs. synthetic, for example) is key to determining the correct care methods for custom-made or home-sewn garments. Knowledge of textile science helps users choose suitable cleaning agents and methods.
 - **Fabric types and fibre content:** Home-sewn or custom-made garments might use a variety of fabrics, each requiring different care. Knowledge of the fibre content (e.g., cotton, polyester or linen) allows users to understand how best to treat the fabric to preserve its quality.
 - **Garment construction:** The way a garment is constructed affects how it should be cared for. For example, delicate seams or intricate embellishments may require special attention. Users familiar with garment construction can identify the most appropriate care procedures based on the design.
- **Cleaning and maintenance techniques:** Custom-made garments may not come with care labels, so users must rely on their understanding of textiles care techniques. This includes knowledge about laundry care (machine wash vs. hand wash), stain removal methods and fabric-specific treatment.

8. Practical skills needed include

- **Laundry care:** Knowing how to wash and dry different fabrics correctly is an essential skill. This includes selecting the right detergent, wash cycle and temperature settings that prevent harm to fabrics.
- **Stain removal:** Different stains require different treatments. Understanding how to properly remove stains from various fabrics helps maintain the garment's appearance without causing further damage.
- **Pressing (ironing):** Pressing garments properly helps maintain their shape and smoothness. Users should know the correct temperature and techniques for pressing various fabric types without causing burns or damage to the textile.
- **Mending:** Knowing how to mend small tears or holes in clothing can extend the life of garments, preventing them from becoming unwearable. This skill ensures that minor issues do not lead to the need for early replacement

Learning Tasks

1. Explain the concept “good care habits” in clothing.
2. Analyse the consequences of poor clothing care habits on personal hygiene.
3. Demonstrate garment maintenance through sorting, washing, drying, pressing, and storing in a practical project.

Pedagogical Exemplars

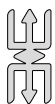
Talk for Learning Approaches

Use think-pair-share/mingling; discuss the importance of good care labels using sticky notes/ A4 sheet/exercise books/jotters to present your responses. E.g.,

- maintain cleanliness of clothing and the body
- prolong the use of clothing
- prevent infections on the skin and hair, etc.

Structuring talk for learning

Use realia, pictures or charts, posters, power point presentation to depict good care habits for whole class discussion.



Note

Stress the need to read care labels/notes/tags on clothing articles before laundering.

Key Assessment

DoK Level 1: Name two functions of care labels.

DoK Level 2: Match the following care instructions to the appropriate symbol:

- a. Machine wash cold
- b. Do not bleach
- c. Tumble dry low

DoK Level 3: Evaluate how care habits affect the durability and appearance of garments.

DoK Level 4: Create a care guide for custom-made garments without care labels.

Hint



Assign **Portfolio Assessment** for the Academic Year by **Week 3**. Portfolio should be submitted by Week 22. Refer to Appendix B at the end of section 1 and the Teacher Assessment Manual and Toolkit pages 22–25 for more information on how to organise Portfolio Assessment.

SECTION 1 REVIEW

This section develops learners' ability to make thoughtful, practical and socially aware choices about clothing selection and care. By exploring the psychosocial aspects of clothing, learners examine why people wear clothes, how cultural, environmental and personal factors influence their choices and the roles clothing plays in communication, identity and status. Lessons emphasise understanding classification and functions of clothing, with real-world discussions on climate, occupation, fashion and social norms shaping decisions about what to wear. Practical activities focus on interpreting care labels and applying correct laundering, ironing, mending and storage techniques to maintain garment quality and extend lifespan. Through collaborative tasks, structured discussions and hands-on demonstrations, learners not only build technical skills but also develop respect for cultural diversity, personal hygiene and sustainability. This section prepares learners to evaluate clothing choices critically, apply care techniques responsibly and understand clothing as both a personal necessity and a social statement, laying foundations for lifelong responsible and culturally sensitive clothing use.

Additional Reading/Teaching Learning Materials

1. Realia of different clothes, accessories and cosmetics.
2. Videos on techniques for caring for and maintaining clothing
3. Pictures and charts of clothing, classification and reasons for wearing clothes.
4. Computer, Projector, camera and Smart phones (if possible).
5. Pictures and charts of clothing, classification of clothing and care labels.
6. Textbooks.
7. Google search.
8. Flip charts.
9. Cardboard.
10. Sticker notes pads.



APPENDIX A: GROUP PROJECT WORK

Task: Design a sewing toolkit for beginner learners. Include five different tools from different categories and explain the rationale for each choice, considering their functions, safety and frequency of use. **(24 marks)**

Scoring Rubrics

Criteria	Excellent (4 marks)	Very Good (3 marks)	Satisfactory (2 marks)	Needs Im- provement (1 mark)
Selection and Variety of Tools	Includes 5 tools from clearly different categories. Selection is thoughtful and relevant to beginner learners.	Includes 4 tools with reasonable variety. Most choices are relevant to beginner learners.	Includes 3 tools. Some tools may not be appropriate for beginners.	Include 1 or 2 tools or very limited selection or inappropriate tools for beginners.
Explanation of Tool Function	Functions of all tools are clearly and accurately explained. Shows deep understanding of how tools are used.	Functions of 4 tools are explained with minor omissions.	Functions of 3 tools are explained. Some inaccuracies present.	Functions of 1 or 2 tools are not clearly explained or mostly inaccurate.
Justification of Tool Selection (Safety and Use)	Provides strong rationale for each tool considering safety, frequency of use, and suitability for beginners.	Rationale is sound for most tools with attention to safety and usefulness.	Rationale is basic or focuses on only one factor (e.g., usefulness only).	Little or no justification provided for the tools selected.
Group Collaboration and Contribution	Evidence of excellent collaboration. All members contributed significantly and worked cohesively.	Good collaboration. Most members contributed fairly to the work.	Some imbalance in contribution. A few members were more involved than others.	Poor collaboration. One or two members did most of the work.
Presentation and Organisation	Toolkit design is well-organised, neat and visually appealing. Information is clear and easy to follow.	Toolkit is organised and generally neat. Minor improvements needed in layout or clarity.	Toolkit presentation is uneven. Some parts are unclear or poorly formatted.	Toolkit is disorganised and lacks clarity or completeness.

Creativity and Practical Insight	Toolkit shows creativity and practicality. Tool choices demonstrate thoughtful attention to beginner needs.	Some creative and practical elements. Toolkit is mostly functional and thoughtful.	Limited creativity. Toolkit is mostly conventional with few unique ideas.	Toolkit lacks creativity and does not address practical beginner needs well.
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APPENDIX B: PORTFOLIO ASSESSMENT

Refer to the Teacher Assessment Manual and Toolkits Section 7.1 on pages 22-25 for guidelines on portfolio assessment.

1. Task: Collect all your work from the academic year, starting from the beginning of the first semester and compile it into a portfolio to be submitted at the end of week 22 for assessment. Your portfolio should include assignments, projects, practical assessments, reflective pieces, mid-semester and end-of-semester papers. This portfolio will be assessed to evaluate your overall understanding and progress throughout the year.

2. Example of structure and organisation of the Portfolio Assessment

As part of the structure of the portfolio assessment, make sure the following information has been provided:

- a. Cover Page which entails the Learner's Name, Form, Subject and period/date.
- b. Table of Contents which has the list of items included with page numbers.
- c. Brief description/background of items such as short description of the reasons for wearing clothes, techniques for caring for and maintaining clothes, the need for reading care labels, etc.

3. Example of learners' works to be included in the Portfolio Assessment

- a. Assignments
- b. Projects
- c. Practical work
- d. Reflective Pieces
- e. Mid semester and end of semester papers

4. Sample mode of administration

- a. Explain the purpose and components of the portfolio to the learners and provide examples and templates for each section.
- b. Schedule periodic reviews (e.g., every 3-4 weeks) to ensure learners are keeping up with their portfolios and provide feedback and guidance during these checkpoints.
- c. Provide learners with the scoring rubrics and provide detailed explanation on the rubrics.
- d. Final portfolios are due in week 22 of the academic calendar. Allow a grace period for revisions based on final feedback.

5. Sample mode of submission/presentation

- a. Communicate the final deadline for portfolio submission to all students to ensure timely and complete submissions.
- b. Learners will submit their completed portfolios either in printed form or through the school's online submission system.

- c. Ensure the portfolio includes all required elements: assignments, projects, practical assessments, reflective pieces, class participation records and a final reflection.
- d. Learners should organise their portfolios clearly and logically, with each component clearly labelled and easy to access.
- e. For digital submissions, learners should upload their portfolios as a single file or in clearly marked folders within the online portal.

6. Sample feedback strategy

- a. Schedule periodic check-ins to discuss progress, set goals and adjust strategies as needed.
- b. Utilise both formative and summative feedback to guide students' development and ensure they understand how to enhance their work continuously.

7. Sample Portfolio Assessment Marking scheme

Learner's works	Score
Assignments/Exercises	10 marks
Projects/Case studies	10 marks
Practical assessment	10 marks
Reflective Pieces	5 marks
Mid-semester and End-of-semester Papers	5 marks
Total marks	40 marks

SECTION 2: WARDROBE PLANNING AND APPEARANCE MANAGEMENT: PRINCIPLES AND PRACTICES

Strand: Psychosocial Aspect of Clothing

Sub-strand: Wardrobe Planning and Appearance Management Practices

Learning Outcome: Apply knowledge and understanding wardrobe planning principles to plan wardrobe individuals and families to meet their clothing needs.

Content Standard: Demonstrate the ability to apply knowledge and understanding of wardrobe planning principles to plan suitable wardrobes for individuals and families.

Sub-strand: Wardrobe Planning and Appearance Management Practices

Learning Outcome: Apply knowledge and principles of good grooming to promote appearance management skills among individuals, families and societal dress sense.

Content standard: Analyse how to apply knowledge and principles of good grooming to promote appearance management skills, dress senses and personal identity building.

INTRODUCTION AND SECTION SUMMARY

The section aims to develop learners' skills in planning and managing wardrobes and promoting good grooming practices to support personal identity and social confidence. Key areas of focus include understanding principles of wardrobe planning to meet the clothing needs of individuals and families, while considering factors such as climate, budget, age, lifestyle and cultural expectations. Learners are to be guided to identify the different stages of the family life cycle and explain how these influence clothing choices, as well as to plan wardrobes that are functional, cost-effective and appropriate for varied occasions. Learners will also understand the concept of good grooming in relation to dress sense, emphasising personal hygiene, posture, diet, exercise, rest, clothing care and environmental cleanliness. The minimum competencies required of a learner in this section include the ability to make informed decisions about clothing selection, organise and maintain a suitable wardrobe, and apply good grooming practices that reflect self-respect and respect for others. Lessons cover the principles of personal appearance management, including how clothing and grooming choices influence self-esteem, social interactions and professional image.

The weeks and indicators covered by this section are:

Week 4: Discuss wardrobe planning and its importance in clothing management.

Plan a wardrobe to support individuals and families achieve their clothing needs and personal identity.

Week 5: Explain good grooming in relation to dress sense.

Examine the factors that promote good grooming.

SUMMARY OF PEDAGOGICAL EXEMPLARS

This section employs a variety of pedagogical exemplars to make lesson delivery learner-focused. Examples include Managing Talk for Learning, Collaborative Group Work, Problem-based and Experiential Learning Approaches. These activities support learners in actively exploring wardrobe planning and good grooming concepts. Teachers are encouraged to adapt and expand these strategies to suit each focal area while ensuring respect for cultural and social contexts. They should also integrate cross-cutting issues such as GESI, SEN, SEL, 21st Century Skills, Core National Values and ICT to make lessons inclusive, interactive and relevant. This approach supports learners to develop critical thinking, respect for self and others and practical skills for managing clothing needs and promoting good appearance

ASSESSMENT SUMMARY

The assessment framework for this section ensures learners are evaluated on both theoretical understanding and practical application of wardrobe planning and good grooming concepts. Assessments validate learners' ability to plan suitable wardrobes considering budget, climate, age and lifestyle and to explain factors promoting good grooming such as posture, diet and hygiene. The approach emphasises varied Depth of Knowledge (DoK) levels from recalling definitions to creating detailed wardrobe plans and comparing grooming impacts. Teachers should use diverse assessment strategies aligned with learning indicators, activities and pedagogical exemplars to accommodate all learners. This ensures assessment tasks not only test knowledge but also develop problem-solving, critical reasoning and practical life skills essential for personal and social development.

WEEK 4: WARDROBE PLANNING AND ITS ROLE IN CLOTHING MANAGEMENT AND PERSONAL IDENTITY

Learning Indicators

1. *Discuss wardrobe planning and its importance in clothing management*
2. *Plan a wardrobe to support individuals and families achieve their clothing needs and personal identity*

FOCAL AREA 1: CONCEPT OF WARDROBE AND WARDROBE PLANNING

Wardrobe planning

Wardrobe planning is the process of selecting and organising clothing items to suit a person's needs, lifestyle, climate and available resources. Wardrobe planning is also the process of choosing, organising, and maintaining clothing items to suit one's needs, lifestyle and available resources.

It helps individuals to choose the right clothes for various occasions and avoid unnecessary purchases. Wardrobe planning focuses on helping individuals develop a sense of responsibility and good grooming habits while staying within their means

Concept of a wardrobe

A wardrobe refers to the collection of clothes and accessories and cosmetics that a person owns and uses for different occasions.

Types of clothes in a wardrobe may include

- School uniforms
- Church or mosque wear
- Casual wear
- Sleepwear
- Sportswear
- Traditional attire
- Footwear and accessories (like belts, caps and scarves)



A Closet



Planned Wardrobe

Figure 11: Forms of wardrobe (Source: Pinterest)

Factors that Influence Clothing Selection

1. Family Life Cycle

The family life cycle refers to the different stages a family goes through and each stage affects how clothing is selected. **Examples of each stage relating to clothing selection include:**

- **Beginning Stage**

An example of this stage is a involves couples who are just starting life together and do not yet have children. They usually have fewer responsibilities and more disposable income. As a result, they tend to spend more on clothing, cosmetics and accessories. Being young and physically attractive, they often choose clothing that highlights their body features, such as well-fitting or fashionable outfits.

- **Expansion Stage**

At this stage, couples have children and must now provide for them. Their social activities reduce and more money is directed towards childcare. This means there is less money available for clothing, so the family must make wise clothing choices. Sometimes clothes may be shared, altered or reused to save money and extend their wardrobe.

- **Contracting Stage**

In this phase, children grow up and leave home to become independent. With fewer financial responsibilities, parents may now afford better quality or more expensive clothes. However, due to age-related body changes, they often prefer looser-fitting and more comfortable clothing.

- **Empty Nest Stage**

This stage begins when the last child leaves home due to marriage, work or school and continues until the death of one or both spouses. During this time, the household transitions from a busy, child-centred environment to one focused on the couple alone. The couple adjusts to life without dependent children. Clothing choices often reflect simpler, quieter lifestyles. Individuals at this stage typically prioritise comfort, ease of care and practicality over fashion trends. Styles tend to be modest and relaxed, with fewer formal or social occasions requiring elaborate dress. For elderly spouses, health or mobility issues may also influence the need for easy-to-wear, accessible designs.

2. Family Budget

A family's income level greatly influences clothing choices. When the family has fewer members or when more members earn an income, there is more money available, and they can afford more or higher-quality clothing. On the other hand, in families where most members are dependents, only basic and less costly clothing can be purchased to avoid financial strain.

3. Community Standards

People tend to dress in ways that are acceptable and appropriate within their communities. Community values and norms influence clothing choices, especially for specific events or roles. To avoid embarrassment or rejection, individuals often choose clothing that aligns with local expectations and traditions.

4. Occupation

A person's job affects the type of clothing they need. For instance, students mostly require school uniforms and casual wear, while professionals need clothing that fits their workplace dress codes. Clothing must be suitable for the nature of the job being done.

5. Age and Sex of Family Members

Clothing needs vary according to age and sex. For example:

- Babies and children grow quickly, so their clothes are often loose and easy to move in.
- Teenagers and young adults, who may have developed body shapes, might prefer fitted clothing.
- Men and women also have different clothing needs due to physical and social differences. Therefore, sex-appropriate clothing is essential when making selections for family members.

- **Climate and Weather**

The climate of a region strongly determines the types of clothing suitable for comfort and protection. Hot, humid areas call for lightweight, breathable fabrics such as cotton and linen that keep the body cool. Cold regions require layered clothing made from wool, fleece or insulated materials to retain warmth. Rainy seasons make raincoats, umbrellas water-resistant footwear essential for staying dry. Adapting clothing to seasonal changes helps maintain health and comfort throughout the year. Families often prioritise versatile garments that can be layered or adjusted to suit varying weather conditions, ensuring practicality and cost-effectiveness.

- **Fashion Trends and Personal Taste**

Fashion and individual style play important roles in clothing choices. Many people use clothing to express their personality, mood or creativity, making selections that feel unique to them. Trends seen in magazines, social media and celebrity culture often influence buying decisions, particularly among young people. While some prefer classic, timeless styles that never go out of fashion, others enjoy experimenting with bold colours, prints or modern designs. Within a family, members may negotiate styles that respect tradition while allowing for personal expression. Understanding fashion trends helps ensure clothing is appropriate for the setting and avoids looking outdated or mismatched.

- **Religious and Cultural Beliefs**

Beliefs and traditions significantly shape clothing choices. Certain religions prescribe modest dress, head coverings or specific colours to reflect faith and values. Festivals, weddings and rituals often involve wearing traditional garments that hold cultural meaning and significance. Choosing culturally significant clothing preserves heritage, strengthens identity and shows pride in one's background. Families must find a balance between modern fashion and cultural respect, especially during formal or communal events where traditions are on display. Teaching younger generations about traditional attire helps maintain cultural continuity and fosters appreciation for shared customs.

Factors to consider when planning a wardrobe

1. Existing Wardrobe

Before purchasing new clothes, it is important to assess what you already own. Go through your wardrobe and remove items that are outdated or no longer useful. Some garments can be altered or updated to meet current needs. For instance, an old blouse with puff sleeves can be restyled with modern sleeves instead of buying a new one. Taking inventory of your clothing helps you identify what is lacking and allows you to buy only what complements your existing wardrobe, helping you save money and maintain a functional collection.

2. Climate

Weather conditions play a significant role in clothing selection. In Ghana and many West African countries where the climate is generally warm, it is ideal to choose lightweight, breathable fabrics that provide comfort. Fabrics such as Akosombo Textiles Prints, Ghana Textile Prints, Printex, batik, and tie-dye are well-suited to the tropical climate and help in maintaining comfort throughout the day.

3. Age

People of different ages have different clothing needs. Babies and young children require loose-fitting clothes to accommodate rapid growth and ensure comfort. Adolescents and young adults often prefer fitted clothing that highlights their body shape. Adults may focus on functionality and style, while the elderly may opt for loose-fitting, darker or cooler-coloured garments that offer ease and modesty. Therefore, the age of a person greatly influences the kind of clothing they should have in their wardrobe.

4. Financial Resources

Your income level determines the quality and quantity of clothing you can afford. Wealthy individuals can afford high-end, designer clothing and to frequently update their wardrobes. However, even individuals with limited means can build an effective wardrobe through careful planning and prioritisation. Thoughtful wardrobe planning allows people of all income levels to dress appropriately and confidently while saving for other essential needs or supporting broader societal causes.

5. Status or Lifestyle

Your lifestyle and social status also affect your wardrobe needs. For instance, a high-profile person such as a CEO of a fashion house may need elegant and stylish outfits like suits or slit and “kaba” for formal meetings and social gatherings. On the other hand, a student may require more practical clothing like school uniforms, T-shirts and jeans. Wardrobe planning should reflect one’s daily activities and social engagements, avoiding unnecessary purchases that do not suit your lifestyle.

6. Activities

Different occasions demand different styles of clothing. Outfits worn to a wedding will differ greatly from those appropriate for a beach trip. Similarly, what you wear to class should be different from what you wear to an entertainment event.. While it’s important to fit in socially, avoid imitating fashion choices that are considered inappropriate or offensive. For example, a glamorous dress may be suitable for a wedding, whereas swimwear such as bikinis or boxer shorts may be appropriate for the beach.

Benefits of planning a wardrobe

A thoughtfully planned wardrobe offers numerous advantages. It helps individuals make smart clothing choices and get the most out of their resources. The key benefits include:

1. Cost Savings

Planning your wardrobe helps minimise impulsive purchases, allowing you to save money by buying only what is necessary.

2. Versatility in Dressing

It ensures you have suitable clothing for different activities and occasions, whether formal, casual or recreational.

3. Variety and Style

A well-planned wardrobe allows you to rotate outfits, reducing the frequency of wearing the same clothes and helping you maintain a fresh appearance.

4. Avoiding Clutter

It prevents the accumulation of unnecessary clothing items that may never be worn, keeping your wardrobe neat and purposeful.

5. Generosity and Sharing

By reviewing your wardrobe regularly, you can identify gently used items that can be passed on to other family members or donated to those in need.

6. Positive Social Perception

Dressing appropriately and stylishly through careful planning can enhance your image and attract admiration from others.

7. Gradual Wardrobe Expansion

Planning enables you to strategically grow your wardrobe with meaningful additions that enhance your overall dressing options.

Learning Tasks

1. Identify and describe the different stages in the family life cycle and explain how they affect clothing selection.
2. Examine how a family's budget influences clothing choices and discuss strategies for planning a wardrobe on a limited budget.
3. Research the various clothing types needed for different activities, such as school, work, and social events.
4. Identify the benefits of having a well-planned wardrobe and explain how it helps save money and avoid unnecessary purchases.

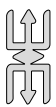
Pedagogical Exemplars

Managing Talk for Learning Approaches: Use the KWL approach and write about what they know and what they want to know about planning a wardrobe.

Collaborative Learning Talk for Learning Approaches: In pairs/groups think-pair- share/ brainstorm to explain the terms wardrobe and wardrobe planning.

Group Work: In mixed gender/ability/cultural groups use pyramid discuss/mingling, explore factors to consider when planning wardrobe. E.g.

1. Existing wardrobe
2. Climate
3. Age
4. Money available
5. Status or lifestyle, etc.



Note

Emphasise the values of responsibility and self-esteem in wardrobe planning.

Key Assessment

DoK Level 1: Define the term wardrobe planning and list three types of clothing commonly found in a wardrobe.

DoK Level 2: Explain how climate and financial resources influence the choice of clothing in wardrobe planning.

DoK Level 3: Compare the wardrobe needs of a university student and a working mother, considering their daily activities and lifestyle.

DoK Level 4: Develop a functional wardrobe plan for a Ghanaian Senior High School student using locally available resources and justify how it meets the student's needs throughout the school term.

FOCAL AREA 2: **WARDROBE PLANNING AND PRACTICAL APPLICATION**

Steps in Selecting and Arranging Clothing for a Wardrobe

Building a functional and well-organised wardrobe is not just about fashion. It is about meeting the daily clothing needs of individuals and families in a practical, cost-effective and stylish manner. The following steps guide the selection and arrangement of clothing in a way that supports both utility and personal expression.

1. Assess Clothing Needs

The first step in wardrobe planning is to identify the clothing requirements of the individual or family. This involves taking into account daily routines, work or school responsibilities, leisure activities, religious practices and social engagements. It is also essential to consider the climate and seasons, as well as any special clothing needs due to health, age or cultural traditions. This comprehensive assessment forms the foundation for selecting appropriate clothing.

2. Evaluate the Existing Wardrobe

Before purchasing new items, take stock of what is already available. Go through each item in the wardrobe and decide what should be kept, repaired, repurposed, donated or discarded. Identify clothing that no longer fits, is out of style or is not appropriate for current needs. This process helps to eliminate clutter and provides a clearer picture of what needs to be added or replaced.

3. Set a Budget and Prioritise Needs

Financial planning is a crucial aspect of wardrobe management. Set a realistic budget for clothing purchases, considering income level and other financial responsibilities. List essential clothing items first such as school uniforms, work attire or seasonal basics before considering non-essential or fashionable additions. Budgeting helps to avoid impulse buying and promotes thoughtful, sustainable choices.

4. Plan Clothing Purchases Wisely

Using the list of needed items, plan what clothing to purchase. Aim for quality over quantity by choosing durable, easy-care fabrics and versatile styles that can be worn on multiple occasions. Consider neutral colors or patterns that can be mixed and matched with existing wardrobe items. Take advantage of sales, local markets or second-hand stores to maximise value without sacrificing style or quality.

5. Consider Personal Style and Body Type

Clothing should enhance confidence and reflect the wearer's personality. When selecting items, consider the individual's body shape, skin tone and style preferences. Encourage choices that flatter the body and align with the wearer's values and self-image. A wardrobe that fits well and looks good helps boost self-esteem and makes dressing each day a more enjoyable experience.

6. Arrange the Wardrobe Neatly and Systematically

A well-organised wardrobe makes it easier to maintain clothing and select outfits efficiently. Group similar items together such as shirts, trousers, skirts or traditional attire and arrange them based on how frequently they are worn. Keep everyday essentials within easy reach and store less-used or seasonal items on higher shelves or in storage boxes. Use appropriate hangers to prevent wrinkles and maintain garment shape.

7. Maintain and Update the Wardrobe Regularly

Proper maintenance ensures that garments remain in good condition. Encourage regular washing, ironing, and mending of clothes. Review the wardrobe seasonally and make necessary adjustments to accommodate growth, weather changes or lifestyle shifts. Updating the wardrobe periodically also allows for the introduction of new trends or personal changes in taste and preference.

Steps in Wardrobe Planning for Specific Groups

1. Identify the Target Group

This initial step involves defining the specific demographic that the wardrobe will cater for. Different groups have distinct clothing requirements based on their life stages, responsibilities and contexts. For instance, children require practical and durable clothing for school and play, while adults may look for professional attire suitable for their work environments. Understanding the target group helps in focusing the wardrobe plan on relevant needs and preferences.

Example: When planning a wardrobe for a teenager, the focus might be on trendy, fashionable clothing suitable for school, social outings and casual gatherings. In contrast, a wardrobe for a new mother may prioritise nursing-friendly tops and comfortable bottoms that can withstand the rigors of childcare.

2. Analyse the Group's Daily Activities

Understanding the typical routines and activities of the target group is crucial. For children, considerations might include the need for school uniforms and casual wear for social activities. Professionals may require a mix of formal and casual attire for meetings and after-work events. By analysing daily activities, clothing selections can be better tailored to accommodate different scenarios.

Example: For a working professional, the wardrobe should include business attire for the office such as tailored suits or blouses along with smart-casual pieces for networking events or casual Fridays. In contrast, a college student may need a mix of lecture-ready outfits, comfortable loungewear for studying and formal wear for job interviews.

3. Consider Environmental and Climatic Conditions

Weather plays a vital role in wardrobe planning. The right clothing must align with the local climate to ensure comfort and appropriateness. For example, individuals in tropical regions might benefit from lightweight fabrics, while those in colder areas may require heavier, layered clothing. This consideration ensures that the wardrobe is both functional and comfortable throughout the year.

Example: A wardrobe for someone living in a city with cold winters might include thermal base layers, heavy coats, hats, gloves and waterproof boots, while someone in a coastal area might prioritise breathable fabrics, sundresses and flip-flops for the beach.

4. Incorporate Cultural and Religious Considerations

Cultural norms and religious beliefs can dictate clothing choices significantly. This step emphasises the importance of respecting and accommodating these considerations in wardrobe planning. For instance, adherents of certain religions may require modest clothing, while specific cultural attire might be essential for others.

Example: A wardrobe for a Muslim woman might include a variety of hijabs and long-sleeved tops paired with floor-length skirts or trousers to adhere to standards of modesty. Similarly, a business attire selection for an individual from a culture that values traditional dress may include formal options that also respect cultural garment styles.

5. Determine the Budget

Establishing a budget is essential to ensure that wardrobe planning remains financially feasible. This involves estimating costs for various clothing items, including essentials, accessories and contingencies for future replacements. A well-defined budget helps balance quality with affordability, preventing overspending while ensuring that necessary clothing is available.

Example: If a family has a budget of 500 cedis for back-to-school clothing, they might allocate funds with 200 cedis for shoes, 150 cedis for tops and 150 cedis for bottoms, ensuring they can cover all necessary categories without overspending.

6. Select Appropriate Clothing Types

Once the needs of the target group are understood, the next step is selecting specific items that will meet those needs. Each demographic has unique preferences: children benefit from durable, easy-to-clean clothing; professionals need versatile and polished outfits; and elderly individuals may require clothing that is easy to wear. For individuals with special needs, adaptive clothing features, such as adjustable fastenings, become critical.

Example: For children, choices might include play-friendly and stain-resistant fabrics like poly-cotton blends, while a wardrobe for a senior individual could include tops with easy pull-on designs and trousers with elastic waistbands for added comfort.

7. Plan for Versatility and Rotation

Versatile clothing allows for mixing and matching, creating multiple outfits from a limited selection. Choosing neutral colours and basic styles can enhance the wardrobe's flexibility. Ensuring that there's adequate clothing for various daily activities again emphasises both practicality and preparedness.

Example: By selecting a few solid-coloured tops that can be worn with different pairs of pants or skirts like a navy-blue blouse that looks great with black trousers, white jeans or a colourful skirt you create numerous outfit options without needing a large number of pieces.

8. Review and Adjust Seasonally or As Needed

Wardrobe plans should be dynamic and adaptable. As changes occur whether due to growth, shifts in lifestyle or changing seasons the wardrobe should be reviewed and updated accordingly. This flexibility not only accommodates immediate needs but also promotes long-term satisfaction and utility from the clothing collection.

Example: A family might assess their children's wardrobes at the beginning of each school term to determine if new clothing is needed due to growth spurts or to accommodate a new sport or activity. Similarly, a professional might review their wardrobe at the start of spring to replace any winter items with lighter layers suitable for warmer weather.

Learning Tasks

1. Identify and list the steps involved in selecting and arranging clothing in a wardrobe.
2. Create a simple wardrobe plan for yourself based on your weekly activities, climate and budget.
3. Compare two different wardrobe plans and explain which one is more practical and why.

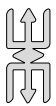
Pedagogical Exemplars

Collaborative Learning/Talk for Learning Approaches: In pairs/groups use talking point to describe how to select and arrange clothing when planning a wardrobe.

Group Work/Collaborative Learning Approaches: In mixed ability/gender/random groups, plan wardrobe for specific groups of individuals and follow-up with whole class discussion.

Experiential Learning Approaches

- In groups, surf the internet/watch video to find out how to plan a wardrobe and present the findings.
- Role-play how a wardrobe is planned using the appropriate clothing items.



Note

Ensure respect for self and others when role playing.

Talk for Learning Approaches

Use the radio presenter strategy to share learning experience to complete the KWL by stating what they learnt in the lesson.

Give differentiated tasks to encourage scaffolding of ideas among all learners.

Key Assessment

DoK Level 1: List three key steps in selecting clothing for your wardrobe.

DoK Level 2: Explain how considering the climate and comfort of fabrics can influence wardrobe selection.

DoK Level 3: Create a plan for organising a wardrobe that includes both casual and formal wear. Justify your choice of how to categorise and store clothes to ensure both accessibility and longevity.

Hint



The recommended mode of assessment for Week 4 is poster presentation. You may use DoK Level 3 as a sample question for learners to design a poster on. Refer to the Teacher Assessment Manual and Toolkit page 76 for additional information on how to use this assessment mode.

WEEK 5: GOOD GROOMING AND FACTORS THAT PROMOTE GOOD GROOMING

Learning Indicators

1. *Explain good grooming in relation to dress sense*
2. *Examine the factors that promote good grooming*

FOCAL AREA 1: THE CONCEPT OF GOOD GROOMING

Good grooming in relation to dress sense

Good grooming in relation to dress sense involves wearing clean, well-maintained clothes that fit well and suit the occasion. It emphasises personal hygiene, ensuring clothes are free from stains and odours. Clothing should be appropriate for the environment, whether formal, casual or professional. Neatly pressed garments, polished shoes and coordinated accessories reflect attention to detail. Hair and nails should be well-maintained, complementing the outfit. Good grooming also includes choosing versatile, comfortable clothing that enhances one's appearance. It demonstrates respect for oneself and others. Ultimately, it shows an understanding of how appearance influences social and professional interactions.

Importance of good grooming

1. **Good grooming builds self-confidence:** Self-confidence stems from self-belief. When you are well-groomed, you feel good about yourself, which boosts your confidence in social and professional settings. Poor grooming, on the other hand, can lead to feelings of insecurity, shyness and a fear of rejection. A well-presented appearance allows individuals to approach situations with boldness and poise, making them less anxious about social acceptance.
2. **Good grooming gives vitality:** A well-groomed person is often perceived as healthy, energetic and active. When someone is well-presented, it reflects their overall well-being and ability to engage in daily tasks with vigour. In contrast, a sick or unkempt person may appear lethargic or unwell, leading to social exclusion or sympathy rather than admiration. Grooming helps individuals maintain the energy required to look and feel their best.
3. **Good grooming enhances professionalism:** In the workplace, good grooming is often seen as a reflection of one's dedication, attention to detail and respect for others. A well-dressed individual is more likely to be taken seriously, earn respect and create positive first impressions. It can also increase opportunities for career advancement, as appearances often influence perceptions of competence and authority.
4. **Good grooming promotes positive social interactions:** People who are well-groomed tend to create positive connections and attract better social interactions. It reflects respect for others and the environment, making it easier to engage in meaningful conversations and build strong relationships. Well-groomed individuals are often viewed as approachable and reliable, fostering trust and respect from others.

5. **Good grooming boosts mental well-being:** When you take the time to look after yourself, it positively impacts your mental health. Regular grooming can lead to a sense of accomplishment and order, helping to reduce stress and anxiety. Feeling good about your appearance contributes to a positive self-image and overall mental well-being, fostering a sense of self-worth and happiness.
6. **Good grooming improves hygiene:** Grooming is closely tied to personal hygiene. By regularly grooming yourself, you maintain cleanliness, which is essential for both physical and social health. It includes keeping nails trimmed, hair clean and clothes fresh, which helps prevent infections, body odour and other hygiene-related issues, promoting good health.
7. **Good grooming increases attractiveness:** When someone takes care of their appearance, it enhances their natural features and boosts their attractiveness. Looking well-groomed can make a significant difference in how others perceive you, fostering confidence and making you more approachable. Attractive individuals often enjoy more positive social interactions and opportunities.
8. **Good grooming reflects self-respect and respect for others:** Taking the time to groom yourself properly shows that you value and respect both yourself and those around you. It conveys that you are mindful of your appearance and understand the impact it can have on your interactions with others. Well-groomed individuals are often seen as more considerate and thoughtful.

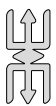
Learning Tasks

1. Explain good grooming and why it is important for building self-confidence.
2. Explain how good grooming contributes to a person's vitality and overall health.
3. Discuss the impacts of good grooming within society.

Pedagogical Exemplars

Managing Talk for Learning/collaborative Learning Approaches

- In pairs, brainstorm/brain-write to review the concept good grooming learnt in Career Technology at the JHS level.
- Whole class/panel/group discussion on what good grooming entails.



Note

Emphasise the need to dress appropriately to enhance self-image.

Learners should be guided in their presentations to promote respect, tolerance and integration of social and cultural issues.

Key Assessment

DoK Level 1: What is the meaning of good grooming?

DoK Level 2: How does good grooming contribute to a person's self-confidence and vitality?

DoK Level 3

1. How does good grooming affect social acceptance and personal interactions?
2. In what ways can good grooming impact long-term success in both personal and professional life?

FOCAL AREA 2: EXAMINE THE FACTORS THAT PROMOTE GOOD GROOMING

Factors that promote good grooming

1. Posture

Posture refers to the way we hold our bodies while standing, sitting or walking. Maintaining a good posture is important as it reflects physical health and confidence. A person with a straight posture looks poised and attractive. Slouching, on the other hand, can lead to a distorted shape and an unappealing appearance. Avoiding high-heeled shoes that disrupt posture is also important for maintaining optimal body alignment.



Figure 12: *Sitting Posture*

2. Diet

A balanced diet is essential for good grooming. Consuming a variety of foods in proper proportions, such as carbohydrates, proteins, vitamins and minerals, ensures that the body functions well. Over-eating or under-eating can lead to poor physical health, which will negatively affect grooming. A nutritious diet promotes good skin, hair and a healthy body size, contributing to a positive and attractive appearance.



Figure 13: *A balanced Diet*

3. Exercise

Regular physical activity is key to maintaining vitality and a well-groomed appearance. Exercise improves the immune system, controls weight, enhances physical shape and ensures good overall health. A routine exercise schedule helps maintain an active, vibrant and healthy body, which is essential for grooming.



Figure 14: *Regular Exercise*

4. Rest and Relaxation

Adequate rest and relaxation play a significant role in good grooming. Resting allows the body to recover from fatigue, while relaxation helps to reduce stress. A rested and relaxed person looks fresh, cheerful and more physically appealing. Activities like watching movies, visiting the beach or enjoying nature can help relieve stress and contribute to a well-groomed appearance.



Figure 15: *Rest and Relaxation*

5. Personal Cleanliness (Hygiene)

Maintaining personal hygiene, such as clean hair, teeth and skin, is essential for good grooming. Regularly washing the hair and keeping it tidy, brushing teeth to prevent bad breath and dental issues and ensuring clean hands and feet all contribute to a polished look. Proper footwear care is equally important, as clean, well-maintained shoes enhance overall grooming.



Figure 16: *Personal Hygiene*

6. Clothing

Clothing is a powerful form of self-expression. Wearing appropriate, clean and well-fitting clothes speaks volumes about a person's grooming. Clothes should reflect the occasion and be in good condition. Dressing modestly and in a manner that complements one's body type is key to looking well-groomed. Clothing should also be fresh, neat and properly cared for to maintain a polished appearance.

7. Environmental Hygiene

A well-groomed person maintains a clean and organised environment. A tidy space not only reflects personal hygiene but also promotes good health. A clean environment helps to prevent diseases, improves well-being, and positively influences the way others perceive you. Regular cleaning and organising your surroundings will ensure a healthier and more attractive living space.



Figure 17: *Environmental Hygiene*

8. Jewellery Care

Jewellery, when kept clean and well-maintained, can enhance a person's grooming. Jewellery should be regularly cleaned to avoid the accumulation of dirt, sweat and grease, which can lead to skin infections. Properly storing jewelry after use ensures it remains in good condition and contributes positively to one's overall appearance.



Figure 18: *Jewellery Care*

Factors that promote good grooming and how they contribute to maintaining hygiene and appearance

1. Personal Hygiene Education

- **Awareness and Knowledge:** Understanding the importance of personal hygiene is fundamental. Education about the benefits of grooming such as preventing disease and enhancing self-esteem can motivate individuals to adopt good practices.
- **Access to Resources:** Information on grooming techniques, such as skincare, dental care and hair care, can empower individuals to achieve and maintain a well-groomed appearance.

2. Cultural Norms and Social Influences

- **Cultural Expectations:** Different cultures have varying standards and practices surrounding grooming. Awareness and conformity to cultural norms can encourage individuals to engage in grooming activities that are valued in their community.
- **Peer Influence:** Social circles often pressure individuals to adhere to certain grooming standards. Positive reinforcement from friends or family can encourage better grooming habits.

3. Self-Esteem and Confidence

- **Personal Satisfaction:** Individuals who regularly engage in grooming and maintain their appearance often report higher levels of self-esteem. This intrinsic motivation can sustain grooming behaviours.

- **Professional Appearance:** For many, good grooming is integral to making a favourable impression in professional settings, which can lead to career advancement and personal fulfilment.

4. Availability of Products and Services

- **Access to Grooming Products:** The availability and affordability of grooming products (shampoos, deodorants, skincare items) play a crucial role in an individual's ability to maintain good grooming habits.
- **Professional Services:** Access to barber shops, salons and spas can promote good grooming by providing professional care that enhances personal grooming efforts.

5. Routine and Time Management

- **Creating a Routine:** Establishing a regular grooming routine can make grooming a habitual part of life, making it easier to maintain.
- **Time Allocation:** Making time for grooming activities can promote good habits. Scheduling grooming as part of a daily or weekly routine emphasises its importance.

6. Environmental Factors

- **Living Conditions:** A clean and organised living space can encourage personal grooming habits. Having a designated grooming area that is well-equipped can facilitate the grooming process.
- **Community Standards:** In communities where grooming is emphasised (e.g., workplaces or schools with a dress code), individuals are more likely to participate in grooming behaviours that meet the expected standards.

7. Mental Health

- **Psychological Wellbeing:** Good grooming can be linked to mental health. Individuals who prioritise self-care tend to have better emotional health, which can create a positive feedback loop encouraging further grooming.
- **Stress Reduction:** Engaging in grooming routines can provide a sense of control and relaxation, thereby supporting overall mental health.

Learning Tasks

1. Discuss the key factors that promote good grooming and how do they impact your daily life.
2. Examine how personal cleanliness and proper clothing contribute to a well-groomed appearance.

Pedagogical Exemplars

Group work/Problem based Approaches: In mixed gender /random groups, discuss the factors that promote good grooming. E.g.,

1. Posture
2. Diet
3. Exercise, rest and relaxation

4. Clothing
5. Personal and environmental hygiene, etc.

Collaborative learning/Group work: In mixed ability/cultural groups, examine how the factors promote good grooming (using Flip charts, pictures, sticky notes, realia of clothing, surf internet, smart phones (if possible)).

Experiential Learning Approaches

1. Undertake a case study on good grooming in relation to the factors by observing persons of your choice in the school and community (using note pads, smart phones (if possible) cameras, etc.) to collect data and present a report.
2. Use differentiated tasks to cater for the learning needs of all learners (male, female and SEN learners).

Key Assessment

DoK Level 1: List four factors that promote good grooming.

DoK Level 2: Explain how rest and relaxation contribute to good grooming.

DoK Level 3: Compare the effects of poor diet and poor posture on a person's grooming and appearance.

DoK Level 4: Imagine you are planning a school seminar on personal grooming. Design a presentation outline that addresses at least five key factors that promote good grooming, explaining their importance and how students can apply them in daily life.

Hint



The recommended mode of assessment for Week 5 is Case Study. You may take a cue from the DoK Level 4 task as a sample. Refer to the Teacher Assessment Manual and Toolkit page 25 for additional information on how to use this assessment mode.

SECTION 2 REVIEW

This section provides a comprehensive guide for learners to understand the importance of effectively planning wardrobes and managing personal appearance. It emphasised the significance of applying wardrobe planning principles to meet individual and family clothing needs while nurturing good grooming habits that enhance overall appearance and self-esteem. Through a blend of theoretical concepts and practical explorations, learners are equipped with essential skills for making informed clothing decisions, managing resources efficiently and promoting positive dress sense within their communities. The pedagogical approaches suggested foster a learner-centred environment that encourages collaboration and real-world application of knowledge, ultimately preparing students for effective personal identity building through their clothing choices. Assessments focus on ensuring a thorough understanding and skill acquisition in wardrobe planning and grooming practices, catering to various learner abilities and promoting inclusive educational experiences.

SECTION 3: UNDERSTANDING THE PROPERTIES AND APPLICATIONS OF FIBRES AND FABRICS IN TEXTILES

Strand: Textiles in Clothing

Sub-Strand: Characteristics of Fibres and Fabrics Functionality

Learning Outcome: Apply knowledge, understanding of fibres to identify and describe the characteristics of different types of fibres and fabrics.

Content Standard: Demonstrate scientific knowledge and understanding to identify and describe the characteristics of different types of fibres and fabrics.

Sub-Strand: Characteristics of Fibres and Fabrics Functionality

Learning Outcome: Analyse the functional properties of fibres and fabrics in relation to their uses.

Content Standard: Demonstrate ability to analyse the functional properties of fibres and fabrics and their application in clothing and household textiles

Hint



Remind learners of **mid-semester examination** in week 6. Refer to the Appendix C for a Table of Specification to guide you to construct your test items.

INTRODUCTION AND SECTION SUMMARY

This section aims to develop learners' understanding of textile fibres and fabrics by exploring their classification, properties and practical testing. It covers the concept of fibres as the basic building blocks of textiles, their classification by source and chemical type and the general properties that influence end uses. Learners will investigate the characteristics of different fibres including absorbency, durability and elasticity and apply scientific principles to identify fibres using methods such as visual inspection, microscopic examination, burning, absorbency and solubility tests. Additionally, the section guides learners to understand how fibre properties influence fabric selection for specific purposes, such as sportswear, children's clothing, workwear, luxury garments and household textiles. Minimum competencies include classifying fibres, describing their properties, conducting identification tests, comparing fabric performance and making informed choices about fabric selection based on function and end use. Lessons are designed to help learners appreciate the role of fibre properties in garment design, selection and care.

The weeks and indicators covered by this section are:

Week 6: Classify fibres into natural and synthetic categories and describe their characteristics.

Apply scientific principles to test for the characteristics of fibres.

Week 7: Investigate the absorbency, durability and elasticity of different fabric types through simple experiments.

Explain how the properties of fibres influence the selection of fabrics for specific purposes.

SUMMARY OF PEDAGOGICAL EXEMPLARS

The section targets learner-centered lesson delivery under each focal area. To do this, the teacher is expected to explore and apply other pedagogical exemplars suitable for each focal area and not limit themselves to those mentioned in the section. Some of the pedagogical exemplars that could be employed include problem-based learning, collaborative learning, experiential learning, structured talk for learning and group discussions. Additionally, hands-on experiments to test fabric properties, fabric identification, fabric performance, textile care, and fabric selection for different purposes can be incorporated to enhance learners' practical understanding and analytical skills.

The teacher is also encouraged to incorporate Gender Equality and Social Inclusion (GESI), Special Educational Needs (SEN), Social and Emotional Learning (SEL), 21st-Century Skills, Core National Values and ICT in lesson delivery. This approach will make learning more interactive, inclusive and application-based, ensuring that learners can effectively understand fibre and fabric characteristics and their functionality in clothing and textiles.

ASSESSMENT SUMMARY

There is the need for the teacher to assess learners' knowledge, understanding and skills on the concepts under this section. To effectively do this, the teacher should use varying assessment strategies to unearth learners' Depth of Knowledge (DoK), as outlined in this manual and the SHS Curriculum. It is equally important to align the assessment activities with the learning indicators as well as the pedagogical exemplars, to create a synergy between them.

Teachers are to make choices that will ensure a good mix of high and low levels of assessment to accommodate the diverse abilities of learners. Assessment strategies may include fabric identification tests, hands-on experiments to analyse fabric properties, presentations on fibre classifications, role-playing activities on textile care practices, research projects on fabric functionality in different environments, peer assessments and self-evaluations. As a guide, specific examples of assessment tasks have been outlined in the section to assist the teacher.

WEEK 6: CLASSIFICATION AND TESTING OF TEXTILE FIBRES

Learning Indicators

1. Classify fibres into natural and synthetic categories and describe their characteristics
2. Apply scientific principles to test for the characteristics of fibres

FOCAL AREA 1: THE CONCEPT OF FIBRES

The Concept “Fibres”

Fibres are the basic building blocks of all textile materials. They are **fine, hair-like strands** that can be twisted or spun into yarns and used to make fabrics. Fibres must have certain properties like, **strength, flexibility and fineness** to be useful in textile production. Fibres can be **Staple** and **Filament** fibres.



A **fibre** is a hair-like, fine and flexible substance used in producing yarns and fabrics.



Staple refers to short fibres which are measured in centimetres, often spun so as to hold together as yarn or thread as in cotton, wool and short broken fibres of silk and flax. Staple fibres are mainly from natural sources but man-made filament fibres can be cut into short length or staples.



A **filament** is man-made long fibres measured in kilometres. Silk is the only natural filament fibre. Filament fibres if not cut into shorter length, needs little twisting before weaving, but they are generally textured or made wavy.



A **yarn** is a mass of fibres or filaments twisted (spun) or laid together. A yarn may also be referred to as a strand. Yarns which consist of one filament are called mono filament yarns. Example: Nylon and hosiery. Multifilament yarns are made up of more than one filament.

Figure 19: Terminologies in Fibres

Like all academic disciplines, textiles have their own terminology and classification systems.

Principal Origin: Fibres are categorised based on their main source, which may be natural or man-made. Natural fibres are obtained from plants, animals or mineral sources found in nature. Man-made fibres, on the other hand, are created artificially using chemical substances in laboratories.

Chemical Type: Every fibre is made of specific chemicals and this chemical composition determines its classification. Plant-based fibres are classified as cellulose fibres, animal-based fibres as protein fibres and mineral-based ones are considered mineral fibres. Some fibres are regenerated, meaning they originate from natural sources like wood pulp but are chemically modified. Others are entirely synthetic, created purely from chemicals without any natural base. Fibres of the same chemical type generally exhibit similar properties and behaviour, particularly in terms of burning and laundry care.

Generic Type or Family Name: Fibres are also grouped under generic or family names, which describe their origin or method of processing. For example, fibres may be identified as seed hair, bast, leaf or husk fibres for plant-based ones; animal hair or secretions for animal-based ones; and rayon, polyester, nylon, acetate or metallic for man-made types. Fibres from the same family often have similar appearances under a microscope.

Common or Specific Names: Since common names are widely recognised, they are often used to clarify classifications. Examples of these names include cotton, wool, silk, nylon, spandex, rayon and fibreglass.

Classification of Fibres

Fibre	Principal origin	Chemical type	Family name	Specific name
1	Natural	Protein	Animal secretion	Silk
2	Natural	Protein	Animal air	Wool
3	Natural	Mineral	Metallic	Lurex
4	Natural	Cellulosic	Seed hair	Cotton
5	Man-made	Synthetic	Polyester	Dacron
6	Man-made	Synthetic	Nylon/ polyamide	Nylon 66
7	Man-made	Regenerated/ man-made cellulosic	Rayon	Viscose rayon
8	Man-made	Regenerated/ man-made protein	Azlon	casein

General Properties and Examples of Textile Fibres

1. Cellulose Fibres (*Natural – Plant-based*)

Examples: Cotton, Linen (Flax), Ramie, Jute, Hemp, Sisal, Raffia, Pina, Coir, Kapok

General Properties

- a. Cellulose fibres are typically short and are referred to as staple fibres.

- b. They have great tensile strength, which makes them strong and hard-wearing.
- c. These fibres spin very well because they cling together easily, resulting in fabrics that do not fray excessively.
- d. Cellulose fibres have low resiliency, which means they wrinkle easily and often require ironing.
- e. They have a high absorbency rate, making them good at absorbing moisture, dye and comfortable to wear in hot climates.
- f. These fibres have low elasticity and therefore do not stretch much.
- g. Prolonged exposure to sunlight can bleach or weaken cellulose fibres.
- h. Cellulose fibres are prone to damage by insects, bacteria and mildew when stored in damp conditions.
- i. They are destroyed by termites and silverfish but are resistant to moths.
- j. They are biodegradable and tend to disintegrate with age.
- k. Being good conductors of heat, they are cool to wear and suitable for warm weather.

2. Protein Fibres (*Natural – Animal-based*)

Examples: Wool (sheep), Silk (silkworm), Mohair, Cashmere, Alpaca

General Properties

- a. Protein fibres absorb moisture very well, which makes them easy to dye.
- b. They have a low density and specific gravity, making them relatively lightweight.
- c. These fibres do not burn readily when exposed to flame.
- d. They are damaged by dry heat and tend to scorch under high temperatures.
- e. Exposure to sunlight causes white protein fabrics to slowly turn yellow.
- f. They are damaged by many oxidising agents, especially chlorine bleach.
- g. Protein fibres are sensitive to alkaline substances such as soap.
- h. Wool exists in staple form while silk is a filament fibre.
- i. Both wool and silk are naturally lustrous.
- j. Wool has excellent resiliency, while silk has moderate resiliency and creases moderately.
- k. They drape well on the human figure.
- l. Wool and silk are strong when dry but become weaker when wet. Wool is more affected by water than silk.

3. Mineral Fibres

- a. Natural Mineral Fibres

Example: Basalt Fibre

Uses in Clothing and Textiles

- Flame-retardant suits for industrial workers.
- Fire barriers and curtains in factories.

- Heat-resistant gloves and mitts.
- Protective panels and linings in safety garments.
- Structural reinforcement in advanced composites for personal protection.

General Properties

- **Excellent Thermal Resistance:** Can handle ~800 °C continuously, brief peaks over 1000 °C.
- **Fireproof and Non-Toxic:** Emits no toxic fumes when exposed to flame.
- **High Tensile Strength:** Stronger than many glass fibres.
- **Chemical Resistance:** Stable against acids, alkalis and salt solutions.
- **Good Flexibility:** Easier to weave and drape than glass fibre.
- **Low Thermal Conductivity:** Effective insulation barrier.
- **Environmentally Friendly:** Made from natural volcanic rock with minimal processing.

b. Man-Made Mineral Fibres

Examples: Glass fibres, Metallic fibres (Gold, Silver, Aluminium, Stainless Steel)

General Properties

- Man-made mineral fibres have high tensile strength, which makes them very durable.
- They have low elongation but possess high elastic recovery.
- These fibres maintain excellent dimensional stability under various conditions.
- They have very high density and are not suitable for clothing.
- Their absorbency rate is low, making them less effective in absorbing moisture.
- They are resistant to wrinkling and retain a smooth surface.
- These fibres are transparent in nature.
- They are flame-resistant and do not burn.
- They are only attacked by hydrofluoric and hot phosphoric acids.
- Strong alkalis at cold or warm temperatures, as well as hot weak alkalis, can damage them.

4. Man-Made Cellulose (Regenerated) Fibres

Examples: Rayon (Viscose), Acetate, Triacetate

General Properties

- Regenerated cellulose fibres are lustrous and have varying degrees of resiliency.
- They resist most dry-cleaning solvents and stain removers but are vulnerable to acetone, phenol and chloroform.
- Mildew may develop on all types of regenerated cellulose fibres.

- d. These fibres are resistant to most insects except for silverfish, particularly in the case of rayon.
- e. Rayon is highly absorbent, while acetate and triacetate have moderate absorbency levels.
- f. Triacetate has good resiliency, acetate moderate and rayon low resiliency.
- g. All of them have medium strength and are generally durable.
- h. Acetate and triacetate are resistant to stretching and shrinking, but rayon is not dimensionally stable.
- i. They deteriorate under prolonged exposure to sunlight but generally resist ageing.

5. Regenerated Protein Fibres

Example: Azlon (from soybeans, casein from milk, peanuts, corn, egg-white, feathers)

General Properties

- a. Regenerated protein fibres have properties similar to natural protein fibres such as wool and silk.
- b. They are soft, resilient and absorbent.
- c. Azlon is often blended with wool to produce suits, jackets, coats and knitted garments.

6. Synthetic Fibres (*Man-Made – From Chemicals*)

Examples: Polyester (Terylene), Nylon (Polyamide), Acrylic, Modacrylic, Polyurethane

General Properties:

- a. Synthetic fibres are very strong whether wet or dry, making them highly durable.
- b. These fibres are dimensionally stable and do not stretch or shrink easily.
- c. They are easy to wash, require little or no ironing and resist wrinkling.
- d. Being thermoplastic, they melt at high temperatures but can be shaped with warm temperatures.
- e. They shrink away from flame and melt into a sticky residue, making them hazardous near fire.
- f. Synthetic fibres do not conduct heat well, so they are warm to wear and not suitable for hot climates.
- g. They absorb oil easily, which makes oily stains difficult to remove.
- h. These fibres are elastic, stretch well, and drape nicely without wrinkling.
- i. Some types, like polyester and nylon, are prone to pilling.
- j. They have low absorbency rates, dry quickly and are difficult to dye.

Learning Tasks

1. Explain fibres and their basic characteristics.
2. Give examples of man-made and natural fibres.
3. Differentiate between regenerated cellulose and regenerated protein fibres.

4. Explain why cellulose fibres are considered suitable for hot climates.

Pedagogical Exemplars

Group work/Collaborative Learning Approaches: In mixed ability/gender groups, review and present the meaning and sources/classification of fibres learnt in J.H.S. to explain fibres.

Structured Talk for Learning /Experiential Learning Approaches: Provide samples/charts/videos/posters/ of fibres for learners to identify. E.g. Natural and man-made fibres.

With the aid of samples/charts/videos/posters on fibres:

- Discuss the characteristics of different fibres.
- Explain the difference between natural and synthetic fibres using charts or slides.

Experiential Learning/Group Work: In mixed ability groups learners classify fibres according to sources: natural and man-made fibres. Examples

1. Natural – Animal, Plant and mineral
2. Man-made – Regenerated, synthetic and inorganic

In groups, surf the internet/watch video to find out the general characteristics of fibres according to their sources.

Key Assessment

DoK Level 1

1. Define the term *fibre* and explain its role in textile production.
2. List examples of cellulose, protein, mineral, regenerated and synthetic fibres.

DoK Level 2

1. Classify fibres based on principal origin, chemical type and generic family name.
2. Differentiate between staple and filament fibres using examples.

DoK Level 3

1. Compare the properties of natural and synthetic fibres and their implications for fabric use and care.
2. In what ways do the properties of protein fibres make them appropriate for cold weather garments?

FOCAL AREA 2: TEST FOR THE CHARACTERISTICS OF FIBRES

Identification of fibres

Identifying textile fibres requires knowledge of their properties. The method used depends on the fabric type, available tools and analyst's experience. Care labels can give hints, but testing may be needed for confirmation. Tests include visual inspection, absorbency, burning and solubility. Microscopic examination is best for natural fibres. Solubility tests are most effective for man-made fibres.

Fibre Identification Tests

Test Type	How to Carry Out the Test	Observation	Conclusion/Result
Visual Inspection	1. Examine the appearance, lustre and texture of the fabric. 2. Untwist a yarn to see the fibre length. 3. Touch to feel the texture and weight.	Shiny/dull appearance, filament/staple length, soft/rough texture.	Helps to narrow down possibilities, but not conclusive. E.g., dull = cotton, shiny = silk or synthetic.
Microscopic Examination	1. Clean the microscope lens, slide and cover glass. 2. Place a drop of distilled water on the slide. 3. Untwist yarn and spread fibres on the slide. 4. Cover with cover glass and observe under microscope.	Surface contour, fibre shape and structure visible under microscope.	Best for identifying natural fibres; not reliable for synthetic fibres due to similar appearance.
Burning Test	1. Pull yarns from the fabric and hold with tweezers. 2. Feed slowly into flame (candle or Bunsen burner). 3. Observe the behaviour in flame and the ash or residue.	Different fibres burn with distinct smells, flames and residues.	Cellulose fibres burn like paper; protein fibres smell like burnt hair; synthetics may melt or form beads.
Absorbency Test	1. Cut a 1cm x 1cm piece of fabric. 2. Drop it into a test tube or bottle top of water. 3. Observe the behaviour in water.	Sinks and gets wet immediately = high absorbency. Floats or wets slowly = low absorbency.	Natural fibres (cotton, wool) = high absorbency. Synthetics (nylon, polyester) = low absorbency.
Solubility/Chemical Test	1. Use a well-ventilated area and protective equipment. 2. Add small amount of chemical (acid/alkali/acetone) to a test tube. 3. Drop a small fibre sample in and stir. 4. Observe any reaction.	Fibre dissolves, changes colour, or remains unaffected.	Useful for identifying manufactured fibres by their chemical composition (e.g., acetate dissolves in acetone).

Learning Tasks

1. Identify tools and materials needed for microscopic, burning, absorbency and solubility tests.
2. Compare the absorbency levels of synthetic, regenerated and natural fibres.
3. Analyse how a combination of tests leads to accurate fibre identification.
4. Design a fibre identification investigation using at least three testing methods and explain your procedure.

Pedagogical Exemplars

Structuring talk for Learning/Problem based Learning Approaches: With the aid of realia/charts/videos/posters on fibres, discuss the various ways of testing for the characteristics of fibres. E.g.

1. Visual test
2. Burning test
3. Chemical test
4. Absorbency test, etc.

Group Work

1. In mixed ability groups, learners test for the characteristics of fibres using at least two of the methods.
2. Groups present report on the experiment for whole class discussion.

Key Assessment

DoK Level 1: List and describe the common fibre identification methods.

DoK Level 2: Classify fibres based on their reaction to burning, absorbency and solubility.

DoK Level 3: Analyse how a combination of tests leads to accurate fibre identification.

DoK Level 4: Design a fibre identification investigation using at least three testing methods and explain your procedure.

Hint



The recommended mode of assessment for Week 6 is **mid-semester examination**. Refer to the Appendix C for a Table of Specification to guide you to construct your test items.

WEEK 7: INVESTIGATE THE ABSORBENCY, DURABILITY AND ELASTICITY OF DIFFERENT FABRIC TYPES

Learning Indicators

1. Investigate the absorbency, durability and elasticity of different fabric types through simple experiments
2. Explain how the properties of fibres influence the selection of fabrics for specific purposes

FOCAL AREA 1: ABSORBENCY, DURABILITY AND ELASTICITY OF DIFFERENT FABRIC TYPES

1. Absorbency of Fabrics

Absorbency refers to the ability of a fabric to take in and retain moisture or liquid. This property is essential in determining a fabric's suitability for specific end uses. For instance, fabrics used in towels, baby diapers, sportswear and undergarments are expected to have high absorbency. The absorbency of a fabric depends on the type of fibre it is made from. Natural fibres such as cotton, linen, wool and silk typically have high moisture absorbency due to their porous structures and hydrophilic nature. Regenerated fibres like rayon also absorb water well because they are derived from natural sources like cellulose. On the other hand, synthetic fibres such as polyester, nylon and acrylic are generally hydrophobic, meaning they resist water absorption, making them suitable for raincoats and outdoor wear.

Practical Investigation: Learners can perform a simple test by placing fabric samples in water to observe how quickly they absorb moisture and whether they sink or float. This helps them compare the absorbency of different fibres and link it to fibre type and structure.

2. Durability of Fabrics

Durability refers to a fabric's ability to withstand wear and tear, pressure or damage over time. It includes resistance to mechanical forces such as abrasion, pilling, tearing and repeated washing. Durable fabrics maintain their form and appearance even after extended use. This quality is crucial for clothing items that are worn frequently or for long durations, such as school uniforms, workwear and upholstery. Synthetic fibres like nylon and polyester are known for their high durability. Cotton and linen, though strong, may wear out faster under harsh washing conditions. Factors influencing durability include the fibre type, yarn structure, fabric construction (weave or knit) and finishing treatments.

Practical Investigation: Learners can conduct comparative durability tests by rubbing fabric samples against a rough surface or subjecting them to repeated washing. Observing how the fabrics respond to stress helps learners appreciate how fibre content and fabric construction affect strength and longevity.

3. Elasticity of Fabrics

Elasticity refers to a fabric's ability to stretch and return to its original shape. It is a key property in garments that require flexibility, comfort, and movement, such as sportswear, swimwear and fitted clothing. The elasticity of a fabric depends on the fibres used and how the fabric is

constructed. Fibres such as spandex (Lycra or elastane) are highly elastic and are often blended with other fibres like cotton or polyester to add stretch. Knitted fabrics are generally more elastic than woven fabrics due to their looped structure. Good elasticity contributes to a better fit, enhanced comfort and freedom of movement.

Practical Investigation: Learners can stretch different fabric samples and observe their recovery. Fabrics with good elasticity return quickly to their original shape, while less elastic fabrics may remain stretched or become distorted.

4. Crease Resistance

Crease resistance refers to a fabric's ability to resist wrinkling when folded or compressed. This property is especially important for formal clothing and garments that should maintain a smooth appearance with minimal ironing. Synthetic fibres such as polyester and nylon usually have good crease resistance, while natural fibres like linen and cotton crease more easily.

Practical Investigation: Learners can fold and press fabric samples under a book or iron for a few minutes, then unfold and observe the degree of creasing. Fabrics that remain smooth or recover quickly have good crease resistance.

5. Pilling Resistance

Pilling resistance is the fabric's ability to withstand the formation of small balls of fibre on the surface, known as "pills." These usually occur due to abrasion during wear or washing. Fabrics with tight weaves or twisted yarns tend to pill less. High pilling can make garments look old and worn quickly.

Practical Investigation: Learners can rub fabric samples with sandpaper or Velcro and observe the appearance of pills. Fabrics that show minimal pilling have high resistance and maintain a better appearance over time.

6. Shrinkage

Shrinkage refers to the reduction in fabric size after washing or exposure to moisture and heat. Fabrics that shrink significantly can cause fit issues in garments. Cotton and wool fabrics are more prone to shrinkage, especially if untreated. Synthetic fibres generally shrink less due to their stable chemical structure.

Practical Investigation: Learners can measure and record fabric samples before and after washing, then compare the size difference. A significant reduction in size indicates poor shrink resistance.

7. Colour-fastness to Washing

Colour-fastness to washing is a fabric's ability to retain its original colour after repeated laundering. Poor colour-fastness results in fading or bleeding of dye into other garments. This property depends on the type of dye used and how well it is fixed to the fibres.

Practical Investigation: Learners can sew a coloured fabric sample to a white cotton piece, then wash the combined sample. Any dye transfer to the white fabric indicates poor colour-fastness.

8. Flammability

Flammability describes how easily a fabric catches fire and how it behaves when exposed to a flame. Some fabrics ignite quickly and burn rapidly, while others resist ignition or self-extinguish. This property is critical for children's clothing, upholstery and workwear. Fibre

type largely influences flammability: cellulose fibres like cotton burn easily, while some synthetics melt.

Practical Investigation (*to be conducted with caution under supervision*): Learners can observe a small fabric sample held with tweezers near a flame. They note if the fabric melts, burns steadily, self-extinguishes and the kind of residue it leaves. Safety precautions are essential for this test.

Learning Tasks

1. List examples of fabrics that are known for high absorbency, durability or elasticity.
2. Conduct investigations to compare the absorbency, elasticity and durability of selected fabric samples.
3. Analyse and interpret the results of these tests to determine the most appropriate fabric for a given use (e.g., sportswear, school uniforms, upholstery).

Pedagogical Exemplars

Group work/Collaborative Learning Approaches

1. In mixed ability/gender groups, conduct simple experiments to test absorbency, durability and elasticity of different fabric types:

E.g.

- a. Absorbency test
 - b. Durability test
 - c. Elasticity test, etc.
2. Groups analyse and record their observations and present their findings in a whole class discussion.

Key Assessment

DoK Level 1: What is elasticity in fabrics and why is it important in garment construction?

DoK Level 2: Explain the effect of fibre type on fabric durability.

DoK Level 3: Compare the absorbency of cotton and polyester fabrics based on test results.

FOCAL AREA 2: HOW THE PROPERTIES OF FIBRES INFLUENCE THE SELECTION OF FABRICS FOR SPECIFIC PURPOSES

The selection of fabrics for various uses whether for clothing, household textiles or industrial purposes is largely determined by the inherent properties of the fibres from which they are made. Understanding these fibre properties helps designers, manufacturers and consumers choose the most suitable fabric for a specific function, enhancing both performance and user satisfaction. Each fibre has unique characteristics such as absorbency, elasticity, strength, durability, texture, drape and thermal insulation, all of which contribute to how a fabric behaves and performs in different conditions.

Key Fibre Properties and Their Influence on Fabric Selection

Fibre Property	Description	Influence on Fabric Selection
Absorbency	The ability of a fibre absorb and retain moisture.	Highly absorbent fibres like cotton, linen and rayon are ideal for hot climates, towels and undergarments. Less absorbent fibres like polyester are used for sportswear and rainwear.
Elasticity	The ability of a fibre to stretch and return to its original shape without distortion.	Elastic fibres like spandex are used in activewear, swimwear and fitted clothing for better fit and comfort.
Tensile Strength	Refers to the resistance of a fibre to breaking under tension.	Strong fibres like nylon and polyester are used in upholstery, ropes and work uniforms.
Durability	The ability of a fibre to withstand repeated use, laundering and friction.	Durable fibres are used in school uniforms, workwear and jeans. Polyester and acrylic are common choices.
Texture and Hand	Refers to the feel or surface quality of a fibre/fabric.	Soft fibres like silk and fine cotton are used in luxury clothing, while coarse fibres are used for sacks and mats.
Drape	Describes how well a fabric falls or hangs in folds.	Fabrics with good drape like silk and rayon are used for dresses and scarves. Stiff fibres like canvas are for jackets and bags.
Thermal Insulation	A fabric's ability to retain heat and provide warmth.	Wool and polyester are used for winter clothing, while cotton and linen are used for summer wear.
Wrinkle Resistance	The ability of a fabric to resist creasing.	Polyester and wool blends are used for office wear and travel garments.
Flame Resistance	Ability of a fabric to resist catching fire.	Modacrylic and treated cotton are used in protective clothing for industrial workers and fire-fighters.

Example Applications of Fibre Properties

1. Sportswear and Activewear

Garments designed for sports and physical activities are typically made from fabrics that offer high performance and comfort. These include polyester blends with spandex or elastane, chosen for their exceptional stretch, durability and shape retention. Polyester provides moisture-wicking and quick-drying properties, which help to keep the wearer dry and comfortable during intense activity, while spandex adds flexibility and freedom of movement, making the garments ideal for running, yoga and gym workouts.

2. Children's Clothing

Clothes for children are made from soft, absorbent and breathable fabrics such as 100% cotton or cotton blends. Cotton is gentle on delicate skin, highly breathable and absorbs moisture effectively, which helps to reduce skin irritation and maintain comfort throughout the day. These properties make cotton ideal for baby wear, sleepwear and everyday children's clothing.

3. Workwear and Uniforms

Work garments and uniforms are constructed from strong, durable fibres like polyester or polyester-cotton blends. Polyester is valued for its toughness, resistance to abrasion and ability to withstand frequent washing without significant wear. Blending with cotton improves breathability and softness, making the fabric comfortable for extended use in industrial, healthcare or service professions.

4. Luxury Garments and Accessories

High-end fashion items and accessories are crafted from premium fibres such as silk, cashmere and fine wool. These materials are selected for their luxurious feel, elegant drape and aesthetic appeal. Silk provides a smooth, lustrous texture suitable for evening wear and formal garments, while cashmere and wool offer superior warmth, softness and refinement, making them ideal for scarves, coats and designer suits.

5. Outdoor and Camping Gear

Functional outdoor apparel and gear, including jackets, tents and backpacks, often use nylon and polyester due to their strength, lightness, water resistance and quick-drying capabilities. These synthetic fibres are sometimes treated with special coatings to enhance their resistance to wind and rain. Their durability makes them suitable for harsh environments and extended outdoor use.

6. Curtains and Upholstery

Home furnishings like curtains, sofas and upholstery fabrics require materials that are both durable and aesthetically pleasing. Fabrics made from heavy-duty fibres such as acrylic, polyester or treated cotton blends are commonly used. These fibres offer strength, wrinkle resistance and flame-retardant properties, ensuring the materials can withstand wear while providing safety and style in home décor.

Learning Tasks

1. Describe how blending polyester with cotton enhances the suitability of workwear fabrics.
2. Name two natural fibres suitable for children's clothing and explain why they are appropriate.
3. Justify the use of silk and wool in luxury garments based on their fibre characteristics and the needs of high-end fashion consumers.

Pedagogical Exemplars

Structuring talk for Learning/Problem based Learning Approaches: Analyse real-life scenarios to determine the best fabric for specific uses. E.g.

- a. Sportswear,
- b. Baby clothes
- c. Curtains
- d. Bed sheets, etc.

Group Work

In mixed ability groups, organise a group activity to match different fabric types to their suitable uses based on properties.

Groups present report for whole class discussion.

Key Assessment

DoK Level 1: Identify fibres used in outdoor and camping gear and state one reason for their use.

DoK Level 2: Explain how fibre properties such as absorbency and softness influence the selection of fabrics for children's wear.

DoK Level 3: Analyse how the functional requirements of household upholstery influence the choice of fibre properties such as flame resistance and durability.

DoK Level 4: Design a fabric for school uniforms that meets the needs of durability, breathability and ease of maintenance. Justify your fibre selection.

Hint



The recommended mode of assessment for Week 7 is Discussion and Presentation. You may take a cue from the DoK Level 3 task as a sample as well as using the group work pedagogy. Refer to the Teacher Assessment Manual and Toolkit page 54 for additional information on how to use this assessment mode.

SECTION 3 REVIEW

This section develops learners' ability to analyse and select textiles by examining functional properties like absorbency, strength and elasticity. Through hands-on experiments, students explore how fibre characteristics influence fabric performance in clothing and household applications. The curriculum combines theoretical knowledge with practical testing of natural and synthetic fibres, teaching students to evaluate materials for different climates and purposes. Learners gain skills in fibre identification, performance analysis and appropriate textile selection. By integrating scientific principles with real-world applications, learners are prepared for both everyday decisions and potential careers in fashion and textile industries, building essential technical and critical thinking competencies through experiential learning.

Additional Reading/Teaching Learning Materials

1. Realia of different types of fibres.
2. Videos on characteristics of fibres.
3. Computer, Projector, camera and Smart phones (if possible).
4. Pictures and charts of types of fibres.
5. Textbooks.
6. Google search.
7. Flip charts.
8. Cardboard.
9. Sticker notes pads.



APPENDIX C: MID-SEMESTER EXAMINATION (1ST SEMESTER)

DURATION: 30 MINUTES FOR MCQ AND 30 MINUTES FOR THE ESSAY

Structure

20 Multiple Choice questions (20 marks)

3 Essay Questions (20 marks)

Sample Questions

A. MCQs (20 questions)

Scoring Guide

- Each correct answer = 1 mark
- Total marks = 20

1. Which of the following is a basic reason for wearing clothes?

- A. To protect the body
- B. To follow changing trends
- C. To impress other people
- D. To show personal wealth

2. Which combination is **MOST** suitable for a balanced wardrobe?

- A. Casual, formal and seasonal wear
- B. Fashionable and trendy clothes
- C. Clothes in a dotted single colour
- D. Only official and sports clothes

3. You are planning a wardrobe for college. Which criteria would you prioritise in selecting clothing?

- A. Affordable, durable, and easy-to-care attire
- B. Clothing in only one colour and print
- C. Choose expensive designer outfits
- D. Only the latest fashion trends

B. Essay

1. Describe how cultural and climatic factors affect the choice of clothing. (4 marks)
2. Outline two techniques for caring and maintaining clothing to ensure its durability. (2 marks)

3. Discuss four (4) ways in which proper care and maintenance techniques influence clothing durability, appearance and cost-effectiveness. (8 marks)

Week	Focal Area	Type of question	DoK Level				Total
			1	2	3	4	
1.	Concept of Clothing, Classification of Clothing	MCQs	2	1			3
		ESSAY					
2	Reasons for wearing clothes. ways/techniques for caring and maintaining clothing	MCQs	2	1	1		4
		ESSAY			1		1
3	Information on care labels, importance of good care labels	MCQs	1	2	1		4
		ESSAY					
4	Concept of wardrobe and wardrobe planning, Wardrobe Planning and Practical Application	MCQs	2	3	2		7
		ESSAY			1		1
5	The concept of Good Grooming, Examine the factors that promote good grooming	MCQs		1	1		2
		ESSAY		1			1
		TOTAL	7	9	7		23

SECTION 4: UNDERSTANDING FIBRES AND FABRICS IN CLOTHING CONSTRUCTION

Strand: Textiles in Clothing

Sub-strand: Fibres and Fabrics in Clothing Construction

Learning Outcome: Apply knowledge, understanding of fibres characteristics to identify different types of fibres and fabrics used in clothing construction.

Content Standard: Demonstrate knowledge and understanding of different fibres and fabrics used in clothing construction.

Sub-strand: Fibres and Fabrics in Clothing Construction

Learning Outcome: Examine the suitability of various fabrics for different clothing items based on their properties.

Content Standard: Demonstrate ability to analyse the relationship between fabric properties and their suitability for specific clothing designs.

INTRODUCTION AND SECTION SUMMARY

This section explores the relationship between fibres, fabrics and their properties in garment making, as well as the experimental analysis of fabric performance in clothing construction. Learners categorise natural, synthetic and blended fibres, investigate properties such as absorbency, durability and elasticity and conduct simple experiments to evaluate advantages and disadvantages of different fabrics. By examining how fibre characteristics influence comfort, appearance and functionality, learners develop critical understanding of fabric selection for various climates, activities and clothing styles. Combining theoretical knowledge with practical testing and real-world applications, this section builds essential technical, analytical and decision-making skills for sustainable and effective garment production.

The weeks and indicators covered by the section are:

Week 8: Categorise and relate fibres to fabrics used in garment making.

Examine the properties of common fabrics and how they influence fabric selection for different clothing styles.

Week 9: Investigate the absorbency, durability and elasticity of different fabric types through simple experiments.

Evaluate the advantages and disadvantages of different fabrics in clothing construction.

SUMMARY OF PEDAGOGICAL EXEMPLARS

The section targets learner-centered lesson delivery under each focal area. To do this, the teacher is expected to explore and apply other pedagogical exemplars suitable for each focal area and not limit themselves to those mentioned in the section. Some of the pedagogical exemplars that could be employed include problem-based learning, collaborative learning, experiential learning, structured talk for learning, and group discussions. Additionally, fabric testing experiments, hands-on sewing exercises with different fabrics, case studies on fabric performance in garment construction, project-based learning on fabric selection for specific clothing styles, and troubleshooting common fabric-related challenges in sewing can be incorporated to enhance learners' practical understanding and problem-solving skills.

The teacher is also encouraged to incorporate Gender Equality and Social Inclusion (GESI), Special Educational Needs (SEN), Social and Emotional Learning (SEL), 21st-Century Skills, Core National Values, and ICT in lesson delivery. This approach will make learning more interactive, inclusive, and skill-based, ensuring that learners can effectively apply their knowledge of fibres and fabrics to produce well-constructed garments.

ASSESSMENT SUMMARY

There is the need for the teacher to assess learners' knowledge, understanding, and skills on the concepts under this section. To effectively do this, the teacher should use varying assessment strategies to unearth learners' Depth of Knowledge (DoK), as outlined in this manual and the SHS Curriculum. It is equally important to align the assessment activities with the learning indicators as well as the pedagogical exemplars, to create a synergy between them.

Teachers are to make choices that will ensure a good mix of high and low levels of assessment to accommodate the diverse abilities of learners. Assessment strategies may include fabric identification tests, practical sewing tasks using different fabrics, research projects on fibre properties and their influence on garment construction, case study analysis on fabric performance in clothing, presentations on fabric handling techniques and peer assessments of sewing projects. As a guide, specific examples of assessment tasks have been outlined in the section to assist the teacher.

WEEK 8: RELATIONSHIP BETWEEN FIBRES, FABRICS, AND THEIR PROPERTIES IN GARMENT MAKING

Learning Indicators

1. Categorise and relate fibres to fabrics used in garment making.
2. Examine the properties of common fabrics and how they influence fabric selection for different clothing styles.

FOCAL AREA 1: CATEGORISE AND RELATE FIBRES TO FABRICS USED IN GARMENT MAKING

A fabric is a large flat sheet produced from solutions, fibres, yarns or combinations of these.

Various methods are used to produce fabrics in industry and in the home. To enable us to understand the processes involved in fabric construction we need to acquaint ourselves with the common terms in textiles and identify the methods used in making fabrics.

1. Common terminologies in fabric construction in clothing production

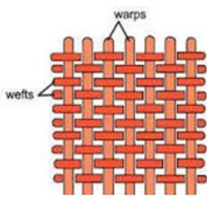
	A fabric is a large flat sheet produced from solutions, fibres, yarns or combinations of these.
	Warp yarns are laid on the loom on which a fabric is woven. Warp yarns are parallel to the selvage and are interlaced with other yarns during weaving.
	A selvage fabric is a long, finished or self-neatened edge of a fabric. A fabric usually has two selvages. The warp yarns are always parallel to the selvage. The straight grain in clothing construction refers to the direction of the warp and selvage yarns.
	Weft yarns are filling yarns for the warp yarns, which are laid on the loom. Weft yarns run perpendicular to the warp and selvage of a fabric.
	A grain in fabrics refers to the position of warp yarns relative to the filling yarns in the fabric. Lengthwise grain is parallel to warp yarns. Crosswise grain is parallel to the filling yarns.

Figure 20: Pictures and Description of Fabric Construction Terminologies

2. Types of fabrics, their characteristics and their uses

Each type of fabric has its own unique set of properties that make it suitable for different applications, depending on factors such as comfort, durability and appearance.

Natural Fabrics

Table: Types of natural fabrics, their characteristics and uses

S/N	Fabric type	Characteristics	Uses
1.	Cotton	Soft, breathable, absorbent, durable and easy to care for. Prone to wrinkling and shrinking.	Commonly used for everyday clothing, such as t-shirts, dresses and underwear.
2.	Linen	Strong, absorbent, quick-drying and breathable. Prone to wrinkling but becomes softer with each wash.	Ideal for summer clothing, tablecloths and napkins.
3.	Wool	Warm, insulating, moisture-wicking and resistant to wrinkles and dirt. It can be itchy and requires careful washing.	Used for sweaters, coats, suits and blankets.
4.	Silk	Luxurious, smooth, lightweight and strong. It is naturally hypoallergenic and regulates temperature well.	It is suitable for formal wear, scarves and ties.

Synthetic Fabrics

Table: Types of synthetic fabrics, their characteristics and uses

S/N	Fabric type	Characteristics	Uses
1.	Polyester	Durable, wrinkle-resistant, quick-drying and retains shape well. Not as breathable as natural fibres.	Common in sportswear, outerwear and blends with other fibres to improve durability.
2.	Nylon	Strong, elastic, and resistant to abrasion and mildew. Lightweight and quick drying.	Used in activewear, swimwear and hosiery.
3.	Acrylic	Soft, lightweight and warm with a wool-like feel. Resistant to moths and chemicals.	Often used in sweaters, hats and blankets as a wool substitute.
4.	Rayon	Soft, absorbent and drapes well. Made from natural cellulose but chemically processed.	Used in dresses, blouses and linings.
5.	Spandex (Lycra/Elastane)	Highly elastic and stretchable, providing comfort and fit. Retains shape well.	Used in sportswear, swimwear and garments requiring stretch.

Blended Fabrics

Table: Types of blended fabrics, their characteristics and uses

S/N	Fabric type	Characteristics	Uses
1.	Poly-cotton	Combines the breathability and comfort of cotton with the durability and wrinkle resistance of polyester.	Used in a variety of clothing, including shirts, sheets and uniforms
2.	Wool Blend	Combines the warmth and texture of wool with other fibres for improved durability and comfort.	Used in coats, suits and sweaters.
3.	Silk Blend	Combines the luxurious feel of silk with other fibres for added strength and easier care.	Used in dresses, blouses and scarves.

Importance of Fibre Classification in Fabric Production

Understanding the classification of fibres is essential in the textile and garment industry because the type of fibre used directly influences the fabric's performance, appearance, durability, comfort and suitability for various uses. Each fibre whether natural or synthetic possesses distinct properties that affect how the fabric behaves in real-world applications.

1. Influences Fabric Functionality and Performance

The classification of fibres helps manufacturers, designers, and consumers make informed decisions based on how the fabric is expected to perform. For example:

- **Natural fibres** like cotton and linen absorb moisture well, making them comfortable in hot and humid climates.
- **Synthetic fibres** such as polyester and nylon are moisture-wicking and quick-drying, which are essential properties for sportswear or rainwear.

2. Affects Comfort and Skin Sensitivity

Comfort is a major factor in clothing design. The type of fibre used impacts how a fabric feels against the skin.

- Natural fibres are generally soft, breathable and gentle, making them ideal for undergarments, children's wear and clothing for people with sensitive skin.
- Some synthetic fibres may cause irritation if not blended properly, but innovations have led to softer, more skin-friendly synthetic options.

3. Determines Suitability for Specific Environments or Activities

Different environments require fabrics with specific performance characteristics:

- **Workwear** demands durability and resistance to stains or chemicals qualities often found in synthetic blends.
- **Luxury garments**, on the other hand, prioritise aesthetics, drape, and softness, which are common traits in natural fibres like silk or high-grade wool.

4. Guides Sustainability and Environmental Impact Decisions

Classifying fibres is also important from an environmental and sustainability perspective:

- Natural fibres like organic cotton, hemp, and bamboo are biodegradable and renewable, contributing to more sustainable fashion choices.
- Synthetic fibres, while durable, are derived from petrochemicals and may take hundreds of years to decompose, although recycled synthetic fibres are emerging as eco-friendlier alternatives.

5. Impacts Fabric Maintenance and Longevity

- Synthetic fibres are typically easier to maintain—they resist wrinkles, dry quickly and are less likely to shrink.
- Natural fibres may require more care (e.g., hand washing or ironing), but they often age well and provide unmatched comfort.

6. Supports Economic Decision-Making

Fibre classification also affects production cost and affordability. Synthetic fibres are often cheaper to produce and buy, making them a popular choice for mass production. Natural fibres, due to their farming and processing requirements, can be more expensive but offer added value in terms of comfort and eco-friendliness.

Fabric Characteristics and Their Impact on Garment Use

Example of Fabric	Fabric Characteristics and Garment Suitability	Choosing the Right Fabric for the Right Clothing	The Role of Fabric Properties in Clothing Design	How Fabric Types Affect Clothing Comfort and Use
Cotton	Soft, breathable, and lightweight; suitable for warm weather.	Ideal for casual wear, undergarments, and children's clothing.	High absorbency and comfort influence its use in relaxed, breathable garment designs.	Comfortable for everyday wear; keeps the wearer cool and prevents skin irritation.
Wool	Thick, warm and resilient; retains heat and resists wrinkles.	Best used for winter garments like coats, sweaters, and scarves.	Insulating properties make it excellent for garments designed to retain warmth.	Offers warmth and comfort in cold climates, though may feel itchy without proper finishing.
Polyester	Strong, wrinkle-resistant and quick-drying. Often blended.	Used for sportswear, school uniforms and outerwear.	Its durability and moisture-wicking quality influence its use in high-performance garments.	Keeps users dry and comfortable during physical activity, but may lack breathability.
Silk	Smooth, lustrous and lightweight with a soft drape.	Ideal for formal wear, lingerie and scarves.	Its elegant appearance and luxurious texture are key design features.	Feels soft and comfortable on the skin; regulates body temperature well.

Nylon	Lightweight, strong, and elastic; resists water and abrasion.	Commonly used in swimwear, raincoats and outdoor gear.	Its elasticity and resistance to moisture make it ideal for active and protective clothing.	Dries quickly and supports flexible movement, enhancing user comfort in wet or active environments.
Linen	Crisp, breathable and lightweight; becomes softer with wear.	Suitable for summer suits, shirts and dresses.	Breathability and absorbency are vital to its use in warm-weather clothing.	Keeps the wearer cool and fresh in hot climates, though wrinkles easily.
Spandex (Elastane)	Extremely stretchy and form-fitting; retains shape well.	Used in athletic wear, swimwear and body-hugging garments.	Its elasticity allows garments to fit closely and move with the body.	Enhances freedom of movement and provides comfort in tight-fitting garments.

Learning Tasks

1. Explain the term fabric.
2. Explain common terminologies used in fabric construction.
3. Describe various types of fabrics, their characteristics and uses.
4. Assess how fabric properties such as elasticity, absorbency and breathability influence the design of specific garments.

Pedagogical Exemplars

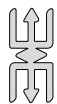
Group work/Collaborative Learning Approaches: In mixed ability/gender groups, use think-pair-share to discuss the types of clothes you wear daily and what makes them comfortable or suitable for different weather conditions.

Display various fabric samples and ask learners to describe their texture, weight and appearance.

Experiential Learning/Group Work: Explain the classification of fibres and their uses in fabric production. E.g., Natural, Synthetic, etc.

Structuring Talk for Learning/Experiential Learning Approaches: Use charts and samples to illustrate different fabric types

- a. Cotton
- b. Linen
- c. Silk
- d. Wool
- e. Polyester, etc.



Note

Visit dressmaking shops to collect pieces of fabrics and sort the fabrics based on fibre origin.

Key Assessment

DoK Level 2

1. Define the term “fabric”.
2. Explain at least three common terms used in fabric production.
3. List/show at least three different types of fabrics and describe each one giving examples.

DoK Level 4

1. Evaluate the importance of fibre classification in sustainable fabric selection and garment production.
2. You are asked to design a clothing line for a tropical climate. Which fibre types would you choose and why?

FOCAL AREA 2: PROPERTIES OF COMMON FABRICS AND HOW THEY INFLUENCE FABRIC SELECTION FOR DIFFERENT CLOTHING STYLES

Introduction to Fabric Selection

Fabric selection is a crucial process in the creation of garments, as it directly influences the garment’s functionality, comfort and appearance. Selecting the appropriate fabric requires an understanding of its properties and how they align with the intended use of the garment. This process can be categorised into two main types: natural fabrics and synthetic fabrics, each with unique characteristics that suit various needs.

Fabric Types: An Overview of Natural and Synthetic Fabrics

1. **Natural Fabrics** are derived from plant or animal sources, offering organic and biodegradable options. These fabrics are generally breathable, soft and comfortable, but may require more care in maintenance.
 - **Examples:** Cotton, linen, wool and silk.
2. **Synthetic Fabrics** are manufactured through chemical processes, typically from petroleum-based materials. These fabrics are known for their durability, resilience and low-maintenance qualities, though they may not be as breathable as natural fibres.
 - **Examples:** Polyester, nylon, acrylic and spandex.

Fabric Properties: Understanding Key Characteristics

When selecting a fabric, it is important to consider several key properties that define its suitability for different garments:

- **Texture:** The tactile feel of the fabric, which affects comfort and wearability.
- **Weight:** Determines the heaviness or lightness of the fabric, influencing its drape and how it fits on the body.
- **Absorbency:** The ability of the fabric to absorb moisture, making it ideal for items that need to be breathable and comfortable, such as undergarments.
- **Stretchability:** Refers to the fabric's ability to stretch and return to its original shape, important for activewear and garments requiring flexibility.
- **Durability:** How well the fabric withstands wear and tear over time, influencing its longevity and suitability for high-use garments.

Natural Fabrics: Characteristics and Uses

1. Cotton

- **Characteristics:** Soft, breathable and highly absorbent. Cotton is gentle on the skin and provides comfort in warm weather, though it is prone to wrinkling and shrinking.
- **Uses:** Perfect for everyday wear, undergarments, t-shirts, dresses and summer clothing due to its comfort and breathability.

2. Linen

- **Characteristics:** Known for its strength, breathability and ability to stay cool even in hot weather. Linen wrinkles easily but becomes softer and more comfortable with each wash.
- **Uses:** Ideal for summer clothing, beachwear, casual shirts and home textiles like tablecloths and napkins.

3. Wool

- **Characteristics:** Wool is warm, insulating and moisture-wicking, making it an excellent choice for colder climates. It can be itchy and requires careful washing to maintain its softness.
- **Uses:** Commonly used in coats, sweaters, suits and blankets due to its warmth and moisture-resistant qualities.

4. Silk:

- **Characteristics:** Luxurious, smooth and lightweight with a natural sheen. Silk is hypoallergenic and regulates body temperature, keeping the wearer comfortable in both warm and cool climates.
- **Uses:** Preferred for formal wear, lingerie, scarves and high-end accessories due to its elegant appearance and luxurious feel.

Synthetic Fabrics: Characteristics and Uses

1. Polyester

- **Characteristics:** Known for its durability, wrinkle resistance and quick-drying properties, polyester retains its shape well over time. However, it is not as breathable as natural fibres.

- **Uses:** Commonly used in sportswear, uniforms, activewear and outerwear due to its practicality and low maintenance.

2. Nylon

- **Characteristics:** Strong, elastic, and resistant to abrasion and mildew. Nylon is lightweight and dries quickly, making it suitable for garments exposed to moisture.
- **Uses:** Often used in swimwear, activewear, outerwear and hosiery, where durability and elasticity are important.

3. Acrylic

- **Characteristics:** Lightweight, warm, and wool-like in feel. Acrylic is resistant to moths and chemicals, making it a good alternative to wool in some applications.
- **Uses:** Frequently used in sweaters, hats, blankets and other cold-weather accessories as a wool substitute.

4. Spandex (Lycra/Elastane)

- **Characteristics:** Highly elastic, stretchable and form-fitting, spandex retains its shape even after extended use.
- **Uses:** Ideal for activewear, swimwear and any garments that require a close, flexible fit.

Fabric Selection Based on Intended Use

Choosing the right fabric for a garment hinge not only on aesthetic preferences but also on its intended application. A comprehensive understanding of the physical demands of the garment, the environment in which it will be worn and the activities the wearer will be engaged in is crucial. Here are several key factors to consider:

1. Climate Considerations

- **Hot Climates:** In warmer environments, it is imperative to choose breathable fabrics such as cotton and linen. These natural fibres facilitate air circulation and wick moisture away from the skin, promoting a cooling effect. Additionally, lightweight and light-coloured fabrics can reflect sunlight, further enhancing comfort.
- **Cold Weather:** For cooler temperatures, fabrics like wool and fleece are outstanding choices, as their insulating properties effectively trap body heat. Moreover, considering water-resistant or waterproof materials can offer enhanced protection against the elements, ensuring that the wearer stays warm and dry in inclement weather.
- **Transitional Weather:** In regions with fluctuating temperatures, layered fabrics such as thermal knits or synthetic blends provide versatility. These materials allow for easy adjustments, as varying layers can be added or removed based on changing conditions.

2. Activity Suitability

- **Sportswear:** Fabrics designed for active performance often utilise high-tech materials that wick moisture away from the body, such as polyester, nylon, or specialised blends with moisture management properties. These fabrics help regulate body temperature during workouts, enhancing overall performance by keeping the wearer dry and comfortable.

- **Activewear:** Athletic clothing benefits from stretchable fabrics like spandex or elastane, which permit a full range of motion and support dynamic movements. These materials also provide a snug fit, which can enhance performance by reducing drag and improving efficiency during physical activities.
- **Leisure Activities:** For casual wear or leisure activities, fabrics like jersey knit or lightweight chambray can offer comfort while still being stylish. Such materials are often versatile, making them suitable for a variety of informal settings.

3. Comfort and Functionality

- **Everyday Garments:** For items such as underwear, loungewear or sleepwear, choosing soft, breathable fabrics like cotton or modal is crucial for comfort against the skin. These materials allow for natural body movement and help regulate temperature for a restful night or relaxing day at home.
- **Workwear:** In occupational settings, durability is paramount. Fabrics like polyester blends or canvas are formulated to withstand wear and tear while ensuring ease of movement. Additionally, features such as stain resistance or durability against industrial elements can extend the life of work garments and improve functionality.
- **Specialised Fabrics:** Depending on the intended use, specific performance features may be essential, such as anti-odour treatments for athletic wear or UV protection for outdoor apparel. These added functionalities cater to the unique needs of different activities and environments.

4. Aesthetic Appeal

- In addition to functionality, the visual aspects of fabric selection should not be overlooked. Patterns, colours, and textures play significant roles in the overall design and appeal of the garment. Choosing appealing fabrics can enhance the wearer's confidence and enjoyment of the clothing.
- Fabrics like silk or satin lend a luxurious feel to evening wear or formal garments, while more textured fabrics can add depth and visual interest to everyday clothing.

5. Sustainability Considerations

- As consumers become more environmentally conscious, the sustainability of fabric choices is increasingly significant. Opting for organic cotton, recycled polyester or other sustainable materials can reduce environmental impact while still meeting functional requirements.
- Understanding sourcing practices and the lifecycle of fabrics can contribute to making ethical choices that align with the values of eco-conscious consumers.

Learning Tasks

1. Describe how the climate influences fabric selection for summer clothing.
2. Explain the key properties of cotton that makes it a suitable choice for summer clothing.
3. Discuss the properties of common fabrics. (e.g The key properties of cotton that makes it a suitable choice for summer clothing. Different care requirements, linen vs polyester etc)

4. Identify the uses of different fabrics.

Pedagogical Exemplars

Structuring talk for Learning/Problem based Learning Approaches: With the aid of realia/charts/videos/posters on fibres, discuss the properties of common fabrics. E.g.

- Soft and comfortable to wear
- Highly absorbent and breathable
- Strong and durable
- Wrinkles easily but can be blended to reduce creasing
- Shrinks after the first wash if not pre-treated, etc.

Group Work: In mixed ability groups/gender groups, identify the uses of different fabrics.

- Cotton: Everyday clothing such as T-shirts, dresses, undergarments, bedsheets and towels.
- Linen: Tablecloths, curtains and upholstery
- Wool: Sweaters, coats, scarves, blankets and carpets
- Polyester: Sportswear, uniforms, outerwear, upholstery and home furnishings, etc

Groups present report for whole class discussion.

Key Assessment

DoK Level 3

1. What advice can be given to someone selecting fabrics for workwear that require both durability and comfort? Include specific fabric recommendations based on the characteristics discussed.
2. Evaluate the appropriateness of using acrylic fabric for winter sweaters compared to wool. What are the implications for comfort, functionality and care?

DoK Level 4: Design a mini-project focused on creating a sustainable clothing line that incorporates at least three different types of fabric. The project should include a discussion of the rationale for each fabric choice, considering functionality, comfort, and sustainability

Hint



The recommended mode of assessment for Week 8 is practical. You may take a cue from the DoK Level 4 task as a sample. Refer to the Teacher Assessment Manual and Toolkit page 37 for additional information on how to use this assessment mode.

WEEK 9: EXPERIMENTAL ANALYSIS AND EVALUATION OF FABRIC PERFORMANCE IN CLOTHING CONSTRUCTION

Learning Indicators

1. Investigate the absorbency, durability and elasticity of different fabric types through simple experiments
2. Evaluate the advantages and disadvantages of different fabrics in clothing construction.

FOCAL AREA1: THE ABSORBENCY, DURABILITY AND ELASTICITY OF DIFFERENT FABRIC TYPES THROUGH SIMPLE EXPERIMENTS

Introduction to Fabric Types

Fabrics play an essential role in our daily lives, shaping everything from the clothes we wear to the linens that adorn our homes. Understanding the different types of fabrics both natural and synthetic, as well as woven and knit allows us to make informed choices for specific applications.

Types of Fabrics

Natural Fabrics: These are derived from natural sources. Examples include:

Cotton: Soft and breathable, ideal for casual clothing and bedding.

Silk: Luxurious and smooth, often used in formal wear and scarves.

Wool: Excellent for cold-weather garments, known for its insulation.

Synthetic Fabrics: Man-made fibres typically created from chemical processes. Examples include:

Polyester: Durable and resistant to wrinkles, used in a variety of garments.

Nylon: Strong and elastic, often found in activewear.

Blends: Combining natural and synthetic fibres to enhance certain properties, such as comfort and durability.

a. Absorbency

Absorbency refers to a fabric's ability to take in liquids, which is crucial for many applications. For instance, towels need to absorb moisture effectively, while activewear may require fabrics that wick sweat away from the body.

Simple Experiments to Test Absorbency

Water Drop Test

Materials Needed: Different fabric samples (cotton, wool, polyester, etc.), water, a stopwatch, and a measuring cup.

Procedure

- Place a drop of water (around 1 mL) on each fabric sample.
- Observe and time how quickly the water is absorbed.
- Record how much water is absorbed within 30 seconds.

Data Analysis: Assess which fabric absorbed the most water in the shortest amount of time to determine overall absorbency performance.

b. Durability

Durability relates to a fabric's ability to withstand wear, tear and environmental factors, ensuring longevity and sustained appearance and performance.

Simple Experiments to Test Durability**Abrasion Test**

Materials Needed: Fabric samples, sandpaper, weight (like a book), and a stopwatch.

Procedure

- Place a piece of fabric on the sandpaper.
- Apply a weight on top and rub back and forth for a set time (e.g., 1 minute).
- Inspect the fabric for pilling or damage.

Data Analysis: Compare how each fabric responds to abrasion to evaluate durability.

c. Strength Test

Materials Needed: Fabric samples, a scale (to measure weight), and a ruler.

Procedure

- Cut each fabric sample into a consistent size (e.g., 2 inches wide, 6 inches long).
- Attach one end of the fabric to a scale and gradually pull until the fabric tears.
- Record the weight it takes to tear each fabric.

Data Analysis: Determine which fabrics demonstrated the greatest resistance to tearing.

d. Elasticity

Elasticity refers to a fabric's ability to stretch and return to its original shape, a crucial characteristic for clothing that requires a good fit and comfort.

Simple Experiments to Test Elasticity**Stretch Test**

Materials Needed: Fabric samples, a ruler, and weights.

Procedure

- Measure the original length of each fabric sample.
- Gradually add weight (e.g., a small weight) to stretch the fabric.
- Measure the extent to which the fabric stretches.
- Release the weight and measure how well the fabric returns to its original length.

Data Analysis: Compare the stretch and recovery measurements for different fabric types to evaluate elasticity.

e. **Data Collection and Analysis**

Collecting and analysing data from the aforementioned experiments involves:

- **Recording Results:** Create a table to log the absorbency rate, durability observations (e.g., amount of wear) and elasticity measurements for each fabric tested.
- **Comparison:** Identify trends in the data, noting which fabrics excelled in specific areas—absorbency, durability or elasticity.
- **Application Insights:** Use findings to inform decisions on fabric selection for various uses, recognising how properties like absorbency are crucial for towels while durability is key for workwear.

Fabric Testing Data Collection and Analysis

Sample: Filled Fabric Testing Table

Fabric Type	Absorbency Rate	Durability Observation	Elasticity	Strengths Identified	Recommended Application
Cotton	High	Mild wear after repeated rubs	Low elasticity	Excellent absorbency	Towels, T-shirts, undergarments
Polyester	Low	Minimal wear, holds shape well	Moderate elasticity	High durability	Sportswear, outerwear
Wool	Medium	Moderate pilling with friction	Low elasticity	Warmth, insulation	Sweaters, coats
Nylon	Low	Very durable, resists abrasion	High elasticity	Durability and stretch	Swimwear, raincoats
Linen	High	Moderate wear, wrinkles easily	Very low elasticity	Breathability	Summer wear, table linens
Silk	Medium	Frays slightly at edges	Low to moderate elasticity	Luxury and drape	Evening gowns, scarves
Acrylic	Medium	Some fuzz after friction test	Moderate elasticity	Lightweight warmth	Knitwear, hats
Spandex	Low	High resistance to wear under stretch	Extremely high elasticity	Flexibility, stretch	Activewear, bodycon garments

Learning tasks

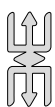
1. Describe how a strength test is conducted to assess fabric durability.
2. Explain the importance of elasticity in fabric selection for activewear.
3. Conduct hands-on activities to test properties of fabrics.
4. Identify fabrics that are suitable for specific clothing types.

Pedagogical Exemplars

Group work/Collaborative Learning Approaches: In mixed ability/gender groups, conduct hands-on activities to test properties of fabrics. E.g.

- Absorbency
- Strength
- Stretchability
- Drape, etc.

Record the observations and discuss your findings.



Note

The tests completed this week should in addition to those covered in the previous week and not a repeat of those already completed.

Structuring Talk for Learning /Experiential Learning Approaches

Observe videos/Interview individuals to find out which fabrics are suitable for specific clothing types. E.g., Cotton for casual wear, Silk for formal attire, etc.

Key Assessment

DoK Level 3: What patterns or trends do you observe in the data for each fabric type based on absorbency, durability and elasticity?

Activity: Re-fill Fabric Testing Table

Fabric Type	Absorben- cy Rate	Durability Observation	Elasticity	Strengths Identified	Recommended Application

Based on the properties observed in your table, which fabric type would you recommend for each of the following garment types: sportswear, baby clothing, school uniform and winter coat? Justify your choices using the data you recorded.

DoK Level 4: Propose a sustainable alternative to polyester for sportswear, justifying your suggestion using the properties tested in class.

FOCAL AREA 2: ADVANTAGES AND DISADVANTAGES OF DIFFERENT FABRICS IN CLOTHING CONSTRUCTION

Advantages and Disadvantages of Different Fabrics in Clothing Construction

The selection of fabric is a critical decision in the construction of garments, as it significantly influences the final product's performance, appearance, comfort and maintenance requirements. Each fabric type, whether natural, synthetic or blended, has unique properties that make it suitable or unsuitable for specific clothing purposes. Understanding these strengths and limitations helps in making informed decisions when designing and constructing garments.

Natural Fabrics

Cotton

Cotton is a widely used natural fibre known for its softness and breathability. It is gentle on the skin and highly absorbent, making it ideal for everyday wear, especially in warm climates.

- **Advantages:** Comfortable to wear, breathable, absorbs moisture well, hypoallergenic and easy to sew.
- **Disadvantages:** Tends to wrinkle easily, may shrink when washed and can lose colour and strength after repeated laundering.

Linen

Linen is another natural fibre valued for its ability to stay cool and dry in hot weather. It has a crisp texture and natural lustre.

- **Advantages:** Extremely breathable, quick-drying, provides a fresh and clean look—excellent for summer wear.
- **Disadvantages:** Wrinkles very easily, can feel rough before multiple washes and often requires frequent ironing to maintain its appearance.

Wool

Wool is derived from the fleece of sheep and is known for its warmth and insulating properties. It is commonly used in garments intended for colder weather.

- **Advantages:** Provides excellent insulation, naturally repels moisture, flame-resistant and retains heat even when damp.
- **Disadvantages:** Can be itchy for some people, shrinks easily when not handled properly and may require dry cleaning or special washing care.

Silk

Silk is a luxurious fabric made from the cocoons of silkworms. It is appreciated for its smooth feel, elegant drape and natural sheen.

- **Advantages:** Lightweight, elegant, drapes beautifully and feels smooth against the skin—ideal for formal and evening wear.
- **Disadvantages:** Delicate, easily stained, expensive and requires careful handling and cleaning.

Synthetic Fabrics

Polyester

Polyester is a man-made fabric known for its strength and durability. It is resistant to shrinking and wrinkling, making it a popular choice for a wide range of garments.

- **Advantages:** Tough and durable, wrinkle-resistant, dries quickly and holds colour well.
- **Disadvantages:** Not breathable, may retain odours, non-biodegradable and can feel uncomfortable in hot weather.

Nylon

Nylon is a strong synthetic fibre originally developed as a substitute for silk. It is now widely used in sportswear and outdoor clothing.

- **Advantages:** Extremely strong and elastic, lightweight, moisture-resistant and quick-drying.
- **Disadvantages:** Poor breathability, prone to static and may pill with frequent use.

Acrylic

Acrylic is a synthetic alternative to wool, often used in sweaters and knitted accessories.

- **Advantages:** Lightweight, warm, retains shape and resists moth damage.
- **Disadvantages:** Not very breathable, susceptible to pilling and can be highly flammable.

Spandex (Elastane)

Spandex is known for its extraordinary elasticity and is commonly blended with other fibres to enhance stretch.

- **Advantages:** Highly stretchable, recovers shape well and enhances comfort and fit in garments.
- **Disadvantages:** Lacks strength on its own, deteriorates under prolonged exposure to heat and is often used only in small percentages in blends.

Blended Fabrics

Polyester–Cotton (Poly–Cotton) Blends

This blend combines the softness and breathability of cotton with the durability and wrinkle resistance of polyester.

- **Advantages:** Balanced comfort and strength, less prone to shrinkage, easier maintenance and cost-effective.
- **Disadvantages:** Less breathable than 100% cotton and may still wrinkle or pill with time.

Wool-Synthetic Blends

These blends combine natural wool with synthetic fibres for increased durability and affordability.

- **Advantages:** Enhanced strength, better resistance to wear and often more affordable than pure wool.
- **Disadvantages:** May lose some of wool's natural warmth and breathability and can feel less soft to the touch.

Applications Based on Fabric Properties

Selecting fabrics based on their characteristics is essential to ensure that garments serve their intended purposes effectively:

- **School Uniforms:** These garments require durability, ease of care and comfort. Poly-cotton blends are ideal due to their wrinkle resistance, durability and breathability.
- **Sportswear:** Stretchability, moisture-wicking and breathability are key. Fabrics like nylon, polyester and spandex are commonly used for their performance-oriented properties.
- **Evening Wear:** Elegance, drape and a luxurious appearance are important. Fabrics like silk, satin, chiffon and velvet provide the sophistication and visual appeal suited for formal occasions.

Learning Tasks

1. Explain how synthetic fabrics differ from natural fabrics in terms of comfort and maintenance?
2. Compare the properties of cotton and nylon. Which would you recommend for warm-weather wear and why?
3. Explain why polyester is often blended with cotton in garment construction?
4. Match fabric samples to appropriate clothing styles based on function.

Pedagogical Exemplars

Structuring talk for Learning/Problem-Based Learning Approaches: Observe images or real-life samples of garments made from different fabrics and discuss why specific fabrics were chosen.

Group Work: In mixed ability/gender groups, organise a group project to match fabric samples to appropriate clothing styles based on function. E.g.,

- a. School uniforms
- b. Sportswear
- c. Evening wear, etc.

Key Assessment

DoK Level 2: Why is polyester often blended with cotton in garment construction?

DoK Level 3

1. How can the disadvantages of certain fabrics be minimised in garment construction?
2. What factors would you consider when choosing a fabric for school uniforms or sportswear?

DoK Level 4: Evaluate a garment made from silk. What makes silk suitable or unsuitable for that garment?

Hint

The recommended mode of assessment for Week 9 is homework. You may take a cue from the DoK Level 3 task as a sample. Refer to the Teacher Assessment Manual and Toolkit page 63 for additional information on how to use class exercises and homework.

SECTION 4 REVIEW

This section introduced the foundational role of fibres and fabrics in garment construction, equipping learners with the knowledge and skills needed to make informed decisions in fabric selection and usage. It emphasises understanding the characteristics of various fibres and how these properties influence fabric behaviour, garment fit, durability and overall construction quality.

Learners are guided to explore the interplay between fibre types, fabric structures and finishing processes through both theoretical and practical activities. Through weeks 8 and 9, students analyse fibre and fabric properties, engage in experimental testing, and evaluate fabric performance in real-world sewing contexts.

The section promotes learner-centred, inclusive and skill-based pedagogy. Teachers are encouraged to integrate diverse teaching methods such as collaborative learning, fabric testing and project-based assignments to foster critical thinking and practical problem-solving. Assessment strategies span written tests, hands-on evaluations and reflective presentations, all aligned with curriculum standards and inclusive education practices. The overarching aim is to prepare learners to apply textile knowledge effectively in designing and constructing appropriate, durable garments.

Additional Reading/Teaching Learning Materials

- Realia of different types of fibres.
- Videos on categorisation of fibres.
- Computer, Projector, camera and Smart phones (if possible).
- Pictures and charts of properties of common fibres.
- Textbooks.
- Google search.
- Flip charts.
- Cardboard.
- Sticker notes pads.

SECTION 5: MASTERING SEWING TOOLS, TECHNIQUES AND GARMENT CONSTRUCTION

Strand: Clothing and textiles production technology

Sub-strand: Clothing Construction Processes

Learning Outcomes

1. Identify and describe the functions of various sewing tools and equipment used in clothing construction.
2. Explain the importance of sewing notions and apply basic stitches in clothing construction.
3. Apply appropriate seam and edge finishes to improve garment quality.

Content Standards

1. Demonstrate knowledge, understanding and skills of handling sewing tools and equipment
2. Demonstrate knowledge and understanding of Sewing notions, basic stitches and their uses in clothing construction.
3. Demonstrate the understanding how to select and use seams and edge finishes in clothing construction appropriately

Hint



- The End of Semester Examination will be conducted in Week 12. Refer to **Appendix D** for a Table of Specification to guide you to set the questions. Set questions to cover all the indicators covered for at least weeks 1 to 11.
- Individual Project Work should be assigned to learners by the end of Week 16. Ensure that the project covers several learning indicators and spans over several weeks. Learners are expected to submit the individual project by week 20. Refer to **Appendix E**.

INTRODUCTION AND SECTION SUMMARY

This section supports learners to explore fundamental and advanced techniques involved in clothing construction. Learners will explore the processes of pattern drafting, cutting, assembling and finishing garments while ensuring precision, quality and durability. Learners will also examine how various construction techniques influence the overall appearance, fit and functionality of garments.

The minimum competencies required of a learner in this section include the ability to select appropriate construction techniques, demonstrate proficiency in sewing processes, handle different fabrics effectively and apply quality control measures in garment construction.

In each focus area, learners will be exposed to the theoretical aspects of clothing construction processes and will engage in individual and group practical explorations of the concepts in class or for discussion in the next lesson.

The weeks and indicators covered by the section are:

Week 10: Classify sewing tools into measuring, cutting, marking and stitching tools.

Demonstrate appropriate handling and maintenance of sewing tools and equipment.

Week 11: Compare hand sewing and machine sewing tools in terms of function and use.

Week 12: Identify common sewing notions and describe their uses in garment construction.

Demonstrate different types of basic stitches used in clothing construction.

Week 13: Categorise stitches based on their functions.

Make samples of stitches suitable for different functions in clothing.

Week 14: Make samples of stitches suitable for different functions in clothing.

Week 15: Identify different types of seams used in garment construction.

Make specimens of commonly used seams in garment construction.

Week 16: Make specimens of commonly used seams in garment construction.

Week 17: Apply suitable edge finishes to prevent fabric fraying. Evaluate the strength and appearance of different seam finishes in clothing construction.

SUMMARY OF PEDAGOGICAL EXEMPLARS

The section targets learner-centered lesson delivery under each focal area. To do this, the teacher is expected to explore and apply other pedagogical exemplars suitable for each focal area and not limit themselves to those mentioned in the section. Some of the pedagogical exemplars that could be employed include problem-based learning, collaborative learning, experiential learning, structured talk for learning and group discussions. Additionally, demonstrations of sewing techniques, hands-on garment construction projects, step-by-step guided sewing activities, troubleshooting common sewing challenges and comparative analysis of different construction techniques can be incorporated to enhance learners' technical skills and creativity.

The teacher is also encouraged to incorporate Gender Equality and Social Inclusion (GESI), Special Educational Needs (SEN), Social and Emotional Learning (SEL), 21st-Century Skills, Core National Values and ICT in lesson delivery. This approach will make learning more interactive, inclusive and skill-based, ensuring that learners develop the competence to construct garments efficiently and professionally.

ASSESSMENT SUMMARY

There is the need for the teacher to assess learners' knowledge, understanding and skills on the concepts under this section. To effectively do this, the teacher should use varying assessment strategies to unearth learners' Depth of Knowledge (DoK), as outlined in this manual and the SHS/Curriculum. It is equally important to align the assessment activities with the learning indicators as well as the pedagogical exemplars, to create a synergy between them.

Teachers are to make choices that will ensure a good mix of high and low levels of assessment to accommodate the diverse abilities of learners. Assessment strategies may include practical

sewing tasks, garment construction projects, pattern drafting exercises, problem-solving activities related to construction errors, case studies on garment finishing techniques, peer assessments of sewing quality and presentations on construction processes. As a guide, specific examples of assessment tasks have been outlined in the section to assist the teacher.

WEEK 10: CLASSIFICATION AND PROPER USE OF SEWING TOOLS AND EQUIPMENT

Learning Indicators

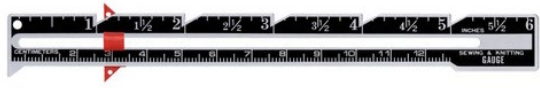
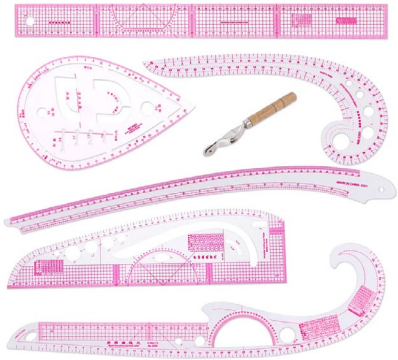
1. Classify sewing tools into measuring, cutting, marking and stitching tools
2. Demonstrate appropriate handling and maintenance of sewing tools and equipment

FOCAL AREA1: CLASSIFICATION OF SEWING TOOLS, EQUIPMENT ACCORDING TO THEIR FUNCTIONS

1. Measuring Tools

These are used to take accurate measurements for garments and fabric layouts.

Examples:

Tool Name	Image	Use
Measuring Tape		A flexible tape used for taking body measurements.
Sewing Gauge		A small ruler with a sliding marker used for measuring hems, pleats and button placements.
Ruler		Used for drawing straight lines and measuring short distances.
French Curve		A template used to draw smooth curves, essential for armholes and necklines.

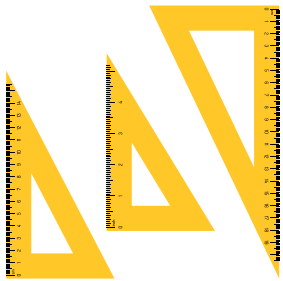
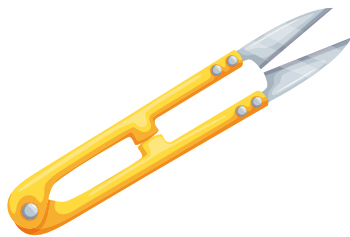
Tool Name	Image	Use
Meter Rule		A long, rigid measuring stick for measuring and marking straight lines on fabric.
Set Square		Used to mark right angles to locate bias or diagonal grain of fabric.

Figure 21: *Measuring Tools*

2. Cutting Tools

Used for cutting fabrics, threads and patterns.

Examples:

Name	Image	Use
Fabric scissors		Used for cutting fabrics accurately.
Pinking shears		Used to neaten and decorate edges of garments and other articles.
Thread snippers		Used to trim threads.

Name	Image	Use
Rotary cutter		Used to cut fabrics and for home décor projects.
Seam/stitch ripper		Used to remove unwanted seams/stitches.

Figure 22: Cutting Tools

3. Marking Tools

Used to transfer pattern markings or indicate where to sew.

Examples:

Name	Image	Use
Tailor's chalk		Used to mark fabric for cutting and sewing, transfer pattern pieces onto fabric and to serve as marking guidelines for embroidery.
Pencil		For creating written content, sketches and marking various surfaces.
Fabric markers		For decorating permanent designs, customisation and fabric painting.
Tracing wheel and carbon paper		For transferring pattern markings and creating accurate markings for sewing.

Figure 23: Marking Tools

4. Stitching Tools

Used in hand sewing or with machines to create stitches.

Examples:

Name	Image	Use
Hand sewing needles		For sewing and mending, embroidery and needle work, patchwork, alterations and repairs.
Sewing machine		For garment construction, mending, patchwork and home décor.
Needle threader		Helps to pass thread through the needles eye.
Bodkin		Guides elastic, ribbons or cords through casings or tunnels in fabric.
Plastic point turner		Helps to create crisp, sharp corners and edges.

Figure 24: *Stitching Tools*

5. Fitting Equipment

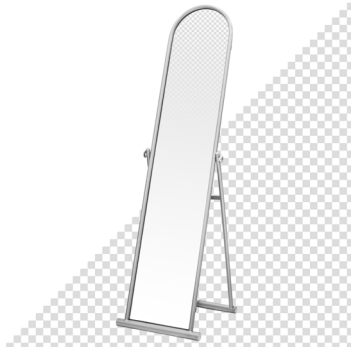
Name	Image	Use
Pins		Used to hold fabric in place, mark patterns and guide stitches.
Dress form		For fitting and draping, pattern making, garment construction and alterations.
Dressing Mirror		For fitting and alterations, visual inspection and trying on garments during the sewing process.

Figure 25: *Fitting Equipment*

6. Pressing Tools

Used to flatten seams and give garments a neat finish.

Examples:

Name	Image	Use
Iron		For pressing fabrics, smoothing seams and shaping garments.

Name	Image	Use
Ironing board		For providing a flat, heat-resistant surface for ironing fabrics.
Sleeve board		For pressing sleeves, cuffs and other narrow or hard-to-reach areas.
Tailors ham		It is used for pressing curved seams and darts to give shape.

Figure 26: *Pressing Tools*

Storage Equipment

Used for storing, organising and protecting items of clothing or fabric.

Examples:

Name	Image	Use
Cupboard or Wardrobe		For storage, organisation and to protect stored items from dust, damage or clutter.
Chest of drawers		For storage, organisation of clothing items and decluttering.

Name	Image	Use
Hanger and rack		For keeping clothing organised and easily accessible.
Toolbox and bag		For storing and organising tools and supplies.

Figure 27: Storage Equipment

Learning Tasks

1. Discuss tools, equipment and materials (sewing supplies) for clothing construction
2. Classify the various sewing tools and equipment according to their uses and functions in the sewing industry.

Pedagogical Exemplars

Talk for Learning/Collaborative Learning Approaches: In pairs/groups, use think-pair-share/shower thought/brainstorming to discuss tools, equipment and materials (sewing supplies) for clothing construction

Group Work

1. In mixed ability/gender/random groups, discuss and classify the various sewing tools and equipment according to their uses and functions in the sewing industry.
2. Groups present their reports for whole class discussion using different presentation modes.

E.g.,

Measuring tools: Tape measure, ruler and seam gauge.

Cutting tools: Scissors, shears and rotary cutter.

Marking tools: Tailor's chalk, tracing wheel and fabric markers.

Sewing tools: Needles, pins, thimbles and sewing machines, etc.

Key Assessment

DoK Level 1: List four categories of sewing tools and give one example under each category.

DoK Level 2: Explain why it is important to classify sewing tools and equipment according to their functions when preparing for sewing tasks.

DoK Level 3: A student needs to sew a basic skirt. Identify and justify the selection of tools from each category that would be most useful for completing the task efficiently

DoK Level 4: Design a sewing toolkit for a someone new to sewing. Include five different tools from different categories and explain the rationale for each choice, considering their functions, safety and frequency of use.

FOCAL AREA 2: APPROPRIATE HANDLING AND MAINTENANCE OF SEWING TOOLS AND EQUIPMENT

1. Cutting Tools (e.g., scissors, shears, seam rippers)

- **Handling:** Use only for fabric, not paper or other materials, to maintain sharpness. Handle with care and keep blades closed when not in use.
- **Maintenance:** Wipe blades after use to remove lint. Store in a dry place to prevent rust. Sharpen regularly.

2. Measuring Tools (e.g., tape measure, ruler, seam gauge)

- **Handling:** Do not bend or overstretch tape measures. Keep rulers flat and handle gently to avoid breaking.
- **Maintenance:** Store them straight or rolled (for tapes) in a drawer or box. Avoid exposure to heat or moisture.

3. Marking Tools (e.g., tailor's chalk, tracing wheel)

- **Handling:** Use lightly to avoid staining fabric permanently. Use the appropriate tool for the fabric type.
- **Maintenance:** Store in a cool, dry place. Keep chalk in a box to avoid breakage.

4. Sewing Machines

- **Handling:** Operate according to the manual. Do not force fabric through the machine.
- **Maintenance:** Regularly oil and clean the machine. Replace needles when dull or bent. Cover the machine after use to prevent dust.

5. Pressing Tools (e.g., iron, pressing ham)

- **Handling:** Always check temperature settings before pressing. Use the right heat level for each fabric type.
- **Maintenance:** Clean the soleplate of the iron. Empty water after use. Store upright in a safe place.

6. Needles and Pins

- **Handling:** Use thimbles when hand-sewing to protect fingers. Avoid leaving pins in fabric when storing.

- **Maintenance:** Keep in a pin cushion or magnetic holder. Dispose of bent or rusty pins/needles safely.

Learning Tasks

1. Identify the proper handling and maintenance of tools and equipment.
2. Measure, mark and cut fabric using the correct tools.

Pedagogical Exemplars

Experiential Learning/Group Work.

In pairs/ mixed ability groups observe demonstration/videos or charts and identify the proper handling and maintenance of tools and equipment.

Individually/ in pairs practice measuring, marking and cutting fabric using the correct tools.

Monitor groups during practice to support learners when necessary.

Key Assessment

DoK Level 1: Identify three basic sewing tools and state their primary functions.

DoK Level 2: Explain how proper maintenance of sewing tools contributes to the effectiveness and safety of sewing activities.

DoK Level 3: Analyse the effects of improper handling of sewing equipment like scissors, needles or sewing machines on sewing outcomes.

DoK Level 4: Create a weekly maintenance plan for a home economics class to ensure the proper care, storage and safety of all sewing tools and equipment

Hint



*The recommended assessment mode for Week 10 is an **Individual Class Exercise**. See Teacher Assessment Manual and Toolkit pages 63– 65 for more information on how to organise an Individual Class Exercise.*

WEEK 11: COMPARE TYPES OF SEWING MACHINE AND OTHER SEWING TOOLS IN TERMS OF FUNCTION AND USE

Learning Indicator: *Compare hand sewing and machine sewing tools in terms of function and use*

FOCAL AREA: COMPARING HAND SEWING MACHINE AND OTHER SEWING TOOLS IN TERMS OF FUNCTION AND USE

Introduction

- In sewing, a wide range of **hand tools** and **machine tools** are used, each designed for specific tasks.
- Understanding the **functions and uses** of these tools helps produce garments that are well-constructed, neat and durable.
- Choosing the right tool for the right job is essential for achieving high-quality results efficiently.

Hand Sewing Tools

Hand sewing tools are used to stitch, join, finish or embellish fabric **manually**, without the aid of a sewing machine.

Examples and Their Functions

- **Hand needles:** Used for various types of manual stitching, including hemming, mending and decorative work.
- **Thimble:** Worn on the finger to safely push the needle through fabric, preventing injury.
- **Pins:** Temporarily hold fabric pieces together to maintain alignment before sewing.
- **Pin cushion:** Provides a safe and convenient place to store pins and needles when not in use.
- **Scissors:** Used for cutting fabric, threads and small trims with precision.
- **Seam ripper:** A sharp tool designed to remove unwanted stitches cleanly without damaging the fabric.
- **Tailor's chalk:** Used to make temporary markings on fabric for sewing guides, such as seam lines and dart placements.
- **Measuring tape:** A flexible ruler for taking body measurements and measuring fabric dimensions accurately.
- **Thread:** The essential material used with a needle to join pieces of fabric by hand.

Key Features

- Lightweight and easy to carry anywhere.
- Ideal for detailed, precise work, especially on delicate fabrics.
- Require minimal maintenance or training.
- No need for electricity, making them accessible and convenient in any setting.

Machine Sewing Tools

Machine sewing tools work with a sewing machine to produce stitches more quickly, evenly and professionally than by hand.

Examples and Their Functions

- **Sewing machine:** The primary tool for stitching fabric quickly and consistently.
- **Presser foot:** Holds the fabric firmly in place against the feed dogs, ensuring smooth, even stitching.
- **Bobbin and bobbin case:** Supply the lower thread that interlocks with the upper thread to form secure stitches.
- **Machine needles:** Specially designed for machine use, available in different types for various fabrics and stitches.
- **Foot pedal:** Controls the machine's speed, allowing the user to adjust stitching pace as needed.
- **Seam guide or plate markings:** Help maintain consistent seam allowances for professional results.
- **Thread spool:** Holds the upper thread used in machine stitching.
- **Oil and maintenance tools:** Keep the machine running smoothly by reducing friction and preventing wear.
- **Machine light:** Illuminates the sewing area, making it easier to see fine details and avoid errors.

Key Features

- Enable much faster sewing compared to hand methods.
- Produce strong, uniform stitches that improve durability.
- Can handle heavy or multiple layers of fabric with ease.
- Require electricity (or manual power for treadle machines).
- Need regular maintenance, such as cleaning and oiling, to ensure smooth operation.

Comparison of Hand and Machine Sewing Tools

- **Function**
 - Hand tools allow manual stitching, marking, and measuring.
 - Machine tools enable fast, consistent mechanical stitching and fabric handling.

- **Use**
 - Hand tools are best for small repairs, detailed finishes and delicate fabrics.
 - Machine tools are ideal for constructing garments, sewing large sections and producing strong seams quickly.
- **Speed**
 - Hand sewing is slower and more controlled, suitable for precise tasks.
 - Machine sewing dramatically increases production speed.
- **Precision**
 - Hand tools excel at detailed, delicate work that requires careful control.
 - Machine tools deliver consistent, even stitches over long seams.
- **Cost**
 - Hand tools are generally less expensive and widely accessible.
 - Machines involve a higher upfront investment and maintenance costs.
- **Portability**
 - Hand tools are lightweight and easy to carry anywhere.
 - Machines are bulkier and less portable.
- **Skill required**
 - Hand sewing demands basic manual dexterity and patience.
 - Machine sewing requires familiarity with machine operation and care.
- **Maintenance**
 - Hand tools need little maintenance beyond keeping them clean and sharp.
 - Machines require regular oiling, cleaning and occasional part replacement.

When to Use Each

- **Hand Sewing Tools**
 - Perfect for finishing hems neatly and invisibly.
 - Attaching buttons securely.
 - Basting (temporary stitches to hold pieces before final sewing).
 - Decorative embroidery or embellishments.
 - Small repairs on the go without needing electricity.
- **Machine Sewing Tools**
 - Constructing main seams in garments quickly and uniformly.
 - Sewing long, straight seams on large projects like quilts.
 - Handling thick or multiple layers of fabric effectively.

- Producing multiple identical items efficiently in production settings.

Types of Sewing Machines

Type of Machine	Image	Use
Manual/Hand Sewing Machine		Uses a hand wheel to stitch fabric, best for small or simple projects and places without electricity
Treadle Sewing Machine		Ideal for areas with no electricity; provides steady stitching, Operated with a foot pedal
Electric Sewing Machine		Used for home and commercial sewing; faster and more efficient, Uses electricity and foot pedal for speed and control
Computerised Sewing Machine		Suitable for detailed, decorative and advanced sewing tasks, built-in patterns and automatic functions

Overlock (Serge) Machine		Used to finish seams neatly and professionally, trims edges and prevents fabric fraying
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Figure 29: *Types of Sewing Machines*

Advantages and Disadvantages of Different Types of Sewing Machines

Type of Machine	Advantages	Disadvantages
Hand Machine	• It is not very expensive, so many people can afford it. • It is light in weight, making it easy to move around. • It does not require electricity, so it can be used anywhere and at any time. • It is simple to operate, making it ideal for beginners. • It works slowly, allowing beginners to produce good quality work.	• Most hand sewing machines only do straight stitches, limiting stitch variety. • Only one hand is free to control the fabric, so sewing may not be very accurate. • It can be difficult for left-handed users, as the handle is usually on the right side. • It does not come with a stand, so one must be provided separately.
Treadle Machine	• It has a cutting surface that can be used to cut small items. • It comes with a stand, so there's no need to provide one. • Some models can do zigzag stitches in addition to straight stitches. • It does not use electricity, making it usable anywhere. • Both hands are free to control the fabric, allowing for better sewing quality.	• It is very expensive, making it unaffordable for many people. • The paddling mechanism is complicated for beginners and hard to master. • It is heavy, making it difficult to move around.

Electric Machine	• With the exception of industrial types, most electric machines are portable and easy to relocate. • They are multifunctional—able to perform tasks such as embroidery, buttonholes, hemming, neatening and decorative stitching. • They are very fast, enabling users to produce many items within a short time. • Both hands are free to control the fabric, which helps in achieving high-quality work.	• They cannot be used without electricity. • They are often expensive, making them less accessible to many people. • Their speed can be a challenge for beginners, who may struggle to control them effectively.
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Learning Tasks

1. Describe the three types of sewing machines.
2. Explain specific functions of each type.
3. Identify the hand sewing machine and sewing tools in clothing construction.
4. Compare the tools and equipment to discuss their similarities and differences in relation to their functions and uses.

Pedagogical Exemplars

Project-Based Learning/Group Work

1. In pairs/ small groups, visit a sewing centre of choice/surf the internet to identify the hand sewing and machine sewing tools used in clothing construction.
2. Compare the tools and equipment to discuss their similarities and differences in relation to their functions and uses.

Key Assessment

Level 1: What is the function of a manual/hand sewing machine and what type of project is it best suited for?

DoK Level 2

1. How does the operation of a computerised sewing machine differ from that of a treadle sewing machine and in what scenarios would each be most useful?
2. Explain how proper maintenance of both hand sewing tools and machine sewing tools contributes to effective and safe sewing practices.

DoK Level 3

1. Explain the differences between an overlock machine and an electric sewing machine, and describe how each can be integrated into a project to achieve optimal results.
2. Analyse how improper handling of sewing tools such as needles, scissors and sewing machines can negatively affect the sewing process and final outcomes.

Hint



The recommended assessment mode for Week 11 is **research**. See Teacher Assessment Manual and Toolkit pages 61 for more information on how to organise a research.

WEEK 12: IDENTIFICATION AND APPLICATION OF SEWING NOTIONS AND BASIC STITCHES IN GARMENT CONSTRUCTION

Learning Indicators

1. Identify common sewing notions and describe their uses in garment construction.
2. Demonstrate different types of basic stitches used in clothing construction.

FOCAL AREA 1: COMMON SEWING NOTIONS

Sewing notions are small tools or accessories used in sewing, especially those that are not part of the fabric or machine.

Examples of notions and their Uses in garment construction

Notion	Use in Garment Construction
Thread	Used to stitch fabric pieces together.
Zippers	Used as fasteners in garments like dresses, skirts and trousers.
Buttons	Used for closures in shirts, blouses and coats.
Elastic bands	Provide stretch and fit in waistbands, cuffs and necklines.
Hooks and eyes	Used for secure fastening in dresses, skirts and bras.
Velcro	Used for easy fastening, especially in children's and sportswear.
Bias tape	Used for finishing raw edges and seams, especially around curves.
Snap	Used as alternatives to buttons, especially in baby clothing.
Seam binding	Covers raw edges to prevent fraying and create a clean finish.
Ribbons	Used for decorative finishes and sometimes functional ties.
Lace trims	Used to decorate and enhance the beauty of garments.
Interfacing	Adds stiffness or support to collars, cuffs, waistbands, etc.
Needles and pins	Essential for hand sewing and pinning fabric pieces before stitching.



Figure 29: *Sewing Notions*

Learning Tasks

1. Discuss sewing notions used in garment construction.
2. Observe samples of notions used on different garments to explain the role of sewing notions in garment construction.

Pedagogical Exemplars

Experiential Learning/Talk for Learning Approaches: Brainstorm/Brain-write to discuss sewing notions used in clothing construction. Using the responses from brainstorming to provide further explanation to support learners understanding.

Group Work: In mixed gender/ability groups observe samples of notion used on different garments to explain the role of sewing notions in garment construction. E.g. Sewing Notions: Thread, buttons, zippers, elastic, bias tape and interfacing.

Key Assessment

DoK Level 1: List five common sewing notions used in garment construction.

DoK Level 2: Explain how sewing notions such as elastic bands, zippers and interfacing contribute to the function and fit of a garment.

DoK Level 3: Compare the use of buttons and Velcro in garment construction. In what situations would one be more appropriate than the other? Justify your answer.

DoK Level 4: Design a children's outfit that incorporates at least five different sewing notions. Explain your selection and how each notion improves the garment's functionality, safety and appearance.

FOCAL AREA 2: THE CONCEPT OF STITCHES

Stitches are patterns formed by a threaded needle on fabric. They are used for both decorative and functional purposes in sewing. Common examples include tacking, chain, zigzag, loop,

hemming, stem, satin and backstitch. Stitches are generally categorised into two main types: temporary stitches and permanent stitches.

Types of Stitches

Temporary Stitches

Temporary stitches, also known as basting stitches, are used for preliminary sewing tasks. Their main purpose is to hold layers of fabric together in the correct position before permanent stitching is applied. These stitches are especially useful during fittings or while assembling garment parts. They are also used to transfer pattern lines or markings from paper patterns onto fabric. Temporary stitches are always removed after the final, permanent stitches have been made.

Permanent Stitches

Permanent stitches are used to securely join parts of a garment or article and they remain in place throughout the life of the item. These stitches are sewn after the temporary stitches have served their purpose and are ready to be removed. Once the permanent stitches are in place, temporary stitches should be carefully taken out to leave a neat and durable finish.

When done by hand, permanent stitching is made using a single thread. However, when done with a sewing machine, two threads are used: an upper thread and a lower (bobbin) thread. These threads interlock to form what is known as a **lockstitch** - a strong and secure stitch that holds the fabric layers together firmly.



Figure 30: *Samples of Stitches*

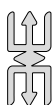
Learning Tasks

1. Explain the concept of stitches.
2. Describe examples of stitches and their uses.
3. Practice basic hand stitches on fabric pieces.

Pedagogical Exemplars

Talk for Learning Approaches

Brainstorm/Brain-write to explain the concept of stitches. Using the responses from brainstorming, come up with the correct meaning of stitches. E.g. Stitches are patterns of thread formed by a threaded needle in an article. Examples of stitches are; tacking, chain, zigzag, loop, hemming, stem, satin and backstitch.



Note

Encourage all learners to participate, share and accept each other's views respectfully.

Structured Talk for learning: Observe realia/charts/pictures/video of different types of stitches, list and describe each one and possibly say their uses to aid understanding.

Experiential Learning: Observe demonstration/videos and practice basic hand stitches on fabric pieces.

Key Assessment

DoK Level 1: What is a stitch in sewing?

DoK Level 2: Explain why different types of stitches are used in sewing.

DoK Level 3: Which basic stitch would you choose to sew a hemline on a skirt and why?

DoK Level 4: Design a simple sewing task (e.g., handkerchief or pillowcase) and explain which types of stitches you would use and how they enhance durability and appearance.

Hint



*The End of Semester Examination will be conducted in Week 12. Refer to **Appendix D** for a Table of Specification to guide you to set the questions. Set questions to cover all the indicators covered for at least weeks 1 to 11.*

WEEK 13: CLASSIFICATION AND APPLICATION OF STITCHES IN CLOTHING CONSTRUCTION

Learning Indicators

1. *Categorise stitches based on their functions*
2. *Make samples of stitches suitable for different functions in clothing*

FOCAL AREA 1: CATEGORISATION OF STITCHES BASED ON THEIR FUNCTIONS

Classification of Stitches by Their Functions

Stitches can be classified into four main categories based on their functions: **temporary**, **joining**, **neatening (or finishing)** and **decorative**.

After cutting out a design from fabric, sewing typically follows a sequence of stitching steps:

1. **Temporary stitches** are used first to hold the fabric pieces in place.
2. These are followed by joining stitches, which permanently join the sections together.
3. Once joined, the temporary stitches are removed and the raw edges are secured using neatening stitches.
4. Finally, decorative stitches may be added to enhance the appearance of the finished article.

The key terms to remember in this process are: temporary, joining, neatening and decorative.

Classification by Function

1. Temporary Stitches

These are used for preliminary sewing tasks such as holding fabric in place for fittings or alignment. They are removed once permanent stitching is done.

- Even tacking
- Long and short tacking
- Diagonal tacking
- Tailor's tacks

2. Joining Stitches (*Permanent*)

These stitches join fabric pieces permanently and remain in the article throughout its life.

- Backstitch
- Running stitch
- Herringbone stitch
- Oversewing
- Ladder stitch

3. Neatening (Finishing) Stitches (*Permanent*)

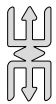
These stitches secure and tidy the raw edges to prevent fraying and give the article a clean look.

- Loop stitch
- Overcasting
- Slip hemming
- Hemming
- Herringbone stitch
- Buttonhole stitch

4. Decorative Stitches (*Permanent*)

These stitches are used to beautify garments or textile articles.

- Satin stitch
- Chain stitch
- Herringbone stitch
- Loop stitch
- Cross stitch
- Stem stitch
- Lazy-daisy (Detached chain stitch)



Note

Some stitches serve more than one function. For example, blanket stitch, herringbone stitch and ladder stitch can be used for joining, neatening and decorating.

Category	Stitch Type	Function
Temporary Stitches	Basting (or tacking) stitch	Used to hold fabric pieces together temporarily before final stitching.
Permanent Stitches	Running stitch, backstitch	Used to join fabric pieces permanently.
Decorative Stitches	Blanket stitch, chain stitch, satin stitch	Used to enhance the aesthetic appeal of garments or fabric items.
Seam Finishing Stitches	Overcast stitch, zigzag stitch	Used to prevent fabric edges from fraying.
Hemming Stitches	Slip stitch, blind hem stitch	Used to finish the edges of garments neatly, especially hems.
Reinforcement Stitches	Double stitch, backstitch	Used to strengthen stress points (e.g., pockets, underarms).
Stretch Stitches	Stretch stitch, zigzag stitch	Used for sewing stretchable or knit fabrics, allowing flexibility.
Embroidery Stitches	Chain stitch, cross stitch, feather stitch	Used for surface decoration and artistic designs.

Learning Tasks

1. Discuss the functions of stitches.
2. Classify stitches according to functions
3. Describe the general guidelines for creating stitches

Pedagogical Exemplars

Structuring talk for Learning/Problem based Learning Approaches: With the aid of samples/charts/videos/posters on stitches, discuss the functions of stitches.

Group Work: In mixed ability groups, learners classify stitches according to functions

1. **Temporary stitches:** These stitches are used to hold fabric pieces together temporarily during the construction process. They are removed once the final, permanent stitching is in place. Temporary stitches are essential for tasks like fitting, positioning, and ensuring accuracy before committing to permanent seams. Eg: Basting Stitch, Tailor's Tacking, Even Tacking Stitch
2. **Permanent stitches:** These stitches are intended to hold fabric pieces together permanently. They provide strength and durability to the finished garment or item. Eg: Running Stitch, Backstitch, Overcasting Stitch

Group Work/Talk for learning approaches: Using mixed ability/gender groups, use pyramid discussion to describe the general guidelines for creating stitches on card boards, sheets of papers, sticky notepads, flip charts or exercise books. Share views for a whole class discussion. E.g.,

- Select the most suitable stitch for the work to enable you to get the right effect
- Select needles that are suitable for the thread and fabric and comfortable for you.
- Fasten on and off securely. This means begin double stitch and end with double stitch.
- Cut sewing thread at an angle, using sharp scissors. Never bite or break thread. For permanent stitching, thread can match or contrast as preferred, etc.

Key Assessment

DoK Level 1: List four types of stitches and their functions.

DoK Level 2: Explain the difference between decorative stitches and reinforcement stitches, providing one example of each.

DoK Level 3: Recommend suitable stitches for constructing a stretchable sportswear outfit and explain your choices.

DoK Level 4: Create a sewing plan for a school uniform that includes at least three different categories of stitches. Justify your selection of each stitch based on the garment's needs.

FOCAL AREA 2: HOW TO MAKE SAMPLES AND FUNCTIONS OF STITCHES

1. Running Stitch

- **Function:** Used for seams, gathering or temporary stitching.
- **How to make it:** Pass the needle in and out of the fabric in even lengths.

2. Backstitch

- **Function:** Strong stitch used for permanent seams.
- **How to make it:** Bring the needle back into the last stitch hole, then forward for a tight seam.

3. Basting (Tacking) Stitch

- **Function:** Temporary stitch to hold pieces together.
- **How to make it:** Make long, loose stitches to allow easy removal.

4. Overcast Stitch

- **Function:** Prevents raw edges of fabric from fraying.
- **How to make it:** Stitch over the edge of the fabric in a diagonal loop pattern.

5. Blanket Stitch

- **Function:** Decorative and edge finishing.
- **How to make it:** Make evenly spaced looped stitches along the fabric edge.

6. Chain Stitch

- **Function:** Decorative stitch, often used in embroidery.
- **How to make it:** Form linked loops that resemble a chain.

7. Tailor's Tacking

- **Function:** Transfers pattern markings from paper to fabric layers.
- **How to make it:** Use double thread to make loose loops between fabric layers. Then gently pull the layers apart and snip the thread between them, leaving thread tufts on both sides.

Learning Tasks

1. Make samples of temporary stitches.
2. Exhibit samples of stitches for gallery walk and appraisal.

Pedagogical Exemplars

Group Work/Project Based Approaches

1. In mixed gender/ability/random groups, make samples of temporary stitches. In your groups, make stitches on your individual project articles. E.g. Diagonal Tacking, Even tacking, Long and short tacking, etc.

2. Exhibit samples of stitches for gallery walk and appraisal.

(Note: Permanent stitches are practised in week 14).

Key Assessment

DoK Level 1: What is the purpose of tailor's tacking in garment construction?

DoK Level 2: Explain the difference between a permanent stitch and a temporary stitch.

DoK Level 3: Choose a stitch suitable for finishing raw fabric edges and justify your choice.

DoK Level 4: Design a mini project (e.g., a small purse or handkerchief) and select appropriate stitches for construction, reinforcement and decoration. Explain the reasons for your choices.

Hint



*The recommended assessment mode for week 13 is a **Mini Project**. Refer to the DoK assessment level 4 for a sample task to assign the individual or group mini project. See Teacher Assessment Manual and Toolkit pages 27 for more information on how to organise a mini project.*

WEEK 14: MAKE SAMPLE STITCHES

Learning Indicator: *Make samples of stitches suitable for different functions in clothing*

FOCAL AREA: MAKE SAMPLES OF STITCHES

1. Faggoting Stitch

Description: A decorative openwork stitch used to join two folded edges or pieces of fabric with space in between.

Use: Commonly used in heirloom sewing, decorative seams or lingerie.

How to Sew

- Place two folded fabric edges a short distance apart.
- Stitch from one-fold to the other in a crisscross or figure-eight pattern, leaving a gap in between.

2. Slip Stitch

Description: A nearly invisible hand stitch used for hemming and closing seams.

Use: Ideal for hemming skirts, trousers, or closing openings in lined garments.

How to Sew

- Pass the needle through the folded edge of the hem, then catch a tiny bit of the fabric.
- Continue alternately picking up the hem fold and the garment to create nearly invisible stitches.

3. Oversewing Stitch (Overcast Stitch)

Description: A looping stitch that wraps around the raw edge of the fabric.

Use: Prevents fabric from fraying; often used in hand-finishing seams.

How to Sew

- Bring the needle over the edge of the fabric and insert it again a short distance along.
- Continue making evenly spaced loops over the edge.

4. Buttonhole Stitch

Description: A strong, decorative stitch used to reinforce the edges of buttonholes.

Use: Creates durable and neat buttonholes on garments.

How to Sew

- Make small, evenly spaced stitches around the edge of the buttonhole.
- Each stitch should include a small loop or knot at the edge to prevent fraying.

5. Herringbone Stitch

Description: A decorative and functional stitch that crosses back and forth in a zigzag pattern.

Use: Used in hems, smocking or embroidery.

How to Sew

- Stitch diagonally across the fabric, alternating directions.
- Each stitch overlaps the previous one to form a crisscross or V pattern.

6. Hemming Stitch

Description: A diagonal stitch used to secure a hem to the garment fabric.

Use: Used for hemming garments invisibly.

How to Sew

- Take a tiny stitch on the garment fabric, then stitch through the folded edge of the hem.
- Continue with small, evenly spaced diagonal stitches.

7. Neatening Stitch (Edge Finish Stitch)

Description: A type of stitch used to finish raw edges to prevent fraying.

Use: Secures raw edges inside garments.

How to Sew

- Use overcasting, zigzag stitch or binding.
- It may be done by hand or machine.

Learning Tasks

1. Make samples of permanent stitches.
2. Exhibit samples of stitches for gallery walk and appraisal.
3. Compare hand and machine stitches in terms of efficiency and durability.

Pedagogical Exemplars**Group Work/Project Based Approaches**

1. In mixed gender/ability/random groups, make samples of permanent stitches. In your groups, make stitches on your individual project articles. E.g.,
 - a. Chain stitches
 - b. Satin stitches
 - c. Blanket stitches
 - d. Machine stitches
 - e. Over sewing
 - f. Overcasting
 - g. French knot, etc.
2. Exhibit samples of stitches for gallery walk and appraisal.
3. Use a comparison chart to compare hand and machine stitches in terms of efficiency and durability.

Key Assessment

DoK Level 1: What is the purpose of the Buttonhole Stitch?

DoK Level 2: Why is the Hemming Stitch a good choice for finishing the bottom edge of a skirt?

DoK Level 3: You are sewing a lightweight blouse by hand. Which stitches would you choose to hem, finish edges and close the lining? Explain your choices.

DoK Level 4: Create a small sewing project or sampler using at least four different hand stitches. Reflect on how your stitch choices affected the final look and durability of your work

Hint



*The recommended assessment mode for Week 14 is a **Discussion and Presentation**. Refer to the DoK assessment level 3 for a sample task. See Teacher Assessment Manual and Toolkit pages 52 for more information on how to organise the discussion and presentation.*

WEEK 15: IDENTIFICATION AND CONSTRUCTION OF SEAMS IN GARMENT MAKING

Learning Indicators

1. Identify different types of seams used in garment construction
2. Make specimens of commonly used seams in garment construction

FOCAL AREA 1: CONCEPT OF SEAMS

A seam is the line where two or more pieces of fabric are stitched together. It holds parts of a garment in place, gives it shape and ensures durability. Seams can also be decorative depending on the design

Types of seams used in garment construction

Type of Seam	Function / Use
Plain Seam	The most common seam; used to join two pieces of fabric edge to edge.
French Seam	A neat, enclosed seam ideal for lightweight and sheer fabrics.
Flat-Felled Seam	Very strong and durable; commonly used in jeans and workwear.
Double-Stitched Seam	Provides extra strength; often used in areas requiring reinforcement.
Lapped Seam	One piece of fabric is lapped over another; used in sportswear and leather.
Bound Seam	The raw edges are covered with bias tape; used for decorative finishes.
Zigzag Seam	Flexible seam suitable for knit or stretch fabrics.
Overlocked Seam	Finished using an overlock machine; trims and binds edges to prevent fraying.

Groups of Seams

Seams, the lines where two pieces of fabric are joined together, can be classified into two main groups based on their visibility on the right side of the garment:

1. **Conspicuous Seams:** These seams are clearly visible on the right side of an article because the stitching lines are exposed. They are often used as decorative features in garment construction.

Examples include: Flat fell seam, Canal seam etc.

2. **Inconspicuous Seams:** Inconspicuous seams do not show stitching lines on the right side of the fabric, making them ideal for a neat, concealed finish.

Examples include: Plain seam, French seam etc.

Traditionally, plain and French seams were used solely as inconspicuous finishes. However, with evolving fashion trends, these seams are sometimes deliberately styled to appear on the outside, making them conspicuous.

Factors that Affect the Choice of Seams

1. **Fabric Type:** The type of fabric being used significantly affects the choice of seams. Lightweight fabrics, like silk or chiffon, may require finer seams, while heavy fabrics, like denim or wool, need stronger, more durable seams.
2. **Garment Style:** The design and style of the garment influence seam selection. For example, a formal suit may require flat-felled seams for a neat finish, while casual wear might use simpler, less complex seams.
3. **Seam Strength:** For areas that experience stress (such as armholes, crotches or side seams), stronger seams like double-stitched seams or French seams may be chosen to ensure durability.
4. **Aesthetic Considerations:** The appearance of the seam can also affect the choice. Decorative seams, such as topstitching or piping, may be selected for visual appeal, especially in fashion garments.
5. **Ease of Sewing and Construction:** The ease of creating certain seams based on the garment's complexity and the skill level of the sewer is a key factor. Some seams are easier to sew by machine, while others may require more manual work or special techniques.

Importance of Seams in Clothing Construction

1. **Joining Fabric Pieces:** Seams are essential for connecting different pieces of fabric together to form a complete garment. Without seams, there would be no way to hold the fabric pieces together, making the garment incomplete.
2. **Durability and Strength:** Well-constructed seams provide strength and durability to the garment. They ensure that the clothing can withstand wear and tear, helping it last longer.
3. **Shape and Fit:** Seams play a crucial role in giving the garment its shape and structure. They help shape the fabric to fit the body, ensuring a comfortable and flattering fit.
4. **Finishing Edges:** Seams finish raw edges of fabric, preventing fraying and unraveling. This is particularly important for ensuring the longevity and neatness of the garment.
5. **Aesthetic Appeal:** Seams can also serve a decorative purpose. Decorative seams or topstitching can add style and enhance the visual appeal of a garment.
6. **Ease of Alterations:** Seams make it easier to adjust or alter a garment for a better fit. A seam allows for expansion or reduction in size if necessary.
7. **Support and Functionality:** Seams can also provide support in certain areas of the garment, such as in the construction of pockets, zippers, and armholes.

Learning Tasks

1. Explain the concept of seams in garment construction.
2. Select two different types of seams used in garment construction and explain their purpose.

3. Identify the factors to consider when choosing a seam.
4. Analyse the pros and cons of selecting specific seams for varied clothing articles.
5. Examine the general rules for making seams.

Pedagogical Exemplars

Problem based learning: In pairs/mixed ability groups, brain-write/brainstorm to explain the concept of seams, with specific examples. E.g. A seam is made when two or more pieces of fabrics are securely joined together with permanent stitches. French seam, overlaid seam, plain seam, run and fell seam.

Group work/ Collaborative learning

1. In pairs/mixed ability groups, read relevant texts, charts, slides, pictures, videos or surf the internet to explain seams.
2. In mixed ability groups, use talking point/ pyramid discussion/panel discussion to examine the general rules for making seams.
3. In mixed ability/gender groups, analyse the pros and cons of selecting specific seams for varied clothing articles and present it in class using charts/pictures/PowerPoint presentation/ concept maps, etc.

Talk for learning: Collaborative/group learning Approaches

1. In mixed gender/ability groups, use mingling, onion ring/radio reporter strategies to discuss the importance of seams in clothing construction.
2. Present your group reports for a whole class discussion.
3. Discuss the types of seams you have on your school uniforms
4. Use the think-square-share method to identify the factors to consider when choosing a seam.

E.g.

- a. The Fabric Type
- b. Seam placement
- c. Style of the article
- d. Product type and use
- e. The age of the wearer, etc.

Encourage learners to respect each other's views on their choice of seams for varied articles.

Experiential/Structuring talk for learning Approaches: With the aid of videos, charts, slides or posters discuss the general rules for making seams. E.g.,

- Threads used in making seams should be suitable for the fabric
- The seam width must correspond to the fabric texture
- Stitch seams firmly to produce strong seams
- Seams should be well pressed to ensure quality work
- Backstitch seams (stitch over) at the beginning and ending for reinforcement, etc.

Experiential learning/Group work: In mixed ability/gender cultural/friendship groups, organise a visit to sewing shops/centres within the community to ascertain the rules regarding the making of the various types of seams.

Key Assessment

Level 1: What is the definition of a seam in garment construction?

Level 2: How do seams contribute to the overall strength and durability of a garment?

DoK Level 3: When designing a garment for activewear, what factors should be considered in selecting the appropriate type of seam?

DoK Level 4: How would the choice of seams in a formal evening gown affect both its appearance and comfort, and why would certain seams be more suitable for this type of garment?

FOCAL AREA 2: MAKE SAMPLES OF SELECTED SEAMS

General rules for making seams

1. **Choose the Right Fabric:** Ensure your fabric is suitable for the seam type you're making. Some seams are better for lightweight fabrics, while others work well with heavier materials.
2. **Use the Correct Seam Allowance:** Follow the standard seam allowance (usually 1/4 to 1/2 inch), unless otherwise specified for your pattern.
3. **Pin Fabric Properly:** Pin fabric pieces together securely before sewing to ensure the edges align properly during stitching.
4. **Press Seams as You Go:** Press seams open or to one side as you sew to avoid bulk and ensure a professional finish.
5. **Finish Raw Edges:** To prevent fabric from fraying, finish raw edges with a zigzag stitch, overlock or binding.
6. **Maintain Even Stitching:** Sew at a steady pace, keeping your stitches even and consistent in length for a neat result.
7. **Sew with the Right Tension:** Adjust the machine's thread tension for smooth, even stitches that are not too tight or too loose.

Make samples of selected Seams

1. **Plain Seam**
 - **Materials Needed:** Two pieces of fabric, sewing machine, pins, scissors.
 - **Steps**
2. **Pin the fabric:** Place the two pieces of fabric right sides together, aligning the edges.
3. **Sew the seam:** Using a straight stitch on your sewing machine, sew along the edge with a 1/4-inch seam allowance (you can adjust the seam allowance depending on the project).
4. **Finish the raw edges:** To prevent fraying, you can finish the raw edges using a zigzag stitch or overcast them.

5. **Press the seam:** Open the seam and press it flat to one side or press it open for a cleaner finish

Types of plain seams

1. Open Plain Seam

- **Description**

This is the most basic form of a plain seam. The two fabric pieces are sewn together with **right sides facing**. After sewing, the seam allowances are pressed open, meaning the two fabric edges are spread flat, creating a cleaner finish.

- **Use**

Commonly used in lighter fabrics where you want the seam to lie flat, often used for standard garment construction.

- **Steps**

- Sew the fabric pieces **right sides together**.
- Press the seam allowances **open**.

2. Closed Plain Seam

- **Description**

This variation is similar to the open plain seam, but instead of pressing the seam allowances open, the seam allowances are pressed to one side, with both raw edges lying together on the same side of the garment.

- **Use**

Used for sturdier fabric types or when you want the seam to have a more structured, bulkier appearance. Common in heavier garments like jackets.

- **Steps**

- Sew the fabric pieces **right sides together**.
- Press the seam allowances to **one side**

3. Double-Stitched Seam

- **Materials Needed:** Two pieces of fabric, sewing machine, pins, scissors.

- **Steps**

- **Pin the fabric:** Place the fabric pieces right sides together, aligning the edges.
- **Sew the first seam:** Using a regular straight stitch, sew along the edge with the appropriate seam allowance (usually 1/4 inch).
- **Sew the second seam:** Move over to the outside edge of the first seam and sew a second line of stitching parallel to the first.
- **Press:** Open the seam and press flat.

4. Flat-Felled Seam

- **Materials Needed:** Two pieces of fabric, sewing machine, pins, scissors.
- **Steps**
 - **Pin the fabric:** Place the fabric pieces right sides together.
 - **Sew the first seam:** Sew a seam with a 1/4-inch seam allowance.
 - **Trim the seam allowance:** Trim one of the seam allowances to about 1/8 inch.
 - **Fold and press:** Fold the remaining seam allowance over the trimmed edge to completely enclose the raw edge. Press flat.
 - **Sew the second seam:** Sew the fold down along the edge to secure the seam and give it a flat, professional finish.
 - **Press:** Press the flat-felled seam flat again

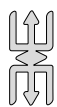
Learning Tasks

1. Observe how to make seams.
2. Make samples of selected seams.
3. Exhibit samples of garment features for gallery walk and appraisal.

Pedagogical Exemplars

Experiential Learning /Structuring Talk for Learning Approaches

1. Watch a video/demonstrate for learners to observe how to make seams.
2. Make samples of selected seams . E.g. Plain seam, French seam, overlaid seam, machine fell seam, double stitched seams, welt seam.



Note

Teacher/facilitator to go around, observing learners' work and guiding them.

Group Work/Project Based Approaches

1. In mixed gender/ability/random groups, make samples of seams. In your groups, make seams on your individual projects.
2. Exhibit samples of garment features for gallery walk and appraisal

Key Assessment

DoK Level 1: What are the basic types of seams used in garment construction? List at least three types of seams.

DoK Level 2: Explain the steps involved in making a plain seam. How does it differ from other types of seams in terms of function and appearance?

DoK Level 3: Choose a type of seam you would use for a garment made of delicate fabric and justify why it is the best choice. What factors (e.g., fabric type, garment purpose) influenced your decision?

DoK Level 4: Evaluate the importance of seam finishing in garment construction. How do different types of seams contribute to the durability and aesthetic of a garment? Provide examples of when specific seams would be used in professional garment-making.

Hint

*The recommended assessment mode for week 15 is **Critiquing**. Refer to the DoK assessment levels 3 & 4 for sample tasks. See Teacher Assessment Manual and Toolkit pages 58 for more information on how to use this assessment mode.*

WEEK 16: MAKE SAMPLES OF SELECTED SEAMS

Learning Indicator: *Make specimens of commonly used seams in garment construction*

FOCAL AREA: MAKE SAMPLES OF SELECTED SEAMS

1. French Seam

- **Materials Needed:** Two pieces of fabric, sewing machine, pins, scissors.
- **Steps**
 - **Pin the fabric:** Place the fabric pieces with the wrong sides together, aligning the edges.
 - **Sew the first seam:** Using a 1/4-inch seam allowance, sew along the edges.
 - **Trim the seam:** Trim the seam allowance to about 1/8 inch.
 - **Press the seam:** Press the seam open.
 - **Pin the fabric again:** Now, place the fabric pieces right sides together and align the edges.
 - **Sew the second seam:** Sew a second seam along the original seam line (about 3/8 inch from the edge). This encases the raw edges inside the seam.
 - **Press:** Press the seam flat again to create a clean finish.

2. Tacked Seam

Description

A simple seam temporarily or permanently secured with hand or machine tacking (long, loose stitches).

How to Make the Sample

- Place two fabric pieces **right sides together**.
- Sew a **plain seam** with a 1.5 cm seam allowance.
- Use **long running stitches (hand or machine)** to tack the seam together.
- Press seam allowances open or to one side.

Purpose

- Temporary holding before permanent stitching.
- Used for fittings or assembling layers in delicate fabrics.

3. Welt Seam

Description

A strong, flat seam with a clean finish one seam allowance is folded and topstitched.

How to Make the Sample

- Place two fabric pieces **right sides together**.
- Stitch a plain seam (1.5 cm seam allowance).
- Trim one seam allowance to **half its width**.
- Fold the longer seam allowance over the trimmed one and press flat.
- Topstitch through all layers near the folded edge.

Purpose

- Durable finish for trousers, jeans, workwear.
- Strengthens and flattens seam lines.

4. Overlaid Seam

Description

A decorative seam made by overlapping two edges and stitching them together.

How to Make the Sample

- Fold under 1 cm of one fabric edge.
- Place it **on top of** the other fabric piece, overlapping by about 1–1.5 cm.
- Pin or baste to hold in place.
- **Topstitch** along the folded edge to secure.

Purpose

- Decorative finish; also used in sportswear and leatherwork.
- Avoids bulk from seam allowances.

5. Counter Seam

Description

A double-stitched seam where both seam allowances are folded to opposite sides and topstitched.

How to Make the Sample

- Stitch a plain seam (1.5 cm seam allowance).
- Press seam allowances in opposite directions (one to each side).
- **Topstitch** on both sides of the seam line to secure the allowances.

Purpose

- Used in reversible garments, visible seam finishes.
- Neat and sturdy with a balanced look.

Learning Tasks

1. Observe how to make selected seams.
2. Make samples of selected seams.
3. Exhibit samples of garment features for gallery walk and appraisal.

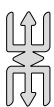
Pedagogical Exemplars

Experiential Learning /Structuring Talk for Learning Approaches

Watch a video/demonstrate for learners to observe how to make seams.

Make samples of selected seams.

E.g. Plain seam, French seam, overlaid seam, machine fell seam, double stitched seams, welt seam.



Note

Teacher/facilitator to go around, observing learners' work and guiding them.

Group Work/Project Based Approaches

In mixed gender/ability/random groups, make samples of seams. In your groups, make seams on your individual projects.

Exhibit samples of garment features for gallery walk and appraisal

Key Assessment

DoK Level 2

1. Describe each of the following seams: Tacked Seam, Welt Seam, Overlaid Seam and Counter Seam.
2. For each seam (Tacked, Welt, Overlaid, Counter), explain the main function of the seam and give one example of where each seam might be used in garment construction.

DoK Level 3: When designing a jacket, which of the four seams would be most suitable for the main body of the garment, and why? The explanation should consider factors such as durability, appearance, and fabric type.

DoK Level 4: Create a detailed plan for a garment or project using these **three different seams** (Plain, Welt, Overlaid). Justify your choices of seams, considering factors such as functionality, aesthetics and fabric type. Reflect on how each seam impacts the overall design and durability of the garment.

Hint



*Individual Project Work should be assigned to learners by the end of Week 16. Ensure that the project covers several learning indicators and spans over several weeks. Learners are expected to submit the individual project by week 20. Refer to **Appendix E**.*

WEEK 17: APPLICATION AND EVALUATION OF EDGE FINISHES IN GARMENT CONSTRUCTION

Learning Indicators

1. *Apply suitable edge finishes to prevent fabric fraying*
2. *Evaluate the strength and appearance of different edge finishes in clothing construction*

FOCAL AREA 1: THE CONCEPT OF EDGE FINISHES

Edge finishes are sewing processes on raw edges of articles. A sewn article is not complete until the edges are finished to prevent its threads from fraying.

Importance of edge finishes

1. **Prevents Fraying:** Edge finishes help to prevent the raw edges of fabric from unravelling over time, maintaining the garment's integrity.
2. **Enhances Durability:** Proper edge finishing techniques contribute to the overall durability of the garment, ensuring that it lasts longer even with repeated washing and wear.
3. **Improves Aesthetics:** Edge finishes give garments a neat, clean, and professional appearance, especially when visible edges are required, such as on hems or necklines.
4. **Provides Comfort:** Well-finished edges reduce the risk of irritating or sharp raw fabric edges rubbing against the skin, improving the comfort of the garment.
5. **Strengthens Seams:** Edge finishes help strengthen the seam area by reinforcing it, which is especially important in areas of stress like armholes and crotch seams.

Types of Edge Finishes

1. Facing

- **Description:** A separate piece of fabric used to finish the raw edge of a garment, usually around **necklines, armholes and openings**.
- **Use:** Provides a clean, professional look and maintains the garment's shape.
- **Types:**
 - Shaped Facing
 - Extended Facing
 - Bias Facing

2. Binding

- **Description:** A narrow strip of fabric (often cut on the bias) sewn around the edge of a garment to enclose the raw edge.
- **Use:** Common for finishing **necklines, armholes or edges of quilts and aprons**.
- **Types:**

- Single-fold binding
- Double-fold binding
- Bias binding

3. Hem

- **Description:** The **bottom edge** of a garment that is folded under and sewn to prevent fraying and create a neat finish.
- **Use:** Used at the **bottom of skirts, dresses, pants and sleeves.**
- **Types:**
 - Double-fold hem
 - Rolled hem
 - Blind hem
 - Narrow hem

4. Lace Trim

- **Description:** Lace is sewn along the edge of a garment to create a **decorative finish.**
- **Use:** Common in **lingerie, blouses, children's clothing** or decorative home items.
- **Application:** Can be applied over the edge or inserted between seams.

5. Scalloping with Embroidery

- **Description:** The fabric edge is finished with a **decorative scalloped design** using embroidery stitches, often by hand or machine.
- **Use:** Used on **handkerchiefs, table linens and light garments** for a fancy finish.
- **Edge is usually cut along the embroidered scallops** after stitching.

6. Facing and Collars

- **Description:** Used to **finish and shape necklines or add style details.**
 - **Facing:** Neatly finishes the inside of the neckline or armhole.
 - **Collars:** A part of the garment that folds over at the neckline, also acts as an edge finish.
- **Use:** Found in **shirts, dresses, and blouses.**
- **Types of Collars (examples):**
 - Peter Pan collar
 - Mandarin collar
 - Shirt collar



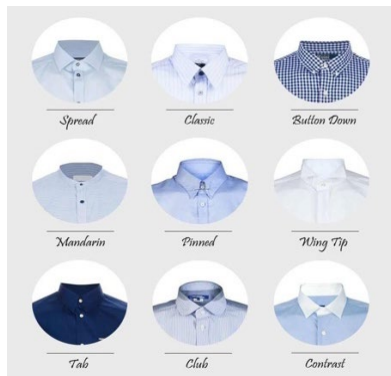
Hem



Facing



Bias binding



Collar



Fridged edge



Frills



Attached lace



Scalloping with embroidery

Figure 31: Examples of Edge Finishes

Learning Tasks

1. Explain the concept of edge finishes in garment construction?
2. Discuss the importance of edge finishes in garment construction.
3. Discuss when edges can be finished in the construction of clothing articles.
4. Observe how the edges of various articles are finished.
5. Make samples of edge finishes on your project articles.
6. Compare and contrast three types of edge finishes and explain when they are best used.

Pedagogical Exemplars

Problem-based learning: In pairs/mixed ability groups, brain-write/brainstorm to explain the concept of edge finishes. E.g., Edge finishes are varieties of techniques used to trim and attach the cut edges of garments and woven fabrics.

Group work/ Collaborative learning: In pairs/mixed ability groups, read relevant texts, charts, slides, pictures, videos or surf the internet to explain edge finishes.

Talk for learning/Collaborative/Group Learning Approaches

1. In mixed gender/ability groups, use mingling, onion ring/radio reporter strategies, discuss the importance of edge finishes in clothing construction. E.g.
 - Edge finishes prevent fraying
 - improve durability
 - give the finished garment a polished and professional look, etc.

Present your group reports for a whole class discussion and appraisal.

2. In mixed ability/gender groups, think-pair-share the different types of edge finishes and present to class. E.g. Facing, binding, hemming, Embellishment with Embroidery or Trimming, Attachment of Lace, Attaching Ruffles or Flounces, Attaching Fringe Edges, etc.

Group Work: In mixed ability/gender/random groups, discuss when edges can be finished in the construction of clothing articles.

Experiential Learning: Visit sewing shops/centres in the community to observe how the edges of various articles are finished.

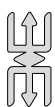
Problem-Based Learning: In pairs, describe the different methods of finishing edges of clothing artefacts/articles. E.g.,

- Facing: Fabric is sewn around the raw edges of a garment, turned inside out and sewn in place to give a smooth, neat surface. This technique is often used for necklines, armholes and garment openings.
- Binding: Narrow strips of fabric are usually cut on the bias and used to bind the raw edges of a garment. It can be left visible or hidden inside, and can have a neat or decorative finish. It is often used on quilts and garment edges, etc.

Experiential Learning /Structuring Talk for Learning Approaches

Show a video/demonstrate for learners to observe how to make edge finishes.

Make samples of edge finishes on your project articles.



Note

Teacher/facilitator to go around, observing learners' work and guiding them.

Key Assessment

DoK Level 1: What are edge finishes and why are they important in garment construction?

DoK Level 2: Explain the function of edge finishes in preventing fabric fraying and improving the overall quality of garments.

DoK Level 3: How do the different types of edge finishes contribute to the durability and aesthetic appeal of a garment?

DoK Level 4: In what situations might one edge finishing technique be chosen over another, and how do factors such as fabric type, garment function, and intended aesthetic influence that decision?

FOCAL AREA 2: **STRENGTH AND APPEARANCE OF DIFFERENT EDGE FINISHES IN CLOTHING CONSTRUCTION**

Overlocking (Serge Stitch)

- **Strength:** Strong and durable. It prevents fabric from fraying and adds extra durability to the edge, making it ideal for fabrics that are subject to frequent movement or laundering.
- **Appearance:** Clean and professional-looking, with a neat, even edge. Overlocking can be done in various thread colours to match or contrast with the fabric.

Pinking Shears

- **Strength:** Moderate. Pinking shears are not as durable as overlocking but still prevent significant fraying. They are suitable for light to medium-weight fabrics.
- **Appearance:** The edge is jagged, creating a decorative yet functional look. It is less polished compared to overlocking or binding but works well for casual garments.

Bias Binding

- **Strength:** Provides moderate strength by reinforcing the edge of the fabric. It's more suitable for lightweight fabrics and garments where a decorative finish is desired.
- **Appearance:** Neat and tidy, with a finished look that can be contrasting or matching with the fabric. It adds a decorative element and is often used for visible edges, like armholes or necklines.

French Seams

- **Strength:** Strong and sturdy. French seams encase the raw edge within the seam, offering a professional finish that is both durable and neat.
- **Appearance:** Elegant and clean. The inside of the garment looks as neat as the outside, making it ideal for lightweight or sheer fabrics that may require a more refined finish.

Rolled Hem

- **Strength:** Moderate. It provides a neat finish but is not as durable as overlocking or French seams.

- **Appearance:** Delicate and fine, ideal for lightweight fabrics like chiffon, silk, and satin. The edge is narrow and smooth, giving garments a more polished and refined look.

Hong Kong Finish

- **Strength:** Very strong, offering excellent durability. It is often used for heavy fabrics like wool or denim.
- **Appearance:** The edge is covered with bias tape, creating a neat, clean finish that looks professional and is often used in high-end garments.

Zigzag Stitch

- **Strength:** Moderate. It helps prevent fraying but may not be as durable as overlocking for fabrics that experience heavy use.
- **Appearance:** The zigzag stitch creates a visually textured finish that is functional but may not look as refined as other edge finishes like bias binding or French seams.

Identify the factors to consider when choosing an edge finish

1. **Fabric Type:** Different fabrics have varying levels of fraying or edge stability. For instance, lightweight fabrics like chiffon may require more delicate finishes such as French seams, while heavier fabrics like denim might benefit from overlocking.
2. **Garment Use:** The intended function of the garment can affect the choice of edge finish. For example, sportswear may require more durable finishes like serging, while evening wear may call for a more delicate finish such as binding or rolled hems.
3. **Durability:** Consider how much wear and tear the garment will undergo. More durable finishes such as overlocking or binding are appropriate for garments exposed to frequent movement or laundering.
4. **Aesthetic:** Some edge finishes add decorative elements to the garment, such as lace trims or rolled hems. The desired aesthetic effect will influence the choice of finish.
5. **Skill Level and Equipment:** The tools and skills available will also impact the choice. Overlocking may require a serger machine, while simpler finishes, like pinking shears, are easier for beginners to use.

Learning Tasks

1. Discuss the strength and appearance of the different types of edge finishes on your school uniform.
2. Identify the factors to consider when choosing an edge finish.
3. Analyse the pros and cons of selecting specific edge finishes for varied clothing articles.

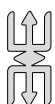
Pedagogical Exemplars

Talk for Learning approaches

1. Discuss the strength and appearance of the different types of edge finishes you have on your school uniforms
2. Use the think-square-share method to identify the factors to consider when choosing an edge finish.

E.g.,

- a. The type of fabric being used
- b. The kind of article
- c. Shape of the edge
- d. Maintenance and care
- e. Durability, etc.



Note

Encourage learners to respect each other's views on their choice of finishes for varied edges of clothing articles.

Group Work: In mixed ability/gender groups, analyse the pros and cons of selecting specific edge finishes for varied clothing articles and present it in class using charts/pictures/power point presentation/concept maps, etc

Key Assessment

DoK Level 1: State three factors to consider when choosing an edge finish for a garment.

DoK Level 2: Explain how the type of fabric used affects the choice of edge finish in garment construction.

DoK Level 3: Compare the strengths and weaknesses of two different edge finishes (e.g., zigzag stitch vs. overlock) in terms of garment durability. Justify why one might be preferred over the other for specific clothing types.

DoK Level 4: When designing a garment intended for frequent wear and high movement (e.g., sportswear), which edge finish would be most appropriate? Consider factors such as fabric type, durability, and comfort in the response.

Hint



The recommended assessment mode for week 17 is **Demonstration**. Teacher Assessment Manual and Toolkit pages 49 for more information on how to use this assessment mode.

SECTION 5 REVIEW

This section provided a comprehensive guide for learners to understand the essential techniques and tools involved in fashion design and garment construction. It emphasised the significance of mastering sewing tools, applying basic stitches and selecting suitable seam and edge finishes to enhance garment quality, durability and appearance. Through a blend of theoretical concepts and practical explorations, learners were equipped with critical skills for executing garment construction processes, solving construction challenges and applying appropriate quality control measures. The pedagogical approaches suggested fostered a learner-centred environment that encourages hands-on learning, collaboration and creative problem-solving, ultimately preparing students for effective and professional garment construction practices. Assessments focused on ensuring a thorough understanding and application of sewing techniques, catering for various learner abilities and promoting inclusive and skill-based educational experiences.

Additional Reading/Teaching Learning Materials

1. Videos on how to make stitches, seams and edge finishes.
2. Samples of different types of stitches, seams and edge finishes.
3. Computer, Projector, camera and Smart phones (if possible).
4. Pictures and charts of stitches, seams and edge finishes.
5. Textbooks.
6. Google search.
7. Flip charts.
8. Cardboard.
9. Sticker notes pads.



APPENDIX D: END OF SEMESTER EXAMINATION (1ST SEMESTER)

DURATION: 1 HOUR, 30 MINUTES (60 MINUTES FOR MCQ, 30 MINUTES FOR ESSAY)

SAMPLE QUESTIONS

SECTION A (MCQs)

DOK Level 1 – Recall

1. What is the primary function of clothing?

- A. Decoration
- B. Fashion
- C. **Protection**
- D. Tradition

DOK Level 2 – Skill/Concept

2. Which category **BEST** describes clothes worn on daily basis?

- A. **Casual wear**
- B. Formal attire
- C. Seasonal outfit
- D. Lounge wear

DOK Level 3 – Strategic Thinking

3. How would you organise a wardrobe for a professional office worker?

- A. **Casual and formal wear**
- B. Fill with party dresses
- C. Include only sportswear
- D. Only jeans and t-shirts

SECTION B (ESSAY QUESTIONS)

1. Explain the following: (*DoK Level 1*)

i. **Hand sewing machine – 2 marks**

ii. **Electric sewing machine – 2 marks**

2. In what three (3) ways can understanding the functions and uses of sewing tools contribute to effective garment construction? (**DoK Level 2**)

3. Draw five (5) sewing tools and explain how each should be properly handled to maintain safety and efficiency during sewing projects. (**DoK Level 3**)

Table of specification for item construction for A (MCQ) and B (ESSAY)

Week	Focal area	Type of question	DoK Level				Total
			1	2	3	4	
1.	Concept of Clothing Classification of Clothing	MCQs	2	1			3
		ESSAY					
2	Reasons for wearing clothes, ways/techniques for caring and maintaining clothing	MCQs		3			3
		ESSAY					
3	Information on care labels, importance of good care labels	MCQs	1	1	1		3
		ESSAY					
4	Concept of wardrobe and wardrobe planning, Wardrobe Planning and Practical Application	MCQs		1	3		4
		ESSAY					
5	The concept of good grooming, Examine the factors that promote good grooming	MCQs	1	2			3
		ESSAY					
6	The concept of fibres, Test for the charac- teristics of fibre.	MCQs	2	2	1		5
		ESSAY			1		1
7	Investigate the absorbency, durability and elasticity of different fabric types, How the properties of fibres influence the selection of fabrics for specific purposes.	MCQs	1	3	2		6
		ESSAY					
8	Categorise and relate fibres to fabrics used in garment making, properties of common fabrics and how they influence fabric selection for different clothing styles.	MCQs			2		2
		ESSAY					
9	The absorbency, durability and elasticity of different fabric types through simple ex- periments, Advantages and disadvantages of different fabrics in clothing construction.	MCQs		2			2
		ESSAY					
10	Classification of sewing tools, equipment according to their functions, Appropriate handling and maintenance of sewing tools and equipment.	MCQs	3		2		5
		ESSAY					
11	Types of sewing machine and other sewing tools in terms of function and use	MCQs			1		1
		ESSAY			1		1
12	Common sewing notions, the concept of stitches.	MCQs	2	1			3
		ESSAY					
		TOTAL	12	16	12/2		42



APPENDIX E: INDIVIDUAL PROJECT WORK

Task: Create a detailed plan for a garment or project using three different seams (Plain, Welt, Overlaid). Justify your choices of seams, considering factors such as functionality, aesthetics and fabric type. Reflect on how each seam impacts the overall design and durability of the garment.

Scoring Rubrics

Criteria	Excellent (4 marks)	Very Good (3 marks)	Satisfactory (2 marks)	Needs Improvement (1 mark)
Planning and Design Concept	The garment/project plan is comprehensive, creative and clearly integrates all three seams logically. All elements (sketches, materials, process) are well-articulated and aligned.	The plan is clear and includes two seams with appropriate integration. Some areas may need more detail or clarity.	The plan shows basic understanding of one seam, but lacks depth.	The plan is vague or lacks significant elements. Seams are not properly integrated or explained.
Justification of Seam Choices	Seam choices are justified with strong, insightful reasoning related to functionality, aesthetics and fabric type. Shows deep understanding of textile application.	Justifications are reasonable and relate well to garment needs. Shows good understanding of how seams affect outcome.	Justifications are basic and may focus only on one aspect (e.g., aesthetics only). Understanding is somewhat limited.	Justifications are unclear, weak or missing. Little or no connection to garment purpose or fabric.
Critical Reflection on Design and Durability	Thorough and thoughtful reflection on how each seam affects design and durability. Considers pros and cons with examples or evidence.	Adequate reflection on seam impact. Discusses both design and durability with some supporting points.	Limited reflection. Mentions seam impact but lacks depth or clarity.	Minimal or no reflection. Seam impact is not clearly discussed.

Criteria	Excellent (4 marks)	Very Good (3 marks)	Satisfactory (2 marks)	Needs Improvement (1 mark)
Use of Terminology and Technical Accuracy	Consistently uses correct technical vocabulary related to seams, fabrics and construction. Shows accuracy and confidence.	Generally correct use of terms with minor errors. Demonstrates solid understanding.	Uses some appropriate terms but with several inaccuracies or vague usage.	Rarely uses appropriate terms. Many inaccuracies show weak understanding.
Visual Presentation and Organisation	Project is very well-organised, neat and visually appealing. Diagrams/sketches are detailed and clearly labelled.	Presentation is neat and organised with clear sketches. Minor areas for improvement.	Presentation is uneven. Sketches may lack detail or clarity. Organisation is basic.	Poorly presented. Disorganised with unclear or missing visuals.
Originality and Personal Insight	Plan shows originality and personal style. Thoughtful, creative ideas and choices are evident.	Some creative elements or personal insights are present. Shows some individuality.	Plan relies heavily on typical ideas. Limited creativity or personal input.	Little or no originality. Plan appears copied or lacks personal voice.

SECTION 6: TECHNIQUES OF FULLNESS, OPENINGS AND FASTENINGS IN FASHION DESIGN AND GARMENT CONSTRUCTION

Strand: Clothing and Textiles Production Technology

Sub-Strand: Fashion Design and Garment Construction Technology

Learning Outcomes

1. Apply knowledge and understanding of the importance and techniques of arranging fullness in garment design and construction.
2. Develop practical skills in incorporating openings to enhance garment fit and aesthetics.
3. Apply knowledge and understanding of openings to select and attach different types of fasteners to enhance the durability and aesthetic value of garments and household articles

Content Standards

1. Demonstrate the ability to describe different methods of arranging fullness in garment construction.
2. Demonstrate the ability to select different types of openings and their application in garment construction.
3. Demonstrate the ability to select and attach different types of fasteners to enhance the durability and aesthetic value of garments and household articles.

Hint



- The recommended mode of assessment for Week 18 is **Mid semester examination**. Refer to the **Appendix F** for a Table of Specification to guide you to construct your test items.
- The End of Semester Examination will be conducted in Week 24. Refer to **Appendix G** for a Table of Specification to guide you to set the questions. Set questions to cover all the indicators covered for at least weeks 13 to 24.

INTRODUCTION AND SECTION SUMMARY

This section develops learners' understanding of garment openings and fasteners as essential components in clothing construction and design. It introduces openings as planned spaces that enable garments to be worn or removed easily and fasteners as devices or techniques that secure these openings while enhancing fit, function and aesthetics. Learners explore types of openings such as hem, box pleat, bound and faced slits and fasteners including buttons, zippers, snaps, Velcro and hooks and eyes.

The section guides learners to understand factors influencing the choice of fasteners and openings such as fabric type and weight, garment design and function, ease of use, aesthetics and durability. Lessons focus on constructing different openings and attaching fasteners securely and neatly and on evaluating the durability and aesthetic appeal of fasteners in garment design. Minimum competencies include identifying and describing different types of openings and fasteners, explaining selection factors, demonstrating construction and attachment techniques, and evaluating fastener suitability for specific garments. The aim is to equip learners with the practical and design skills needed to create functional, well-finished and attractive garments.

The weeks and indicators covered by the section are:

Week 18: Identify different techniques of arranging fullness in clothing construction.

Demonstrate practical skills in creating different fullness arrangements in garments.

Week 19: Demonstrate practical skills in creating different fullness arrangements in garments.

Analyse the impact of fullness techniques on the fit and appearance of garments.

Week 20: Explain the types of garment openings and their uses in garment design and construction.

Demonstrate the steps in constructing different types of openings.

Week 21: Demonstrate the steps in constructing different types of openings.

Assess the suitability of various openings for different garment designs.

Week 22: Identify different types of fasteners and their applications in garment construction,

Demonstrate techniques for attaching fasteners securely and neatly.

Week 23: Demonstrate techniques for attaching fasteners securely and neatly.

Week 24: Evaluate the durability and aesthetic appeal of different fasteners in garment design.

SUMMARY OF PEDAGOGICAL EXEMPLARS

This section uses varied pedagogical exemplars to make learning interactive, inclusive and learner-centred, with approaches such as Group Work, Structured Talk for Learning, Demonstrations, Problem-based Learning and Experiential Learning. Learners work in pairs and groups using think-pair-share and structured discussions to identify and compare types of openings and fasteners and their uses, while teachers use real garments, charts, posters and videos to support observation and analysis. Demonstrations guide learners through constructing different openings and securely attaching fasteners such as buttons, zippers and snaps and project-based learning includes creating an ‘Openings and Fastenings Album’ to practice techniques and exhibit work for peer evaluation. Experiential learning activities involve observing ready-made garments and visiting sewing shops to assess fastener durability and aesthetic appeal, with teachers encouraged to adapt these strategies while incorporating different construction techniques to enhance learners’ technical skills and creativity. Gender Equality and Social Inclusion (GESI), Special Educational Needs (SEN), Social and Emotional Learning (SEL), 21st-Century Skills, Core National Values and ICT to make lessons inclusive, participatory and culturally responsive.

ASSESSMENT SUMMARY

Assessment in this section ranges from foundational identification to advanced design reasoning. At DoK Level 1, learners list types of garment openings and fasteners with examples of their uses. At DoK Level 2, they explain factors influencing the choice of fasteners and describe accurate techniques for constructing openings and attaching fasteners neatly. At DoK Level 3, they analyse and justify appropriate fastener and opening choices for specific garments based on fabric type, function and user needs. At DoK Level 4, learners design detailed garment plans incorporating multiple opening and fastening methods, evaluating their choices for durability, aesthetics and suitability. This assessment design supports recall, application, analysis and critical reflection for professional garment construction.

WEEK 18: TECHNIQUES FOR CREATING AND APPLYING FULLNESS IN GARMENT CONSTRUCTION

Learning Indicators

1. Identify different techniques of arranging fullness in clothing construction
2. Demonstrate practical skills in creating different fullness arrangements in garments

FOCAL AREA 1: ARRANGEMENT OF FULLNESS IN CLOTHING CONSTRUCTION

Fullness in clothing refers to the extra fabric added to a garment to allow for ease, comfort, movement, style or design. The arrangement of fullness determines how this extra fabric is gathered or shaped into the garment.

Purpose of Fullness

- To allow ease of movement and comfort
- To enhance the fit of the garment
- To add style, shape or decoration
- To accommodate body curves or volume

Factors to Consider in Choosing Methods of Arranging Fullness

1. Fabric Type

- Lightweight fabrics (e.g., chiffon, organza) work best with **gathers, shirring and smocking**.
- Medium to heavy fabrics (e.g., cotton, wool, denim) are more suitable for **pleats, darts and tucks**.
- The drape and thickness of the fabric affect how fullness will appear and behave.

2. Figure Type

- Fullness can be used to **enhance or reduce** certain body features.
- For fuller figures, avoid excessive gathers or shirring in bulky areas (e.g., waist or hips).
- Use **darts** or **pleats** to shape and flatter the body, especially around the bust or waist.

3. Purpose

- Functional garments (e.g., uniforms, activewear) may require minimal fullness for **ease and comfort**.
- Fashion or decorative garments can include more elaborate fullness like **godets, tucks or smocking**.

- Consider whether the fullness is meant for **fit**, **movement** or **aesthetic appeal**.

4. Style

- Soft, flowing styles benefit from **gathers, shirring and smocking**.
- Structured or formal styles often use **pleats and darts** for a crisp finish.
- The design intent (e.g., romantic, classic, modern) influences the fullness method chosen

Placement of Fullness

- At the waist, shoulders, cuffs, bust, hip or back depending on the design and desired silhouette.

Methods of arranging fullness in clothing construction

1. Gathers

- Small folds or puckers created by sewing two rows of loose stitches and pulling the threads.
- **Used in:** Skirt waistbands, sleeves, yokes.

2. Pleats

- Folds of fabric sewn at the top and left hanging below.
- **Types:** Knife pleats, box pleats, inverted pleats.
- **Used in:** Skirts, blouses, school uniforms.

3. Darts

- Triangular folds of fabric sewn to fit body curves (e.g., bust, waist, hips).
- **Used in:** Bodices, blouses, dresses.

4. Tucks

- Small stitched folds, often decorative and functional.
- **Types:** Pin tucks, spaced tucks.
- **Used in:** Blouses, children's clothing.

5. Shirring

- Rows of gathering stitched close together using elastic or normal thread.
- **Used in:** Bodices, sleeves, waistbands.

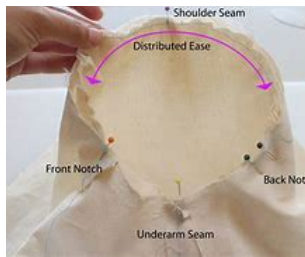
6. Godets

- Triangular pieces of fabric inserted into a seam or slash to add flare.
- **Used in:** Skirts, dresses for added volume.

7. Smocking

- Decorative hand stitching that gathers fabric in a controlled way.
- **Used in:** Traditional children's clothing, peasant blouses.

8.



Easing



Casing



Shirring

9.



Dart

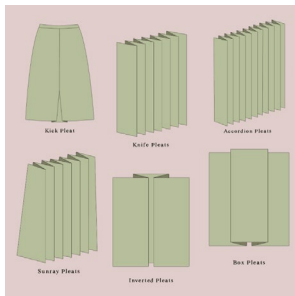


Ruffles/frills



Gathers

10.



Pleats



Tucks



Godet dress

Figure 32: Methods of Arranging Fullness

Learning Tasks

1. Explain how the purpose of the garment affects the method of fullness used.
2. Explore other types of fullness used in clothing construction.

Pedagogical Exemplars

Talk for Learning approaches: Brainstorm on fullness in clothing construction i.e., meaning and types. E.g.,

- Gathers
- Pleats
- Darts
- Shirring, etc.

Experiential Learning/Group Work Approaches

1. In mixed gender/ability/friendship groups, surf the internet, posters, videos or pictures to find out other types of fullness used in clothing construction.
2. Present your findings for a whole class discussion using varied methods of presentation.

Key Assessment

DoK Level 1: List the four main factors to consider when choosing a method for arranging fullness in clothing construction.

DoK Level 2: Explain how **fabric type** and **figure type** affect the choice of fullness arrangement in a garment.

DoK Level 3: You are designing a dress for a customer with a petite figure and soft, flowing fabric. Which method of arranging fullness would you choose and why?

DoK Level 4: Develop a garment design (e.g., blouse, dress, or skirt) and describe how fullness can be incorporated, taking into account the fabric type, the wearer's body figure, the purpose of the garment, and the overall style. Each design choice should be clearly justified.

FOCAL AREA 2: MAKE SAMPLES OF FULLNESS USED IN CLOTHING CONSTRUCTION

1. Gathers

Description: Small, even folds created by pulling stitching threads.

How to Make

- Sew two rows of long machine stitches parallel to each other.
- Gently pull the threads to gather the fabric.
- Distribute the gathers evenly.

Use: Skirt waistbands, sleeve heads, yokes.

2. Pleats

Description: Folds of fabric secured at the top and allowed to hang.

Types to Sample: Knife pleat or Box pleat.

How to Make

- Mark and fold the fabric into pleats.
- Pin and press in place.
- Stitch along the top edge to hold.

Use: Skirts, uniforms, blouses.

Types of Pleats in Clothing Construction

a. Knife Pleat

- **Description:** All pleats are folded in the same direction with sharp, overlapping folds.
- **Use:** School uniforms, skirts, dresses, tailored garments.

b. Box Pleat

- **Description:** Two folds face away from each other, creating a rectangular “box” effect.
- **Use:** Skirts, blouses, coats, decorative details.

c. Inverted Pleat

- **Description:** The reverse of a box pleat; two folds face toward each other and meet at the centre.
- **Use:** Skirts, tunics, jackets and back pleats on shirts.

3. Darts

Description: Triangular folds sewn into fabric to fit the garment to body curves.

How to Make

- Mark dart lines with chalk.
- Fold the fabric along the dart line and sew from the wide end to the point.
- Press towards the centre or as needed.

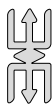
Use: Bodices, waistlines, bust shaping.

Learning Tasks

1. Make samples of fullness used in clothing construction.
2. Exhibit samples of work.
3. Compare and contrast the techniques of creating pleats and darts.

Pedagogical Exemplars**Experiential Learning/Structuring Talk for Learning**

1. Watch a video/demonstrate how to make arrangement of fullness.
2. Make samples of fullness used in clothing construction. E.g.
 - a. Pleats
 - b. Darts
 - c. Gathers
 - d. Tucks, etc.

**Note**

Teacher to go around, observing learners' work and guiding them.

3. Exhibit samples of work for appraisal by both teachers and peers. Learners should be honest in appraising their peer's work/product

Key Assessment

DoK Level 1: List three methods of arranging fullness in clothing construction and give one example of when each method is used.

DoK Level 2: Explain the difference between pleats and darts. How does each method contribute to the fit and shape of a garment?

DoK Level 3: In designing a skirt that requires added fullness at the hem, which method would be most suitable—pleats, gathers, or darts? Justify the choice by explaining how the selected method would influence the design and fit of the skirt.

DoK Level 4: When designing a custom dress for a client who requires structure at the waist and flow at the bottom, describe the fullness techniques suitable for the bodice and skirt. Explain how these techniques work together to achieve the desired look and fit.

Hint



*The recommended mode of assessment for Week 18 is **Mid-semester examination**. Refer to the **Appendix F** for a Table of Specification to guide you to construct your test items.*

WEEK 19: FULLNESS TECHNIQUES AND THEIR EFFECT ON GARMENT FIT AND APPEARANCE

Learning Indicators

1. *Demonstrate practical skills in creating different fullness in garments*
2. *Analyse the impact of fullness techniques on the fit and appearance of garments*

FOCAL AREA 1: MAKE SAMPLES OF FULLNESS USED IN CLOTHING CONSTRUCTION

1. Tucks

Description: Narrow folds of fabric stitched down to create shape or decoration.

How to Make

- Fold the fabric and press.
- Stitch close to the fold for pin tucks or wider apart for decorative tucks.

Use: Blouses, children's garments, decorative panels.

2. Shirring

Description: Multiple rows of gathers created by elastic thread or gathering technique.

How to Make

- Use elastic thread in the bobbin.
- Sew multiple rows parallel to each other.

Use: Bodices, waistlines, cuffs.

3. Smocking

Description: Decorative embroidery on gathered fabric that holds the gathers in place.

How to Make (Basic Sample)

- Mark a grid on the fabric.
- Gather fabric along the rows.
- Stitch decorative patterns by hand across the gathers.

Use: Traditional blouses, dresses, baby clothes.

4. Godet

Description: A triangular piece inserted into a seam or slash to add flare.

How to Make

- Cut a slit in the main fabric piece.
- Insert and sew a triangular godet piece.
- Press seams flat.

Use: Flared skirts, dresses

Learning Tasks

1. Make samples of selected fullness used in clothing construction.
2. Exhibit samples of work
3. Explain the difference between shirring and smocking in terms of technique and appearance.

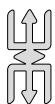
Pedagogical Exemplars

Experiential Learning/Structuring Talk for Learning

1. Watch a video/demonstrate how to make selected arrangement of fullness
2. Make samples of selected fullness used in clothing construction.

E.g.,

- a. Tucks
- b. Shirring
- c. Smocking
- d. Godet, etc.



Note

Teacher/facilitator to go around, observing learners' work and guiding them.

3. Exhibit samples of work for appraisal by both teachers and peers. Learners should be honest in appraising their peer's work/product.

Key Assessment

DoK Level 1: List the steps involved in making each of the following:

- a. Tucks
- b. Shirring
- c. Smocking
- d. Godet insertion

DoK Level 2: Explain how smocking and shirring differ in technique and purpose. In which type of garment would each method be most suitable?

DoK Level 3: A client requests a decorative blouse with subtle shaping and a vintage look. Which technique would you choose between tucks and smocking and why? Justify your decision based on fabric type, design and purpose.

DoK Level 4: Design a garment that uses at least two different methods of arranging fullness from the list (tucks, shirring, smocking, godet). Describe:

- a. The type of garment.
- b. Where and why each method will be used.
- c. How these methods complement each other in terms of style, function and fabric suitability.

FOCAL AREA 2: THE IMPACT OF FULLNESS TECHNIQUES ON THE FIT AND APPEARANCE OF GARMENTS

1. Fit of the Garment

Fullness techniques like tucks, darts, gathers, pleats, smocking, shirring and godets significantly affect how a garment fits the body by adding or controlling volume in specific areas.

- **Darts and Tucks:** Shape the garment to the body's curves (e.g., bust, waist, hips), creating a closer and more fitted silhouette.
- **Gathers and Shirring:** Add softness and ease. These allow room for movement and flexibility, especially in areas like the bodice or sleeve heads.
- **Smocking:** Holds gathers in place and provides stretch while maintaining a neat appearance — good for children's or fitted garments.
- **Godets:** Add flare and movement, often used in skirts or dresses to create a more dramatic, flowing fit from the hips downward.
- **Pleats:** Offer controlled fullness. They can either slim down or add volume depending on their direction and placement (e.g., box pleats vs. knife pleats).

2. Appearance and Style

Fullness also contributes to the aesthetic and style of the garment, influencing how it drapes, flows and looks when worn.

- **Gathers and Pleats:** Add visual interest and texture; can create a feminine, classic or voluminous look.
- **Tucks:** Create clean lines and tailored details; often used decoratively while still shaping the fabric.
- **Shirring and Smocking:** Add decorative texture while offering flexibility. These techniques are often associated with casual, romantic or vintage styles.
- **Godets:** Visually enhance movement and flow; create dynamic lines and a more flared silhouette.

Importance of Fullness in Garment Construction

- Improves fit and comfort.
- Enhances garment silhouette and style.
- Allows for freedom of movement.
- Adds decorative and design interest.
- Essential in children's and maternity wear.
- Helps shape garments to body curves.
- Provides ease in specific areas like waist, bust, hips and sleeves.

Learning Tasks

1. Discuss why fullness is important in garment construction.
2. Name different fullness techniques and discuss their effect on fit and appearance.
3. Examine how fabric types affect fullness techniques and how these influence garment design decisions.

4. Design and construct a mini garment featuring two fullness techniques and evaluate the final outcome.

Pedagogical Exemplars

Talk for Learning/ Experiential Learning

1. In mixed ability and gender groups, brain-write to discuss why fullness is important in garment construction.
2. Ask learners to name different fullness techniques they are familiar with.
3. Observe videos, pictures or real garments with different fullness techniques such as gathers, pleats, darts, shirring and tucks and discuss their effect on fit and appearance.
4. Visit dressmakers to find out how different fabrics affect the type of fullness used in garment construction.
5. Provide different fabric samples and guide learners to examine how fabric types affect fullness techniques. E.g.
 - a. Used to shape
 - b. Enhance design
 - c. Provide ease for movement, etc.

Project-Based Learning: Learners individually design and construct a mini garment featuring two fullness techniques and evaluate the final outcome.

Group Work

1. In pair/small groups reflect on how fullness techniques contribute to aesthetics and movement in garments.
2. Discuss how different fabrics react to fullness techniques and how this influences garment design decisions.

Key Assessment

DoK Level 1: List our fullness techniques and state one way each affects the fit of a garment.

DoK Level 2: Explain how pleats and tucks influence both the fit and appearance of a garment. Use examples of where each might be applied.

DoK Level 3: You are designing a blouse with a fitted bodice and decorative detailing. Which two fullness techniques would you use to achieve both a shaped fit and visual appeal and why?

DoK Level 4: Create a design concept for a two-piece outfit (e.g., blouse and skirt) using three different fullness techniques. For each technique, explain:

- a. Where it will be applied?
- b. How it will improve the fit?
- c. How it enhances the style or visual appearance of the garment?
- d. Why it suits the selected fabric and design purpose?

Hint



The recommended assessment mode for week 19 is **Concept map**. Refer to DoK level 4 item for a sample task.

WEEK 20: TYPES AND CONSTRUCTION OF GARMENT OPENINGS

Learning Indicators

1. Explain the types of garment openings and their uses in garment design and construction
2. Demonstrate the steps in constructing different types of openings

FOCAL AREA 1: THE CONCEPT OF GARMENT OPENINGS

Openings refer to sections of a garment that are designed to allow easy access to wear and remove the garment. Openings also provide comfort, functionality and contribute to the garment's aesthetic appeal. They are usually closed with various types of fasteners such as buttons, zippers or hooks.

Types of Openings

The types of openings in garments include

1. Continuous Wrap

This type of opening features a continuous wrap of fabric, usually overlapping in a way that creates a smooth, wrapped effect. Common in garments such as wrap dresses and skirts.

Example: Wrap dress with a front closure.

2. Faced Slit

A faced slit involves creating a small slit in the garment, typically finished with a fabric facing to prevent raw edges from fraying.

Example: Slits on the side of skirts or dresses.

3. Box Pleat

This is a pleat opening where two folds of fabric are pressed in opposite directions, typically used at the back or side of a skirt or dress to allow ease of movement.

Example: Box pleats on a pleated skirt.

4. Fly-Front

A fly-front opening is most often used for pants or skirts, where a flap of fabric is folded over the opening, usually closed with a zipper or button for a clean, neat appearance.

Example: Fly-front trousers or jeans.

5. Bound

A bound opening uses a fabric binding to encase the raw edges of the opening. This method is often used for necklines, armholes, or slits.

Example: Bound armhole in a sleeveless dress or top.

6. Hem

A hem opening is the finish applied to the edge of a garment, such as the bottom of a skirt, dress or sleeve. The edge is folded over and stitched to prevent fraying and finish the garment's edges.

Example: Hem of a skirt or pants.

7. Buttonhole or Button and Loop

Buttonholes and loops create an opening that is fastened by threading a button through the hole, most commonly used in shirts, dresses and jackets.

Example: Buttonholes along the front of a blouse.

8. Slit

A slit opening is a simple cut or split in the fabric, often used for ease of movement in skirts or dresses. Slits are typically finished with a facing or binding to prevent fraying.

Example: A back slit in a pencil skirt.

Classification of Openings

Openings can be classified based on how the fabric edges meet or overlap

1. Overlap Openings

In these openings, one side of the fabric overlaps the other to close the opening. This provides security and is often used in garments requiring a clean finish, such as dresses or skirts. Example: Fly-front, Continuous Wrap, placket, box-pleat and hem openings.

2. Meet Openings

Meet openings are where the fabric edges meet each other and are joined by a fastening (such as a button, zipper or hook), without overlapping. This type is often used in more tailored or structured garments. Example: Bound, hem and Faced openings

Factors That Influence the Selection of Openings

When selecting an opening for a garment, several factors come into play

- **Garment Type:** Different garments require different openings based on style and function. For instance, a fly-front opening is commonly used for pants, while a faced slit is used for skirts or dresses.
- **Fabric Type:** The weight, texture and drape of fabric determine the best method for creating an opening. Heavier fabrics may need more secure closures (e.g., zippers), while lighter fabrics may work well with button or loop fastenings.
- **Aesthetic and Style:** The opening should complement the design of the garment. For example, a continuous wrap opening is often used for a feminine, flowing design, while a box pleat opening provides a structured look.
- **Ease of Use:** The intended wearer's ease of getting in and out of the garment is a key consideration. For example, a hem opening is simple but functional, while a fly-front may be more complex but necessary for pants.

- **Functionality:** The garment's purpose affects the choice of opening. For instance, slits are used for ease of movement, while button and loop openings are used for secure fastening in jackets or dresses.
- **Durability:** The strength of the opening is important in ensuring longevity, especially for areas subjected to stress, such as the crotch or waistband.



Continuous Wrap opening



Bound opening



Box pleat opening



Fly front opening



Faced Slit opening

Figure 33: Types of Openings

Learning Tasks

1. Explain the difference between overlap openings and meet openings.
2. Discuss the types of openings/fastenings.
3. Give examples of fasteners/closures that can be used to close openings.
4. Discuss factors that influence the choice of openings and fastenings.

Pedagogical Exemplars

Talk for Learning/Collaborative Learning Approaches

1. In pairs/groups, use think-pair- share/shower thought/onion ring, to discuss
 - a. the types of openings/fastenings
 - b. examples of fasteners/closures that can be used to close openings.

E.g.,

Openings:

- i. Continuous wrap

- ii. Faced-slit
 - iii. Box pleat
 - iv. Fly front Bound
 - v. Hem, etc.
2. In gender/ability groups, use pyramid/panel discussion strategies to discuss factors that influence the choice of openings and fastenings. E.g.
- i. Type of fabric
 - ii. Age of the wearer
 - iii. Style of garment, etc.

Key Assessment

DoK Level 2: Explain the difference between overlap and meet openings. How does the classification of an opening affect its functionality in different garments?

DoK Level 3: Imagine you are designing a formal dress that requires an opening at the back. Which type of opening (e.g., faced slit, box-pleat or fly-front) would you choose for this garment? Justify your choice based on factors such as fabric type, garment style and functionality.

DoK Level 4: Design a garment that requires an opening to accommodate movement and ease of wear (e.g., a skirt or jacket). Explain your choice of opening, considering how it influences both the garment's fit and appearance. What additional considerations, such as the intended use of the garment or the fabric type, would impact your decision? Provide a detailed rationale.

FOCAL AREA 2: CONSTRUCTION OF SELECTED TYPES OF GARMENT OPENINGS

How to Make Openings in Garments

When creating openings in garments, there are several factors to consider. These include the type of opening, its length, width, flatness, weight and the type of stitches used. Here's an overview of the general principles for making openings

Factors to Consider When Making Openings

1. Length of the Opening

- The length of the opening depends on its function. For example, a buttonhole opening may be about 2 to 3 inches long, while a side slit opening might be several inches long depending on the garment style.
- For a **zipper opening**, the length would match the length of the zipper.

2. Kind of Openings

- **Vertical Openings** (e.g., front, back, side openings): These are used in garments like dresses, shirts, or jackets, where there is a need for easy wearing.
- **Horizontal Openings** (e.g., waistbands, necklines): These openings are typically used in waistbands, skirts, and sleeves.

- **Slits and zips:** These are often found at hems, side seams, or sleeves to offer ease of movement.

3. Flatness of the Opening

- Some openings, like hem openings and buttonholes, are designed to be flat and smooth against the body to create a sleek finish.
- Others, such as pleats or gathers, introduce volume and texture around the opening. The amount of fabric in these openings should be controlled to maintain a balanced and neat appearance.

4. Width of the Opening

- The width of an opening is crucial in determining its functionality. For example, a fly-front opening on pants needs to be wide enough to allow for easy movement and closure.
- Slit openings might be narrower for a more tailored appearance, while box pleats need to be wide enough to allow the pleats to fold properly.

5. Weight of the Opening

- The weight of the fabric will influence the type of opening to use. Heavier fabrics (like denim or wool) may require reinforced openings, such as a bound slit or reinforced buttonholes, while lighter fabrics (like cotton or silk) may allow for lighter, more delicate openings.
- For delicate fabrics, a simple facing or bias tape may be used to finish the edges neatly without adding bulk.

6. Stitches Used

- The stitching around the opening will vary depending on its type and purpose. Common stitches include:
 - **Straight Stitch:** For basic seams and openings, such as on slit openings.
 - **Zigzag Stitch:** To finish raw edges and prevent fraying, commonly used on the inside of slits or to secure a hem opening.
 - **Blind Hem Stitch:** Often used for hem openings to keep the stitching invisible from the outside of the garment.
 - **Buttonhole Stitch:** Used for creating buttonholes and securing the edges of an opening.
 - **Topstitching:** Adds decorative or reinforcing stitches along an opening's edge, used in fly-front zippers or pleated openings.

Construction of Selected Types of Garment Openings

Hem Opening Construction

A hem opening is a simple and essential technique used to finish the edges of a garment, such as the bottom of a skirt or pants.

- **How to Make**

1. **Mark the desired length** for the hem on the garment.
2. **Fold up the fabric** from the edge, usually around 1 to 1.5 cm and press it flat. If a deeper hem is needed (e.g., for a more structured look), fold the fabric accordingly.
3. **Pin the hem** in place, ensuring the fold is even all around.
4. **Stitch along the hemline** using a straight stitch, zigzag stitch or blind hem stitch (depending on the desired finish). For a more invisible hem, a **blind hem stitch** can be used, especially when hand-sewing or on a machine with a blind hem foot.
5. **Press the hem** again after sewing to ensure the fold stays in place and the opening has a neat finish.

- **Considerations**

1. The width of the hem is typically determined by the weight and style of the garment. For example, a casual dress might have a wider hem, while a tailored suit may have a narrower, more discreet hem.

Box Pleat Opening Construction

A **box pleat** is a type of pleat where two parallel pleats are folded in opposite directions, creating a raised effect. This opening technique adds volume and structure to a garment, such as in skirts or dresses.

- **How to Make**

1. **Mark the pleat locations** on the fabric using chalk or fabric markers.
2. **Fold the fabric** at the marked pleat locations, making sure each pleat is folded in the same direction. For a box pleat, alternate the direction of each pleat.
3. **Pin the pleats** in place and press them flat to set the folds.
4. **Sew along the top edge** of the pleats to secure them in place. Ensure the pleats are evenly spaced and aligned.
5. **Press the pleats** again after sewing to ensure they maintain their shape.

- **Considerations**

1. The box pleat adds a structured and professional look, especially when used in skirts, uniforms or tailored dresses. The pleats can be wide or narrow depending on the desired effect.

Continuous Wrap Opening Construction

A **continuous wrap** opening is typically used in garments like wrap skirts or dresses, where one side of the garment overlaps the other.

- **How to Make**

1. **Cut the fabric pieces** for the wrap opening. One side will be longer than the other to create the overlap.
2. **Press the raw edge** of the longer piece inward (about 1 to 2 cm), and sew it down to prevent fraying.

3. **Position the longer side** over the shorter side, aligning the edges.
 4. **Add fasteners** such as buttons, hooks or ties to secure the wrap opening. If using buttons, sew them on the inside of the garment for a neat finish.
 5. **Topstitch around the opening** if desired to reinforce the opening and give it a polished look.
- **Considerations**
 1. A **continuous wrap** opening creates a sleek and functional closure. It's ideal for dresses, skirts, and shirts where a wrap-around effect is needed for ease of wear.

Learning Tasks

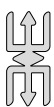
1. Explain general considerations when constructing openings in garments (e.g., flatness, fabric weight, type of stitches).
2. Describe how to construct a hem opening and explain its purpose in garment finishing.
3. Compare the construction steps of a box pleat opening and a continuous wrap opening.
4. Observe how to make openings and fix fasteners.
5. Make sample of openings and fix appropriate fasteners or closures.

Pedagogical Exemplars

Experiential Learning /Structuring Talk for Learning Approaches

1. Watch a video/demonstrate for learners to observe how to make openings and fix fasteners.
2. Make sample of openings and fix appropriate fasteners or closures.

Group Work/Project Based Approaches: In mixed gender/ability/random groups, learners make samples of openings on articles and fix appropriate fasteners /closures. In their groups, make openings/fastening on their individual project articles and fix appropriate fasteners or closures.



Note

Teacher/facilitator to go around, observing learners' work and guiding them.

Key Assessment

DoK Level 1: List any four types of garment openings and one garment example where each can be used.

DoK Level 2: Explain how fabric weight and flatness influence the method of constructing a garment opening.

DoK Level 3: You are designing a lightweight summer blouse. Which type of opening would you choose from hem, box pleat or continuous wrap? Justify your choice based on fabric, garment purpose and appearance.

DoK Level 4: Evaluate the suitability of box pleat and continuous wrap openings in a formal dress and a school uniform. Consider garment style, ease of wear, durability and aesthetics. Support your answer with detailed reasoning.

Hint



*The recommended assessment mode for week 20 is **Homework**. Refer to the Teacher Assessment Manual and Toolkit pages 46 for more information on how to use this assessment mode.*

WEEK 21: GARMENT OPENINGS AND THEIR APPLICATION IN ARTICLES

Learning Indicators

1. Demonstrate the steps in constructing different types of openings
2. Assess the suitability of various openings for different garment designs

FOCAL AREA 1: CONSTRUCTION OF SELECTED TYPES OF GARMENT OPENINGS

1. Bound Opening

How to Make

- Mark and cut the opening.
- Cut a bias strip of fabric (same or contrasting).
- Align and sew the strip right sides together along the edge of the opening.
- Fold the strip over the raw edge, turn under, and stitch down to enclose the edge neatly.

Use: Often used for sleeve plackets, necklines, and decorative finishes.

2. Faced Slit Opening

How to Make

- Cut a slit at the desired opening point.
- Prepare a facing piece and align it right sides together with the garment.
- Stitch around the slit, clip into the corners and turn the facing to the inside.
- Press and topstitch if needed.

Use: Common in skirts, dresses, and blouses.

3. Keyhole Opening

How to Make

- Mark the keyhole shape (usually oval or teardrop) on the fabric.
- Sew a facing around the marked line.
- Cut the shape carefully and clip curves.
- Turn facing to the inside and press flat.

Use: Typically used in back necklines and decorative front neck openings.

Learning Tasks

1. List three points to consider when choosing or constructing an opening for a garment.
2. Describe the steps involved in making a faced slit opening and state one garment it is suitable for.

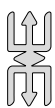
3. Compare the bound opening and keyhole opening in terms of appearance and function

Pedagogical Exemplars

Experiential Learning /Structuring Talk for Learning Approaches

1. Watch a video/demonstrate for learners to observe how to make openings and fix fasteners.
2. Make sample of openings and fix appropriate fasteners or closures.

Group Work/Project Based Approaches: In mixed gender/ability/random groups, learners make samples of openings on articles and fix appropriate fasteners /closures. In their groups, make openings/fastening on their individual project articles and fix appropriate fasteners or closures.



Note

Teacher/facilitator to go around, observing learners' work and guiding them.

Key Assessment

DoK Level 1: Name three types of garment openings and give one example where each is commonly used.

DoK Level 2: Explain why a bound opening might be more appropriate than a faced slit opening for a blouse made of lightweight fabric.

DoK Level 3: A designer is making a formal dress with a high neckline and no zippers. What type of opening would you recommend and why?

DoK Level 4: Evaluate the use of faced slit, bound and keyhole openings in terms of aesthetics, ease of construction and durability. Which would be most suitable for a school uniform blouse? Support your answer with reasons.

FOCAL AREA 2: FACTORS THAT INFLUENCE THE SUITABILITY OF DIFFERENT OPENINGS ON ARTICLES

Factors Influencing the Suitability of Different Types of Openings on Garments and Articles.

The selection of appropriate openings in garment construction is critical to both functionality and aesthetics. Several factors influence the suitability of a particular type of opening and understanding these considerations helps ensure comfort, ease of wear and garment durability.

1. Type of Fabric

The nature and weight of the fabric play a significant role in determining the most appropriate type of opening.

- Lightweight fabrics such as chiffon, voile, or lawn are best suited for delicate and subtle openings like faced slits, loops or keyholes, which do not add bulk or distort the fabric's drape.

- Heavier fabrics such as denim, wool or canvas require stronger and more structured openings—like bound openings, fly fronts or zippers—to ensure durability and maintain garment integrity during wear and washing.

2. Purpose of the Garment

The function for which the garment is intended directly impacts the choice of opening.

- Functional garments, including uniforms, school wear or workwear, demand durable and secure closures such as zippers, heavy-duty buttons or button plackets to ensure reliability and safety during active use.
- In contrast, fashion-forward or decorative garments offer more flexibility and can feature creative and stylish openings like laced-up fronts, wrap openings or ornamental keyholes that enhance the garment's visual appeal.

3. Style and Design of the Garment

The design features and silhouette of the garment must harmonize with the chosen opening.

- For instance, a wrap dress typically requires a full wrap opening that aligns with the garment's overall design.
- A classic shirt design often incorporates a faced or bound button placket, which complements the structured, symmetrical look.
- The opening should enhance the garment's style without compromising its form or function.

4. Position or Placement of the Opening

Where the opening is located on the garment influences both its visibility and practicality.

- Front openings, as found in shirts, coats and jackets, should be accessible and easy to fasten; zippers and buttons are commonly used in these positions for quick and secure closure.
- Side or back openings, often used in dresses or fitted tops, require more discreet options such as invisible zippers, faced slits or hook-and-eye closures, ensuring a seamless appearance.

5. Ease of Wearing and Comfort

The type of opening should facilitate easy dressing and undressing, especially for garments designed for specific users.

- Children's clothing, for example, benefits from simple, convenient fastenings like snaps, elasticised openings, or Velcro to support independence and comfort.
- Similarly, garments for the elderly or people with special needs may require adaptive fastenings to ensure ease of use and comfort.

6. Durability and Strength

Garments intended for frequent use need openings that can withstand repeated movement, stress, and laundering.

- Strong and reinforced openings, such as fly fronts, bound edges and overlapped zippers, are ideal for trousers, jeans or heavy-duty work garments.

- Reinforcing techniques and appropriate materials should be used to extend the garment's lifespan and preserve its functionality over time.

Learning Tasks

1. Explore the factors that influence the suitability of different openings on articles of clothing and household items.
2. Examine the openings of different garments and household articles to assess the suitability of the openings.

Pedagogical Exemplars

Group Work/Project Based Approaches

1. In mixed gender/ability/random groups, visit individuals, families and fashion designers to find out the factors that influence the suitability of different openings on articles of clothing and household items.
2. In your groups, examine the openings of different garments and household articles to assess the suitability of the openings. E.g., Factors such as fabric type, garment style, functionality, aesthetics and wearer comfort, etc.

Key Assessment:

DoK Level 1: List four types of garment openings and state one factor that can influence the selection of each.

DoK Level 2: Explain how fabric type and garment function influence the choice of opening in clothing construction.

DoK Level 3: You are designing a dress for a child. Which type of opening would be most suitable and why? Consider ease of wear, safety and fabric used.

DoK Level 4: Evaluate three different types of garment openings for use in an activewear jacket made from stretch fabric. Discuss their suitability based on comfort, durability, ease of construction and design appeal. Recommend the best option and justify your choice.

Hint



The recommended assessment mode for week 21 is **Peer Assessment**. Refer to the Teacher Assessment Manual and Toolkit pages 72 for more information on how to use this assessment mode.

WEEK 22: FASTENERS AND THEIR APPLICATION IN GARMENT CONSTRUCTION

Learning Indicators

1. Identify different types of fasteners and their applications in garment construction
2. Demonstrate techniques for attaching fasteners securely and neatly

FOCAL AREA 1: TYPES AND APPLICATIONS OF FASTENERS

Fasteners are devices or techniques used to open, close, secure or adjust garments. They enable ease of wearing, help with fit and can enhance the style or decoration of a garment.

Types of Fasteners and Their Applications

Type of Fastener	Description	Common Applications
Buttons	Small discs passed through buttonholes or loops	Shirts, blouses, trousers, jackets
Zippers	Interlocking teeth with a slider for quick fastening	Pants, jackets, dresses, skirts
Snaps (Press Studs)	Two interlocking discs (metal or plastic) that click into place	Baby clothes, pockets, cuffs
Hooks and Eyes	A hook and loop closure often used in invisible or secure fastening	Waistbands, dresses, lingerie
Velcro (Hook and Loop)	Fabric fastener with two strips that stick together	Kids' clothing, shoes, adaptive wear
Toggles	Rod and loop fasteners used for both utility and decoration	Coats, outerwear, traditional wear
Eyelets and Lacing	Reinforced holes with a lace passed through	Corsets, hoodies, shoes
Frogs	Ornamental closures made of decorative cord loops and buttons	Cheongsams, coats, gowns

Points to Consider When Choosing Fasteners

1. Fabric Type and Weight

- Heavier fabrics require strong, supportive fasteners (e.g., zippers, toggles).
- Lighter fabrics work better with delicate or hidden fasteners (e.g., buttons, snaps).

2. Garment Design and Function

- Fasteners should match the purpose of the garment — formal wear may need discreet fasteners, while casual or sporty wear allows for practical ones.

3. Ease of Use

- Choose fasteners that suit the wearer's needs. For example, Velcro and snaps are ideal for children or the elderly.

4. Position and Placement

- Ensure the fastener lies flat and does not cause bulk or discomfort, especially near joints or under arms.

5. Aesthetics and Style

- Fasteners can enhance or complement the garment design. Choose styles (metal, decorative, fabric-covered) to match the garment theme.

6. Durability and Maintenance

- Consider how often the garment will be worn or washed. Strong fasteners like zippers are ideal for frequent use.

7. Age of the Wearer

- **Children** need easy-to-use fasteners (e.g., Velcro, snaps).
- **Adults** can manage complex fasteners (e.g., hooks, zippers).
- **Elderly or individuals with mobility issues** benefit from easy closures or adaptive fasteners.

Learning tasks

1. Identify and describe four different types of fasteners used in garments and state one garment each is best suited for.
2. Observe a ready-made garment and identify the fastener used. Explain why that type of fastener was suitable for the fabric and garment purpose.

Pedagogical Exemplars

Talk for Learning/Collaborative Learning Approaches: In pairs/groups, use think-pair-share/shower thought/onion ring, to identify different types of fasteners and their applications in garment construction. E.g.

1. Fasteners/closures

- a. Zipper
- b. Hooks and eye
- c. Ribbon
- d. Press-studs
- e. Button and buttonhole/loop
- f. Velcro
- g. Hook and bar, etc.

2. Openings and their fasteners/closures

- a. Fly front - Button and buttonhole

- b. Bound - Press stud, hook and eye/bar, etc.

Key Assessment

DoK Level 1: List four types of garment fasteners and give one example of a garment that uses each.

DoK Level 2: Explain three factors that influence the choice of fasteners in garment construction.

DoK Level 3: You are designing a lightweight summer blouse. Which fastener would you choose and why? Consider fabric, user age and function.

DoK Level 4: Evaluate the suitability of three different fasteners (e.g., zipper, snap, Velcro) for use in children's wear. Recommend the most appropriate option and justify your choice in terms of safety, ease of use and durability.

FOCAL AREA 2: TECHNIQUES FOR ATTACHING FASTENERS

Techniques for attaching fasteners refer to the methods used to securely and neatly fix fasteners onto garments. These techniques vary depending on the type of fastener and the fabric used and are crucial for functionality, durability and appearance.

Techniques by Fastener Type

Fastener	Technique for Attaching
Buttons	- Mark button positions. - Sew through holes (2 or 4) with strong thread. - Add a shank for thick fabrics.
Zippers	- Use zipper foot on the sewing machine. - Pin and baste in place. - Stitch close to the teeth. - Use facing or fly depending on design.
Snap (Press Studs)	- Sew-on: Stitch around the holes on both male and female parts. - Press-on: Use snap tool to attach firmly.
Hooks and Eyes	- Sew hook on one side, eye on the other. - Use small whip stitches around each loop or hook base.
Velcro (Hook and Loop)	- Stitch around the edges of both strips. - Reinforce with X-shaped stitches for strong hold.
Toggles	- Sew loops and toggles securely. - Reinforce with interfacing if on soft fabrics.
Eyelets & Lacing	- Reinforce the hole area. - Use eyelet pliers to insert. - Stitch or press into place, then lace.
Frogs	- Hand-sew both loops and knot in place. - Ensure even positioning and neat stitching.

General Tips for Attaching Fasteners Neatly and Securely

- Fastenings should be sewn in double fabric.
- Provide more or longer fasteners for close fitting clothes.
- Use interfacing behind fastener areas for reinforcement.
- Mark accurately to ensure alignment.
- Use the right thread and needle for your fabric.
- Test before final stitching to ensure placement is correct.
- Backstitch or double stitch at stress points for durability.
- Press gently after sewing to flatten and neaten the area.



Velcro



Buttons



Zippers



Press studs/snap



Hook and eye



Hook and bar



Chine balls and loops



Rouleau loops and buttons

Figure 34: Samples of Fasteners

Learning Tasks

1. List three types of fasteners and describe the basic technique for attaching each.
2. Discuss the importance of fasteners in clothing construction and their applications.
3. Observe two ready-made garments and note the fastener type and how it was attached.
4. Attach a fastener of choice (e.g., button, snap, zipper) on a fabric sample, ensuring secure and neat stitching.

Pedagogical Exemplars

Experiential Learning/Group Work

1. In pairs and small groups observe videos, posters and pictures showing different types of fasteners to discuss the importance of fasteners in clothing construction and their applications.
2. Organise demonstration session for learners to observe different fastener attachment techniques. E.g.,
 - Buttons: Demonstrate how to sew a flat button and a shank button securely using the correct stitching technique.
 - Hooks and Eyes: Show how to attach hooks and eyes neatly on fabric.
 - Zippers: Demonstrate the process of attaching a centred zipper.
 - Press Studs and Velcro: Guide learners in securing these fasteners neatly on fabric, etc.

Project-Based Learning Approach

1. Individually practice attaching buttons, zippers and hooks on different opening of fabrics to create openings and fastenings album.
2. Guide learners to evaluate their work and make improvements where necessary.
3. Create an album to be exhibited in week 23.

Key Assessment

DoK Level 1: List four common types of fasteners used in garments.

DoK Level 2: Explain how the fabric type can influence the choice of fastener and attachment technique.

DoK Level 3: A customer complains that the buttons on their coat keep falling off. What could be the reason, and how would you fix it to ensure durability?

DoK Level 4: Compare the techniques used to attach a zipper and a snap on a children's jacket. Which would you recommend and why, considering security, ease of use and garment care?

Hint



The recommended assessment mode for week 22 is **Case Study**. Refer to the Teacher Assessment Manual and Toolkit pages 25 for more information on how to use this assessment mode.

WEEK 23: TECHNIQUES FOR ATTACHING FASTENERS SECURELY AND NEATLY

Learning Indicator: *Demonstrate techniques for attaching fasteners securely and neatly*

FOCAL AREA: TECHNIQUES FOR ATTACHING FASTENERS

Preparation for Attaching Fasteners

Before attaching any fastener, proper preparation is key to ensuring it is secured neatly and functions effectively in the finished garment.

1. Selection of Suitable Fasteners

- **Fabric Type and Weight:** Light fabrics (e.g., cotton, silk) need delicate fasteners (e.g., small buttons, snaps). Heavy fabrics (e.g., denim, wool) require sturdier fasteners (e.g., zippers, larger buttons).
- **Design and Function:** The fastener must align with the design and purpose of the garment. For instance, a zipper might be chosen for its sleekness in dresses, while buttons might be more appropriate for blouses or cardigans.
- **Age and Ability of the Wearer:** Children’s garments require easy-to-use fasteners like Velcro or snaps, while adult garments may feature more complex fasteners like buttons or zippers.

2. Reinforcement of Fastening Area

- Use **interfacing** or **stay-stitching** to reinforce areas where fasteners will be attached. This prevents fabric from stretching or distorting when the fastener is applied.
- **Mark Fastener Placement** using fabric chalk, pins or washable markers to ensure proper alignment of the fastener.

Step-by-Step Techniques for Attaching Fasteners

The techniques below detail the steps to securely and neatly attach different types of fasteners to fabric:

Fastener Type	Key Techniques
Buttons	1. Mark the placement of the button on the garment. 2. Use a needle and thread to sew through the button’s holes. 3. For thick fabrics, use a button shank (a small loop of thread beneath the button) to provide space for the fabric underneath. 4. Knot the thread securely on the reverse side to prevent it from loosening.
Zippers	1. Pin or baste the zipper in place along the edge of the garment. 2. Attach a zipper foot to the sewing machine for close stitching. 3. Sew along both sides of the zipper tape, ensuring it is aligned evenly with the fabric. 4. Press the seam open after sewing to ensure a smooth and professional finish.

Press studs	1. Pin or mark the placement of both male and female snap parts. 2. If sewing-on snaps, use a strong thread and stitch around the snap's holes. 3. For press-on snaps, use a snap tool to attach them securely to the fabric.
Velcro	1. Mark and pin the hook and loop strips to the garment. 2. Sew around all four edges of the Velcro strips, ensuring they are firmly in place. 3. To reinforce, stitch an X or box stitch pattern within the Velcro area to ensure durability and avoid slippage.
Hooks and Eyes	1. Mark the placement of the hook on one side of the garment and the eye on the opposite side. 2. Sew the hook part onto the fabric with small, tight stitches. 3. Similarly, attach the eye with secure stitches, ensuring both pieces align properly when the fastener is closed.

Learning Tasks

1. Discuss the importance of fasteners in clothing construction and their applications.
2. Observe different fastener attachment techniques.
3. Practice attaching buttons, zippers and hooks on different opening of fabrics to create openings and fastenings album.

Pedagogical Exemplars

Experiential Learning/Group Work

1. In pairs and small groups observe videos, posters and pictures showing different types of fasteners to discuss the importance of fasteners in clothing construction and their applications.
2. Organise demonstration session for learners to observe different fastener attachment techniques. E.g.,
 - a. Buttons: Demonstrate how to sew a flat button and a shank button securely using the correct stitching technique.
 - b. Hooks and Eyes: Show how to attach hooks and eyes neatly on fabric.
 - c. Zippers: Demonstrate the process of attaching a centred zipper.
 - d. Press Studs and Velcro: Guide learners in securing these fasteners neatly on fabric, etc.

Project-Based Learning Approach

1. Individually practice attaching buttons, zippers and hooks on different opening of fabrics to create openings and fastenings album.
2. Exhibit the albums for peer evaluation to assess each other's work based on neatness and security.
3. Guide learners to evaluate their work and make improvements where necessary.

Key Assessment

DoK Level 1: What is the purpose of reinforcing the area where a fastener will be attached?

DoK Level 2: Why is it important to select fasteners based on fabric type and the intended use of the garment?

DoK Level 3: Explain the step-by-step process for attaching a zipper and how to avoid common mistakes during the application.

DoK Level 4: Design and justify a plan for attaching three different types of fasteners to a garment made from multiple fabric types, ensuring both functionality and appearance are considered.

Hint



*The recommended assessment mode for week 23 is **Questioning**. Refer to the Teacher Assessment Manual and Toolkit pages 30 for more information on how to use this assessment mode.*

WEEK 24: EVALUATE THE DURABILITY AND AESTHETIC APPEAL OF DIFFERENT FASTENERS IN GARMENT DESIGN

Learning Indicator: *Evaluate the durability and aesthetic appeal of different fasteners in garment design*

FOCAL AREA: EVALUATING THE DURABILITY AND AESTHETIC APPEAL OF FASTENERS IN GARMENT DESIGN

1. Zippers

- **Durability**

Zippers, especially metal and moulded plastic types, are highly durable. They withstand repeated use, stress and laundering, making them ideal for outerwear and heavy garments. Nylon coil zippers are more flexible but slightly less durable.

- **Aesthetic Appeal**

Zippers can be highly aesthetic depending on type—exposed metal zippers give an edgy, modern look, while invisible zippers offer a clean, seamless finish in formalwear.

- **Used in:** Jackets, jeans, dresses, sportswear, skirts.

- **Durability Rating:** Very High

- **Aesthetic Appeal Rating:** High

2. Buttons

- **Durability**

Buttons made from materials like metal, wood or corozo are very durable. Plastic buttons are less so and may crack or fade over time. Button stitching quality also affects longevity.

- **Aesthetic Appeal**

Buttons are extremely aesthetic. They come in countless shapes, colours and textures. They can be decorative elements, especially in coats, blouses and dresses.

- **Used in:** Shirts, blouses, dresses, coats, formal wear.

- **Durability Rating:** High

- **Aesthetic Appeal Rating:** Very High

3. Snaps/Press studs

- **Durability**

Metal snaps are moderately to highly durable and ideal for garments that require quick fastening. Plastic snaps are less durable and more prone to breakage.

- **Aesthetic Appeal**

Snap fasteners are usually minimal in aesthetic appeal unless designed intentionally to be visible. Often used for functionality rather than decoration.

- **Used in:** Baby clothes, outerwear, casualwear, sportswear.
- **Durability Rating:** Moderate to High
- **Aesthetic Appeal Rating:** Moderate

4. Hook and Eye / Hook and Bar

- **Durability**

These fasteners are highly durable when used in appropriate areas (like waistbands). However, improper sewing can reduce their effectiveness over time.

- **Aesthetic Appeal**

They are aesthetically subtle and used when a discreet closure is desired. Common in tailored or elegant garments.

- **Used in:** Trousers, skirts, blazers, formal dresses.
- **Durability Rating:** High
- **Aesthetic Appeal Rating:** Moderate to High

5. Velcro (Hook and Loop)

- **Durability**

Velcro has moderate durability. It works well in functional garments but can wear down with frequent use or get clogged with lint.

- **Aesthetic Appeal**

Velcro has low aesthetic appeal it's bulky, often visible and associated more with utility than fashion.

- **Used in:** Children's clothing, medical or adaptive wear, sportswear.
- **Durability Rating:** Moderate
- **Aesthetic Appeal Rating:** Low

6. Magnetic Closures

- **Durability**

These fasteners have moderate durability. Over time, the magnetism can weaken and they're not ideal for garments under high tension.

- **Aesthetic Appeal**

Magnetic fasteners are high in aesthetic appeal due to their seamless look and modern, minimalist design.

- **Used in:** Adaptive clothing, bags, modern formal wear.
- **Durability Rating:** Moderate
- **Aesthetic Appeal Rating:** High

Garment-Fastener Matching Table

Garment Type	Best-Suited Fasteners	Reason
Formalwear	Invisible zippers, buttons, hook and eye	Offers clean lines, elegance and discreet closures
Casualwear	Buttons, plastic zippers	Comfortable, functional and stylish
Sportswear	Plastic zippers, Velcro, snaps	Lightweight, durable, quick to fasten
Children's Wear	Velcro, plastic snaps	Easy to use, safe, low choking risk
Outerwear	Metal zippers, snaps, toggles	Durable under stress, weather-resistant
Adaptive Clothing	Magnetic closures, Velcro, zippers	Easy to operate, suitable for limited mobility

Learning tasks

1. Which types of fasteners are most durable, and why?
2. How does the aesthetic appeal of a fastener affect the overall garment design?
3. Visit a sewing shop/garment sales outlet to assess the durability and aesthetic appeal of different fasteners in garment design.
4. Choose one garment type and recommend a suitable fastener for it. Explain your choice based on durability and appearance.

Pedagogical Exemplars

Experiential Learning Approach

1. Visit a sewing shop/garment sales outlet to assess the durability and aesthetic appeal of different fasteners in garment design.
2. Present your finding for whole class discussing on the following:
 - a. What makes a fastener durable?
 - b. How do fasteners contribute to the overall appearance of a garment?

Problem-Based Learning

1. In small groups select a fastener of choice and surf OERs or other sources to research and write a report on the following:
 - a. Durability factors: Material, frequency of use and strength.
 - b. Aesthetic appeal: Design, visibility and suitability for different outfits.
 - c. Best uses of the fastener in garment construction, etc.
2. Encourage learners to test the durability by fastening and unfastening their sample works multiple times.

Key Assessment

DoK Level 1: Identify five common types of fasteners used in garment design.

DoK Level 2: Which fastener would you recommend for children's clothing and why?

DoK Level 3: How do the durability and aesthetic appeal of zippers, buttons and Velcro compare?

DoK Level 4: Design a garment and choose a fastener that best suits it. Justify your choice based on durability, appearance, user needs and sustainability.

Hint



*The End of Semester Examination will be conducted in Week 24. Refer to **Appendix G** for a Table of Specification to guide you to set the questions. Set questions to cover all the indicators covered for at least weeks 13 to 24.*

SECTION REVIEW

This section develops learners' ability to identify, produce, evaluate and justify the use of garment openings and fasteners essential for quality clothing construction. Through making samples of openings such as bound, hem and faced slits and securely attaching fasteners like buttons, zippers and snaps, learners master professional techniques that ensure durability, comfort and style. Structured observation of ready-made garments, group discussions and field visits link theory to practice, supporting critical selection based on fabric type, garment purpose and design needs. By combining technical construction skills with design reasoning and evaluation, this section prepares learners to plan and produce well-finished garments that meet functional, aesthetic and sustainable standards in clothing and textile production.

Additional Reading/Teaching Learning Materials

1. Samples of arranged fullness and openings and fastenings
2. Videos on arrangement of fullness and openings and fastenings.
3. Computer, Projector, camera and Smart phones (if possible).
4. Pictures and charts of arranged fullness.
5. Textbooks.
6. Google search.
7. Flip charts.
8. Cardboard.
9. Sticker notes pads.



APPENDIX F: MID-SEMESTER EXAMINATION (2ND SEMESTER)

DURATION: 1 HOUR (30 MINUTES FOR PAPER 'A' AND 30 MINUTES FOR PAPER 'B')

Table of specification for item construction for A (MCQ) and B (ESSAY)

Week	Focal Area	Type of question	DoK Level				Total
			1	2	3	4	
13	Categorisation of stitches based on their functions, Make samples of stitches	MCQs	3				3
		ESSAY					
14	Make samples of stitches	MCQs	1	3	2		6
		ESSAY					
15	Concept of seams, Make samples of selected Seams	MCQs	2	2			4
		ESSAY					
16	Make samples of selected Seams	MCQs		2	1		3
		ESSAY					
17	The concept of edge finishes, strength and appearance of different edge finishes in clothing construction.	MCQs		2	2		4
		ESSAY			1		1
		TOTAL	6	9	6		21



APPENDIX G: END OF SEMESTER EXAMINATION (2ND SEMESTER)

STRUCTURE

SECTION A – 40 MCQs **Total Marks: 40** (1 mark per question)

SECTION B – Essay Questions

DURATION: 1 HOUR, 30 MINUTES (45 MINUTES FOR MCQ, 45 MINUTES FOR ESSAY)

SAMPLE QUESTIONS

SECTION A – 40 MCQs

1. Which stitch is primarily used for hemming garments? [**DoK Level 1**]
 - A) Backstitch
 - B) Blind stitch**
 - C) Chain stitch
 - D) Running stitch
2. Which stitch **BEST** suits stretchy fabrics? [**DoK Level 2**]
 - A) Backstitch
 - B) Running stitch
 - C) Straight stitch
 - D) Zigzag stitch**
3. The **BEST** seam/edge for a lightweight summer dress is... [**DoK Level 3**]
 - A) flat-fell + pinking
 - B) French + bias binding**
 - C) overlocked + zigzag
 - D) plain + serging.

SECTION B – Essay Questions

Scenario

You have been invited as a design consultant to support a team of fashion students working on a themed collection. The team plans to create garments for three categories: children's wear, formal adult wear and outdoor jackets. They are concerned about selecting the most appropriate fasteners that ensure durability, safety, ease of use and aesthetic appeal for each category.

Task

Analyse the properties of different types of fasteners and their suitability for each garment category. Then, complete the table below by categorising the fasteners, giving relevant examples and recommending a suitable fastener type for each category along with a justified common use in garment design.

Table of specification for item construction for A (MCQ) and B (ESSAY)

Week	Focal Area	Type of question	DoK Level				Total
			1	2	3	4	
13	Categorisation of stitches based on their functions, Make sample of stitches	MCQs	1				1
		ESSAY					
14	Make samples of stitches	MCQs	2	4			6
		ESSAY					
15	Concept of seams	MCQs	1	1			2
		ESSAY					
16	Make samples of selected Seams	MCQs		1	1		2
		ESSAY					
17	The concept of edge finishes, strength and appearance of different edge finishes in clothing construction.	MCQs	1	3	3		7
		ESSAY					
18	Arrangement of fullness in clothing construction	MCQs	3	2	1		6
		ESSAY			1		1
19	Make samples of fullness used in clothing construction, The impact of fullness techniques on the fit and appearance of garments.	MCQs			2		2
		ESSAY					
20	The concept of garment openings	MCQs	1	1			2
		ESSAY					
21	Construction of selected types of garment openings, Factors that influence the suitability different openings on articles	MCQs	1	2	2		5
		ESSAY					
22	Types and Applications of Fasteners	MCQs	1	1			2
		ESSAY					
23	Techniques for Attaching Fasteners Securely and Neatly	MCQs		1			1
		ESSAY					
24	Evaluating the Durability and Aesthetic Appeal of Fasteners in Garment Design	MCQs	1	1	2		4
		ESSAY			1		1
		TOTAL	12	17	13		42

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1. Brown, L. & Green, K. (2018). *Understanding fabric classifications*. Boston, MA: Textile Studies Publishing. pp. 89-110.
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6. Leonardo Ai Image generator
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13. Thompson, S. (2020). *Fabric weaves: Types, characteristics, and uses*. Weave World Publishing. pp. 45-67.

PICTURES OF DIAGRAMS AND LINKS

1. Picture of a yarn: <https://tinyurl.com/rvzv7pc>
2. Picture of accessories link: <https://i.pinimg.com/736x/9c/ff>
3. Picture of adornment link: <https://i.pinimg.com/originals/dd/c3/>
4. Picture of care labels/ tags link: <https://www.bing.com/images/search?view=detailV2&ccid>
5. Picture of **Care Symbols and Instructions** link :<https://th.bing.com/th/id/R.72e2087bd6f7bf00d>
6. Picture of clothes link: www.pinterest.com
7. Picture of cosmetics link: www.bing.com
8. Picture of fibre grain line: <https://tinyurl.com/4ps8aenn>
9. Picture of fibre link: <https://tinyurl.com/5xm86aka>
10. Picture of Filament: <https://tinyurl.com/2ph8wb3y>
11. Picture of group identity link: <https://c8.alamy.com/comp/2KYYF0W>
12. picture of lacing fabric: <https://tinyurl.com/mvrsm2ey>
13. Picture of modesty link: <https://www.instaloverz.com/wp>
14. Picture of protective link: <https://th.bing.com/th/id/R.161def801ece5cfdb>
15. Picture of quilting fabric: <https://tinyurl.com/hvmsz5bc>
16. Picture of sexual lure link: Pinterest
17. Picture of staple fibre link: <https://tinyurl.com/4vrwxwnj>
18. Picture of staple fibre: <https://tinyurl.com/4vrwxwnj>
19. Picture of Techniques for Caring and Maintaining Clothes (Source: Pinterest.com)
20. Picture of warp yarn link: <https://tinyurl.com/4umuwxp4>
21. Picture of weft yarn link: <https://tinyurl.com/96kc82ce>
22. Pictures of fastenings link: <https://tsel.mm.bing.net/th/id/OIP>
23. Pictures of openings link: <https://image.slidesharecdn.com>
24. Pictures of sewing notions: www.bing.com
25. Pictures of sewing tools and equipment: www.thesprucecrafts.com
26. Pictures of types of fullness link: <https://th.bing.com/th/id/R.901bf2dfa5ae>
27. Pictures of types of sewing machines: <https://www.bing.com>

