

NATIONAL OPEN UNIVERSITY OF NIGERIA

SCHOOL OF EDUCATION

COURSE CODE: PED235

COURSE TITLE: CLOTHING AND TEXTILES

COURSE GUIDE

PED 235
CLOTHING AND TEXTILES

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Introduction

Primary education provides the basic foundation on which every other forms of education rest. There is a need therefore to acquaint you as a would be teacher at this level of education, with all the relevant skills, knowledge, methods and materials so as to enable you teach effectively all the subjects in the primary education curriculum. It means that you have the responsibility to draw from your wide range of knowledge and skills to be able to teach a wide range of subjects in the curriculum. To do this, you will need to be exposed to a wide range of contents and materials. Clothing and Textiles is one of the courses which you will need.

This course PED 235 is designed in such a way that it will help you learn about issues and concepts that will prepare you for the task of being a primary school teacher.

The course has three modules made up of: The study of textiles and clothing, sewing processes and personal clothing and household clothes.

The course includes this course guide which will enlighten you on how to go through the content and find it interestingly and enjoyable. You will have regular tutorial sessions at your study centre. You are advised to attend these tutorial classes to enable you benefit maximally from this course.

Course Aims

This course, clothing and textiles has the major aim of introducing you and exposing you, as a teacher, to the materials and processes involved,

with a broad range of knowledge and techniques about some basic ideas in clothing and textiles. You are therefore required to work through the course expecting to be exposed to those basic concepts and practices which you will need to teach the course to your pupils.

Course Objectives

To achieve the aims set out in this course, some sets of specific objectives have been specified. Each unit of the study has specific objectives which are usually included at the beginning of the unit. Try to read these objectives before you start to work through the unit. You may wish to refer to them from time to time as you work through the unit to check on your progress and also at the end or completion of the unit. By so doing you would be able to identity your level of attainment of the objectives. The objectives of the course are stated below.

Meeting these objectives indicate that you have achieved the aims of the course:

(a) Identify various types of fabrics and classify them into categories.
(b) Handle some basic sewing tools and equipment.
(c) Explain the test, care and use of local fabrics.
(d) Discuss and practice how to make clothes using simple sewing tools.
(e) Identify faults, causes and remedies in sewing machines.
(f) Operate a sewing machine.
(g) Identify the correct methods of making stitches and seams.
(h) Distinguished between different types of edge finishes.
(i) Make edge finishes to your garment.
(j) Make specimens of zips, buttons, hooks and eye studs.
(k) Make an apron or any other household article.
(l) Identify factors which influence the choice of clothes for different occasions.
(m) Discuss different types of household clothes.
(n) Identify different styles that would suite people.
(o) Identify and carry out effective repairs or renovation on old garment.

Working through this Course

For you to complete this course successfully, you are required to read every study unit of this material and also read any other material which may be provided by the National Open University of Nigeria. There are self assessment exercises in all the units. These are for you to check your progress in the course. You will be required to do and submit the Tutor-Marked Assignments for the purpose of assessment and grading. The scores will be added to those from the end of course examination to give you the final grade in the course. The course should take you about 14 weeks to complete. Therefore, you should plan and allocate your

time to each unit in order to complete the course on time and successfully too. You will also need to be attending the tutorial sessions where you will have the opportunity of interacting with your peers in other to compare knowledge.

Course Materials

The major components of the course are:

- Course Guide
- Study Units
- Recommended Textbooks for Further Readings
- Assignments
- Presentation Schedules

Study Units

There are three modules made up of units. They are as follows:

Module 1 The Study of Textiles and Clothing

Unit 1 Textiles
Unit 2 Study of Fibre
Unit 3 Sewing Tools
Unit 4 Sewing Equipment

Module 2 Sewing Process

Unit 1 Essential of Clothing Construction
Unit 2 Clothing Construction Process I
Unit 3 Clotting Process II

Module 3 Personal Clothing and Household Cloths

Unit 1 Choice of Clothing
Unit 2 Renovation and Clothing Maintenance

Each unit consists of one or two weeks work. 1t includes introduction, objectives, the content, exercises, conclusion, summary, tutor-marked assignment (TMA), references for further readings. The unit directs you to work on exercises related to the required material. It assesses your progress on the material you have just completed. The exercises and the TMA together will help you to achieve the terming objectives stated for the units and for the whole course.

Textbooks and References

CESA (1990). *Home Economics for Nigerian Secondary Schools Clothing and Textiles-Pupils Text*. Lagos: Macmillan Nig. Ltd.

NERC (1978). *Home Economics, Students Books* 4 *and* 5. Lagos: Macmillan Nig. Ltd.

Oseni, D. O. (1986). *Junior Secondary Home Economics Book* I. England: Longman Group Ltd.

Cock, V. I. (1980). *Dressmaking Simplified Second Edition Metric.* Ibadan: Spectrum Books Limited.

Neal, M. M. (1976). *Needlework for Schools, New Metric Edition.* Glasgow: Blakie and Son Limited.

Mbel, P. E. *et al* (2001). *Home Economics at a Glance.* Lagos: Daban Publishers Ent.

Assessment

There are these components of assessment in this course. The first is the self-assessment exercises or activities. You are advised to be sincere in attending to the exercises. The second is the TMAs. This is the continuous assessment component which is graded. It accounts for 30% of the total scores. You are also advised to take this with all seriousness, because it will assist you to pass the course. Always make sure that the TMA responses gets to your tutorial facilitator on or before the due date. Always get in touch with your facilitator in case you would not be able to submit your TMA within the due date.

Final Examination and Grading

At the end of course, you are required to take an examination which will last for a 3-hour duration. It has a value of 70% of the total course grade. The examination will consists of questions, such will reflect the type of self-testing, practice exercises and TMA problems which you have been meeting. All parts of the course will be examined.

Try to use the time between finishing the last unit and sitting for the examination to release the whole course. You may find it useful to review your self-exercises or activities, TMAs and the comments on them before the examination.

Course Marking Scheme

The following table lays out how the actual course marking is broken down

Assessment	Marks
Assignment 1-4	Four assignment, best three marks of the four

	account for 10% each = at 30% of course marks.
Final Examination	70% of overall course score marks.
TOTAL	**100% of course marks.**

Course Overview

There are nine study units in this course. You have about 14 weeks to complete it. Therefore, you are required to spread the units so as to cover them with ease within 14 weeks. Try to do and submit the TMAs on or before the due dates.

How to Get the Most from this Course

You are into distance education. Here, the study units replace the university lecturer. One of the greatest advantages of distance education is that you can be reading or working through the specially designed study material or self-learning material at your own pace, and at a time and place that suites you best. In the same way that a lecturer gives you some reading to do, the study units tell you when, what and even how to read the material and the references. You are provided with activities or exercises to do at some given points. These replace the in-class exercises that could be given by the lecturer.

Each of the study units follows a common format. It starts with the introduction which gives you how the subject matter or content is integrated with the other units of the course. The next is the set of objectives. They give you what you should be able to achieve or do after what you should be able to achieve or do after completing the unit. The objectives are meant to guide your study. After you have completed a unit, make it a habit to check if you have achieved the set objectives. This will definitely improve your chances of passing this course.

1) The main body of the unit guides you through the required reading and directs you to other sources, if any.

2) As a strategy for working through this course. If you run into any trouble, call your facilitator or visit the Study Centre. Note that the job of your facilitator is to help you. Therefore when you need assistance, do not hesitate to call and ask your tutorial facilitator or the centre to provide it.

3) Your first assignment in this course is to read this Course Guide thoroughly.

4) Organise a study schedule. Design a course overview to guide you through the course. Note the time you are expected to spend on each unit and how the assignments relate to the units. Note important information such as details of your tutorials, dates for submission of TMAs, exams, etc. Write down in your dairy.

5) Once you have created your own study schedule, do everything to stay faithful to it. The major reason that students fail is that they get behind with their course work. If you get into difficulties with your schedule, please, let your tutor know before it is too late for help.

6) Turn to Unit 1, and read the introduction and the objectives for unit 1.

7) Assemble the study materials. You will need your references and the unit you are studying at any point in time.

8) As you work through the unit, you will know what sources to consult for further readings.

9) Visit your study centre whenever you need up to date information.

10) Well before the relevant due dates (about 4 weeks before due dates), visit your study centre for your next required assignment. Keep in mind that you will learn a lot by doing the assignment carefully. They have been designed to help you meet the objectives of the course and, therefore, will help you pass the examination. Submit all assignments not later than the due date.

11) Review the objectives for each study unit to confirm that you have achieved them. If you feel unsure about any of the objectives, review the study materials or consult your tutor. When you are confident that you have achieved a unit's objectives, you can start on the next unit. Proceed unit by unit through the course and try to space your study so that you can keep yourself on schedule.

12) When you have submitted an assignment to your tutor for marking, do not wait for its return before starting on the next unit. Keep to your schedule. When the Assignment is returned, pay particular attention to your tutor's comments, both on the tutor-marked assignment form and also the written comments on the ordinary assignments.

13) After completing the last unit, review the course and prepare yourself for the final examination. Check that you have achieved the unit

objectives (listed at the beginning of each unit) and the course objectives (listed in the Course Guide).

Facilitators/Tutors and Tutorials

There are 8 hours of tutorials provided in support of this course. You will be notified of the dates, times, and location of these tutorials, as well as the names phone number of your facilitator, as soon as you are allocated a tutorial group.

Your tutor or facilitator will mark and comment on your assignments, keep a close watch on your progress, and on difficulties you might encounter to provide assistance to you during the course. You must send your tutor-marked assignment to your tutor before the schedule date (at least two working days are required). They will be marked by your tutor and returned to you as soon as possible.

Do not hesitate to contact your facilitator by telephone or e-mail and discuss problems if you need assistance.

The Following might be circumstances in which you would find help necessary. Contact your facilitator if:

- You do not understand any part of study units or assigned readings;
- You have difficulty with the self-test or exercise;
- You have a question or a problem with an assignment or with the grading of an assignment.

You should try your best to attend tutorials. This is the only chance to have face-to-face contact with your course facilitator and ask questions which are answered instantly. You can raise any problem encountered in the course of your study. To gain much benefit from course tutorials prepare a question list before attempting them. You will learn a lot from participating in active discussion.

Summary

PED 235, Clothing and Textiles is a course that intends to prepare you for better understanding of what can make you achieve the goals of teaching and learning process in the classroom and the school system in general. Upon completing this course, you will be equipped with the basic skills that will enable you to assist the students to achieve the goals of attending schools for the purpose of learning.

We wish you success with the course and hope that you will find it both interesting and useful.

Wishing you the best of luck.

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MODULE 1 THE STUDY OF TEXTILES AND CLOTHING

Unit 1 Textiles
Unit 2 The Study of Fabrics
Unit 3 Sewing Tools
Unit 4 Sewing Equipment

INTRODUCTION

Clothing and Textiles are important area of Home Economics which is the application of the sciences and arts towards achieving a healthy and happy home.

The study of Clothing and Textiles deals with the outward appearances of the individual and the home in so far as Clothing and Textiles contribute to such appearances. There are different types of textiles available in the market and they are used in various ways. This makes the production and manufacture of textile fabrics a very interesting and complex business.

A knowledge of the tools and equipment used in the construction of clothing items is necessary because it adds value to how they should be handled and even to what specific use they should be considered.

Nigerians are very conscious of the use of textile fabrics. It is important to have a good understanding of fabrics, clothing tools and equipment so as to make the best of them economically, socially and aesthetically, some textile fabrics require the use of specific tools and equipment to produce them, sew, store and care for them. There is the need to identify clothing fabrics, know how and when to use them appropriately and be able to care for them.

The study of clothing and textiles involves knowing how to choose material for clothes and household articles, garment construction or fashion designing, renovation or clothing maintenance, washing and ironing of clothes.

In this Module therefore, you will be exposed to fibres and fabrics, sewing tools and equipment. As students you will be expected to handle the basic tools and equipment relevant for this course very effectively.

UNIT 1 TEXTILES

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1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Origin of Fabrics
    3.2 Properties of Fibres
    3.3 Identification of Fibres
    3.4 Finishes
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Readings

1.0 INTRODUCTION

Clothing, shelter and food are very essential in our daily life. Clothings are textile fabrics which could be used by individuals, household linen, and needlework or garment construction and as soft furnishing. It is important to learn about textile and fabrics so as to be able to utilize them most effectively and efficiently too.

Personal textile and fabrics protect the body from cold, heat, prevent unnecessary loss of heat and moisture from the body as well as provides identity to the wearer.

It is also important to maintain a descent and presentable appearance by wearing good clothing, suitable for the time, place, and occasion. A good knowledge of textile and fabrics will make clothes wear well, and will also prevent wrong choice of fabrics for dressmaking, and needlework.

2.0 OBJECTIVES

After studying this unit, you should be able to:

- identify various types of fabrics from their colours, weave, texture and the technical finishes or shine
- make a list of the types of fabrics available in your local market
- identify the type of finish given to any fabric in your local market
- classify the fabrics listed into Natural, Animal and man-made categories
- tabulate the sources of fabrics

- make a list of simple sewing tools and equipment. Advance reasons for faults in sewing machine
- handle some basic sewing tools and equipment efficiently.

3.0 MAIN CONTENT

3.1 Origin of Fibre

There are various fabrics -natural and man made. Fabrics are made from animals, vegetables, and synthetic fibres. The process of making fabrics from textile takes three main stages:

-

(a) preparation of the fibres, that is spinning them into suitable lengths and thicknesses;
(b) making it into yarns by twisting the length of the fibres to make it strong and elastic;
(c) knitting or weaving into fabrics.

Fibres can be classified into two groups:

(a) natural
(b) artificial, or man-made or synthetic fibre

Natural Fibre

(a) wool obtained from the fleece of sheep, hairs of camel and other animals; and
(b) silk obtained from the cocoons of the silk worm



(c) Vegetable fibres have cellulose base. For

example:

(a) cotton is obtained from the fibres of the cotton bolls surrounding the seeds. Cotton plants grow in Nigeria and many other tropical regions.
(b) Linen is obtained from the fibre of a plant known as flax. The

inside stalk is spun into yarns. The fibres are long and in bundles held together by natural gum.

They look smooth and free from fluff. Linen fibres absorb moisture and dry more quickly than most natural fibres, hence it is useful in making glass and tea towels.

Artificial or Man-made Fibres

Artificial fibres are made by using chemicals and other materials such as wood pulp, coal derivations. These are either suspended or dissolved in suitable liquids and the solution poured through fine tubes into solution of the chemical to form threads. These threads are very strong, no-shrinking and washable.



(a) Rayon is made from cellulose collected from wood pulp or cotton linters treated with chemicals-there are viscose rayon and acetate rayon. The fibres have high-tenacity, relatively smooth and washable. Rayon should be washed often as it gets dirty easily. Articles made from rayon include handkerchiefs, lingerie, ribbons, local head-ties and scarves.

(b) Terrylene is made from various chemicals. It has the properties of wool but does not shrink like wool. It is washable, durable and warm.

The fibres are soft, strong and can be produced in different colours and weights. They are suitable for children's wear, school uniforms, everyday wear because they can stand the weather and are washable. They are not affected by moths and insects but are easily stained by grease. The heavier threads are used for heavy furnishing.

(c) Nylon is a synthetic fibre which is also produced from chemicals. Nylon is used for every type of garment -underwears, nightwear, furnishings, stockings, gloves, net, carpet, umbrellas etc. It lasts

long, washes well, does not need ironing, does not crease or shrink. It does not absorb much water and dries very quickly. It is not easily stained, resists mildew and insects. It is not damaged by most cleaning and bleaching chemicals, acids or grease (solvent).

(d) Other man-made fibres are polythene, lurex which is made with plastic and metalic thread, Fibre glass, agilon and banlon.

(e) Crimplene -This is another type of terylene. It is soft, very light and can be used for dresses, suits, and children's wear.

It does not shrink, drapes well, and keeps its shape after a long wear. It is easily dyed into the most delicate shades or the most vivid colours.

SELF ASSESSMENT EXERCISE 1

Take a look at your family wardrobe and make a list of clothing items which belong to either the natural or artificial fabrics.

3.2 Properties of Fibres

By the time you go through the properties of fibres, you will be fully equipped on how to handle your fabrics and even to choose what to buy so that they can serve you for a while. Let's begin with the most commonly used fabrics in Nigeria;

Cotton - It is able to absorb moisture up to 40% of its own weight. It is cool to wear, feels crisp, firm and smooth.

It is stronger when wet than dry and can be washed and boiled. It can be starched to improve its appearance. It can be fast dyed into attractive colours and various designs can be printed on it. It can be successfully bleached. If left for any length of time, it is attacked by mildew, easily destroyed by acids but it is resistant to alkalis.

Cotton is moth proof; highly inflammable

Uses: Outer wear, rain wear, hosiery, furnishings, carpet and household textiles.

Linen - Linen is a very strong and durable fabric. Bleached linen is snowy white. It has a glossy surface and lends, itself to successful laundering. This is evident in damask table linen.

Linen materials are not greatly affected by alkalis. It absorbs a little more moisture than cotton. It is cool to wear. Linen creases easily but can be made crease resistant if treated with resin. If left damp for a time, it is attached by mildew. It is easily dyed so various colours can be printed on it.

Uses: suits, bedlinen, table linen, tea towels, glass cloths, handkerchiefs, canvas, tarpaulins etc.

Wool: Wool is not common in Nigeria but it is mostly used during the cold weather. The outer surface of wool is covered with scales.

Wool is very elastic. It is warm because it traps air in the pockets of its over lapping scales. When burnt, it partially melts and gives off a smell of burning feathers. If very hot water is used *to* wash a woollen garment, the wool will shrink, become hard and felt. Woollen fabric has the unique property of absorbing moisture without feeling wet. As it absorbs moisture, it gives extra warmth. So woollen fabric is ideal for winter.

It is destroyed by moths and alkalis

Uses: Dresses, suits, cardigans.

Silk - It is smooth, very fine and warm *to* touch. Silk is one of the strongest natural fibres. It is capable of absorbing a lot of moisture without appearing damp. It is damaged by strong acids. It is elastic and crease resistant. If *too* much heat is applied when silk is washed, the fibres become tender and of white silk turns yellowish. It burns with a characteristic of protein smell.

Uses -dresses for ceremonial occasions, evening or day wear, lingerie, ties, scarves.

Rayon - It absorbs moisture and is a good conductor of heat. It is soft and drapes well. It is resistant to mildew and is mothproof.

Uses -women's outerwear, under wear, curtains, bedspreads.

Acetate - It has a rich soft appearance, absorbs moisture and is a good conductor of heat. It drapes well and recovers quickly from creasing when it is dry. Lasts for a long time without rotting with age. Too much heat melts the fibres. Dissolves in acetone and nail polish remover and is damaged by alkalis.

Uses -evening wears, scarves and ties, shirts, pyjamas, blouses.

3.3 Identification of Fibre and Fabrics

Many fabrics look attractive but do not wear well. It is important to take a close look at fabrics before payment as appearances are not usually what they seem. For instance, many acetate fabrics look like silk fabrics but on close examination, it can be discovered that they are not silk. In most cases there are labels on materials to show their fibre content but

occasionally there are no labels on them.

A series of tests could be carried out to determine the fibre content of materials. A material could also be assessed by handling to determine whether it is soft, warm, or fluffy or whether it creases easily when crumbled in the hand. Listed below are some household tests which may be carried out:

(a) labels
(b) appearance and handling test
(c) strength test
(d) burning test

Labels - are not really tests but they are means of identifying fabrics. Labels are often attached to fabrics and to the garment itself. They should be carefully read as some names may be misleading.

Appearance Test -Examine the material to test the lustre or delustre and the flufiness, and handle the material to feel the softness, warmth and resilience. This appearance test may be deceptive, e.g. rayon can look like silk, wool or linen.

Strength Test -Carry out this test on either dry or wet yarn. Have two yarns ready. Hold the dry yarn between the first finger and thumb of each hand, thumb uppermost, and pull. Wet the other yarn thoroughly in water and repeat the test. Note whether there is a loss or increase of strength in the yarn, if there is no change in the yarn, this should be indicated too:

- a considerable loss of strength indicates rayon,
- an increase in strength indicates cotton, mercerised cotton or linen,
- little or no change indicates wool, silk or synthetics.

Burning Test; hold a piece of fabric in the flame of a lighted match, candle or gas burner, until it begins to ignite, and then withdraw the fabric. Note whether the fabric burns in the flame and continues to burn out of the flame or if the fabric melts when put into the flame.

Note the smell given off when the fabric is burning and whether or not it gives off smoke.

Note also what kind of ash is given off when the fabric is burning and whether or not it gives off smoke.

- if it burns in and out of the flame, smells like burning paper with an acid smoke and the ash is grey or feathery, it is either cotton, rayon or linen.
- If it burns only in the flame, smells of burning feathers with an

alkalis smoke and the ash is like black bead, it may be wool or silk:

- If it burns in and out of flame and smells like vinegar and has ash like a black bead which does not crush easily, it is either acetate or arnel.

- If it smells and shrinks from the flame with a white smoke and hard light coloured ash, it is either nylon or perlon.
- If it melts and shrinks from the flame, with sooty smoke and has a hard light coloured bead ash, it is either terylene or dacron.

Laboratory Tests are also carried out and used for the identification of fabrics. Some of these involve the use of microscope, burning test alkalis and acids.

SELF ASSESSMENT EXERCISE 2

Collect various fabrics from a tailor's shop or fashion designer's shop and carry out the burning test. Group the fabrics according to the burning test reactions. Record your findings

3.4 Finishes

Finishes are special treatment put on fabrics to make them look attractive. Finishing is the process which the fabric goes through before it is put on sale. Sometimes unfinished fabrics with faults may be put on sale.

Purification: This is a finishing process which involves cleaning and bleaching a fabric to make it look white. The dirty grey or yellowish tint in fabrics is caused by natural impurities and atmospheric dirt. Sometimes the yarn has been treated with certain starches and oils to make it firm enough for weaving and these have to be removed

Scouring: is another finishing process which is the loosening of dirt, grease and other impurities on the fabric so that it can be washed easily. Cotton and linen are boiled with soda to dissolve the grease before the materials are bleached into pure white colour so that they can be dyed or printed as desired.

Colouring of Material: This is also part of the finishing process which comes after purification. The material is dyed or printed.

Printing: are of various forms. They include: block, roller, screen, flock printing. Some of these such as block are done by hand while some like roller are done by the machine. The roller printing has the desired pattern engraved on copper rollers, one for each colour: the pattern is sunk instead at being raised.

Here are some other finishes commonly used by textile manufacturers:

Mercerised: treatment given to cotton f.ebri5 to give a glazed or lustrous appearance.

Sandforised: this is used for fabrics that shrink badly in order to make them shrink-resistant.

Crease –Resistant: used to make fabrics not to crease

Drip-Dry: this treatment makes the material non-ironable. When washed, the water simply drips until it dries. Some people sometimes refer to this finish as "wash and wear".

Stain-Resistant: fabrics that are given this type of finish do not get dirty easily because dust and dirt will not settle on the surface.

Water-Repellent -water does not soak through fabrics treated this way. This is suitable for rain coats and shower-proof materials.

Anti-Flame -puti-flame fabrics will not go into flame when ignited. It will smoulder only while in flame. This is desirable for under wears and babies items.

Moth-Proof -fabrics treated this way will not be destroyed by insects, cockroaches etc.

SELF ASSESSMENT EXERCISE 3

Collect some fabrics from a tailor's shop nearest to you and identify the type of finish given to each fabric.

4.0 CONCLUSION

In this unit, you have been introduced to various types of fibre and fabrics and how to identify them with ease. The experience will guide you in your daily choice of what to buy and wear as personal clothing and household linen.

5.0 SUMMARY

In this unit, you have learnt that:

- Textiles are important for our daily lives;
- Not all textile fabrics are wearable;
- There are natural and artificial fabrics;
- Such household tests as appearance, strength tests and burning tests can be used to identify fabrics
- Finishes are special treatments given to fabrics to make them look attractive before putting them on sale.

6.0 TUTOR-MARKED ASSIGNMENT

Assess your household linen and indicate the type of fabrics they are made from.

7.0 REFERENCES/FURTHER READINGS

CESAC (1990). *Home Economics for Nigerian Secondary Schools Clothing and Textiles -Pupil's Text*. Lagos Macmillan Nig. Ltd.

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Neal, M. M. (1976). *Needle work for Schools, New Metric Edition*. Glasgow: Blackie and Son Limited.

UNIT 2 THE STUDY OF FIBRES

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7.0 References/Further Readings

1.0 INTRODUCTION

In this unit, you will carry out some simple scientific experiments and tests to enable you to be able to recognise and identify the properties of various fabrics. These experiments will assist you in knowing how to handle these fabrics. Many fabrics have been damaged as a result of improper handling. Local fabrics are produced and extensively used in this country.

For observation and cost effectiveness, you may join with your colleagues to carry out these simple experiments in groups. You will need to have a collection of several fabrics.

Test 1-Burning Test

(a) Hold the thread of each fabric in the flame and note the following:

- If it burns,
- At what rate it burns
- How it burns
- It is reduced to ashes
- Does it melt or give out any odour?

(b) Describe the residue that is left, if any.

Test 2 -Microscopic Examination

Collect samples of cotton, silk, wool, linen and rayon fabrics and take to the nearest laboratory to use for microscopic examination. Viewing under the microscope, note the following:

- The shape of the filaments, whether round, flat or twisted. Note the length, the thickness, colour, smoothness and the appearance of the surface of each filament.

Test 3 -Water Retention

- Take a bowl of water, place a piece of each material on the surface of the water at the same time and see how quickly each is submerged in the water.
- Hang the wet fabrics and note the one that dries first.

2.0 OBJECTIVES

After studying this unit, you should be able to:

- Identify a fabric using a burning test,
- Care for any fabric based on its identified characteristics'
- Identify a local fabric and where it originates from,
- Explain to a colleague the basic processes involved in weaving a named local fabric,
- Prepare (make) a fabric album.

3.0 MAIN CONTENT

3.1 Identification of Local Fabrics

Nigerians have local fabrics which are indigenous to particular parts of the country. For instance, the Akwete cloth is made in Akwete, Abia state, the Aso-oke is made locally in Yoruba -land i.e. South-West of Nigeria, while the Okene cloth is made locally at Okene in Kogi state.

Other locally woven cloths are the Kano cloth, the Benue cloth, and the Fulani milk-maid cloths. The weaving of these cloths is done mainly by women on weaving looms.

3.2 Manufacture of Local Fabric

The Akwete Cloth is produced from dyed, spun and twisted cotton yarn. Assorted, coloured, and thick sylkos are used to weave various designs unto the cloth. Different designs have different names and meanings. For example, there are designs for an unmarried lady, engaged but not yet married, a married lady, a widow or a divorcee. There are designs tailored to mark specific local or national ceremonies such as yam festival, independence anniversary etc.

Akwete cloth is mostly used as a ceremonial wear as it is not cheap to

produce and it is usually very beautiful.



Aso-Oke is a locally woven fabric commonly found in the South-West of Nigeria. The weaving is fine and neat. Sometimes metallic threads are arranged in small groups on the warp to produce a striped effect. When the weft threads are shuttled through, the finished fabric has stripes of metallic thread. This usually looks very attractive as women's wrappers and head ties.

The plain woven Aso Oke is neat and strong. In some areas, the warp threads, are arranged to give small, oval holes like button holes on the finished fabric.

Rayon and silk threads, slightly thicker than the yarn, are sometimes interwoven in the fabric to produce very effective designs.

Aso Oke is used at traditional occasions such as weddings, engagements, funerals and other festivals. The fabric is used by both men and women. It can be used to make bedspreads, oven pads or inner mattress covers.



Okene and Kano Cloths are woven with cotton yarn by craftsmen who make an industry of it.

The cloths are coarse and thick. They can stand up to frequent washing.

They are most suitable for making articles such as mattress covers, cushion covers, floor and oven cloths.

3.3 Care in Handling Different Fabrics

In this unit, we have been learning about fabrics. A knowledge about their characteristics will enable us to treat and handle them properly.

Experiments have been performed in the previous topic to show the reactions of fabrics to various treatments. These reactions are expected to guide us in handling these fabrics.

The following fabrics should be noted:

Wool -This fabric needs the use of pinking shears when cutting out or over-casting could be used to finish off the raw edges of wollen materials.

When ironing wool, a hot iron should not be used -directly. A damp cloth should be placed on the material before ironing.

Silk -is soft to the touch and can easily roll up. Care should be taken in laying out silk for cutting out. Silk thread with a fine needle should be used when sewing silk and the stitches should be slightly loose.

Silk should be ironed while still slightly damp. A moderately hot iron should be used as very hot iron will scorch the material.

Cotton does not fray easily. Cotton or mercerised cotton thread should be used for cotton material. Cotton fabrics could be starched to keep them in good condition and hot iron should be used on cotton materials.

Linen -Linen creases very badly so care should be taken in handling it. After sewing, the material should be hung to keep it straight and smooth. Linen frays badly at the cut edges. A strand of the cloth should be pulled out to make sure the cut is straight along the grain. Do not try to tear linen on the grain like cotton. The texture of linen is firm and this makes it suitable for tailored dress. It can stand a fairly hot iron, and should be ironed while sewing to keep in good shape and to remove creases.

Nylon -This fabric drapes well, and it is as durable as cotton. Nylon fabrics do not easily crease and fray badly. So when cutting, it is important to leave a good allowance to minimise fraying.

Okene and Kana Cloths -Shrink readily like any untreated cotton fabric. But if you want to use them to sew a garment, you will need to pre-shrink the fabric by soaking in cold water for about twenty four hours and leaving on the line to drip dry. This also implies that for sewing, a good seam allowance should be provided during cutting. Because of the coarse and thick nature of the fabric they should not be warn next to the skin as they could have some uncomfortable effect on the skin.

4.0 CONCLUSION

In this unit, you have learnt about various fabrics in terms of their characteristics; how they react to such tests as burning tests. These information as well as your experience of their various reactions will assist you in handling the fabrics. You will also ensure that these fabrics give you the worth of your money when you buy them.

5.0 SUMMARY

In this Unit, you have learnt:

- That you can identify any fabric using burning test
- How to care for different fabrics
- How to use some local fabrics and for what purpose
- Where some of the local fabrics are produced.

6.0 TUTOR-MARKED ASSIGNMENT

Make a collection of the local fabrics and prepare an album

7.0 REFERENCES/FURTHER READINGS

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UNIT 3 SEWING TOOLS

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Identification of Sewing Tools
    3.2 Description of some Basic Sewing Tools
    3.3 Drawings of some Basic Sewing Tools
    3.4 Strategies for Using Sewing Tools
    3.5 Use and Care of Sewing Tools
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Readings

1.0 INTRODOCTION

For every job to be effectively performed, especially those that require creative skills, the right type of tool, equipment and material must be used. Where the correct gadgets are not used, a harphazard work most likely results.

In the clothing world, the right tools; equipment and material need to be used in order to produce a good effect. Good taste, common sense, patience and creativity are very important while using tools and equipment in clothing construction.

Tools and equipment are used in the making of clothes. The planning and construction of clothes must suit the function for which it is made. The aesthetic characteristics of clothes affect the mental well-being of the wearer of the clothes and those within the environment.

2.0 OBJECTIVES

By the end of the unit you should be able to:

- identify some basic sewing tools
- discuss how to care and store sewing tools
- practice proper procedure of handling sewing tools
- make an article of clothing using any simple sewing tool
- identify the various materials used for the care of sewing tools.

3.0 MAIN CONTENT

3.1 Identification of Sewing Tools

Sewing tools are referred to s small equipment. They are important items that should be available in every home and clothing industry. This is necessary because the need for sewing or mending of clothing items is a common feature in the home and clothing world. Tools for sewing or repair purposes need to be identified.

It is also important to know how to handle sewing tools and for what type of fabric they should be used for.

When sewing tools are identified, their functions should be clearly defined.

Some of these sewing tools are so important and portable enough (e.g. sewing needles and thread) for individuals to carry about as the need to use them can arise easily anytime and anywhere.=9843

3.2 Description of Some Basic Sewing Tools

1. **Thread:** This is used for most sewing. The colour of the thread and material sewn must be the same or very close. Matching thread should be used for sewing.
2. **Needle:** This is used for both machine and hand sewing. The size of the needle to be used depends on the type of material.
3. **Pin:** This is a sharp and very slender metal used to hold materials in position for sewing. To ensure freedom from rust, needles, pins should be stored in containers with powder or woollen materials which absorb moisture.
4. **Thimble:** This is used to protect the middle finger while hand sewing. When not in use, it should not be put into water to avoid rusting especially the metal type.
5. **Tape Measure:** This is made up of firm fabric and clearly marked on both sides with inches and centimetres respectively. It is usually 60 inches long.



6. **Tracing Paper:** It is a carbon light paper available in different colours used with tracing wheel for transfering pattern markings

e.g. dart, botton hole etc on to fabrics.

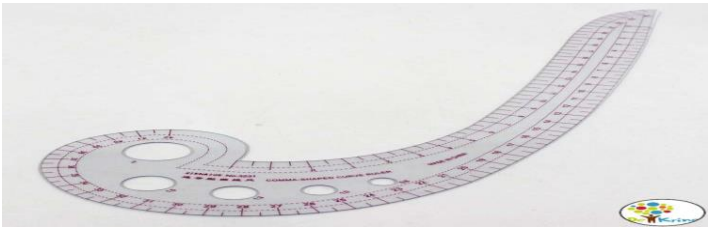
7. **Tracing Wheel:** It is used with tracing paper to transfer pattern markings onto fabrics.
8. **Scissors:** This is used for cutting on fabrics before and while sewing. This should be very sharp. Users should avoid dropping them carelessly or using them for the wrong purpose.



9. **Trimming or Thread Scissors:** Used for cutting off threads from fabrics. It usually has a round colourful handle and about 6 inches long.
10. **Pinking Shears:** This is used for neatening edges of specimens and seams of garments.
11. **Pin Cushion:** Used for keeping needles and pins while sewing. It is sewn with cloth and stuffed with cotton and sometimes stuffed with white sand. When it is stuffed with sand, it can be used for cleaning rusting pins and needles.
12. **Tailor's Chalk:** It is available in different colours and shapes. It is used to identify pieces of a fabric, transfering pattern markings, marking measurement on fabric in preparation for sewing.



13. **French Curve:** It is made of wood or steel and used for curving neckline, arm hole and skirts.

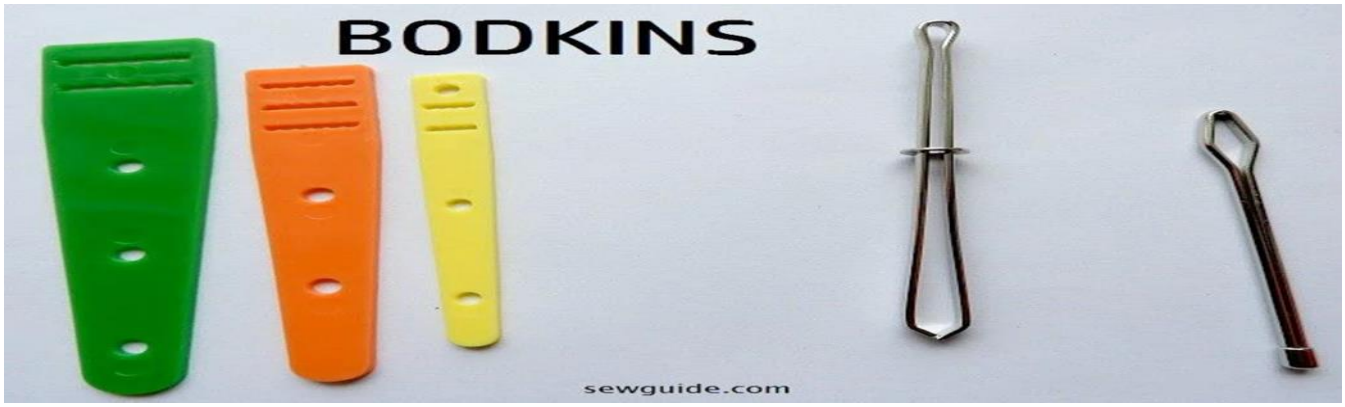


14. **Stiletto:** used for piercing small openings for eyelets.

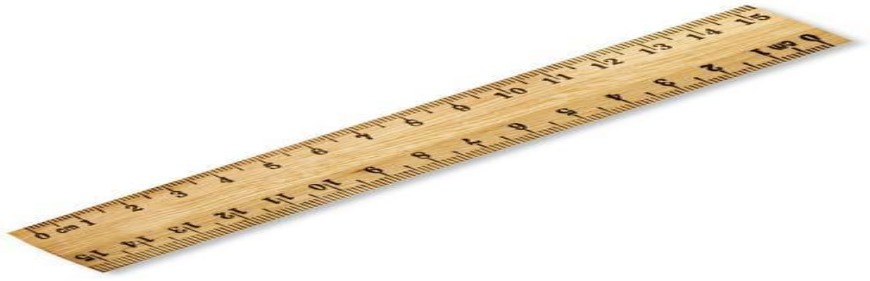
15. **Magnet:** An instrument used for picking pins and needles
16. **Seam Picker:** It is an instrument that has a steel blade and a plastic handle. It is very useful for unpicking machine stitches or for cutting out machined button holes.



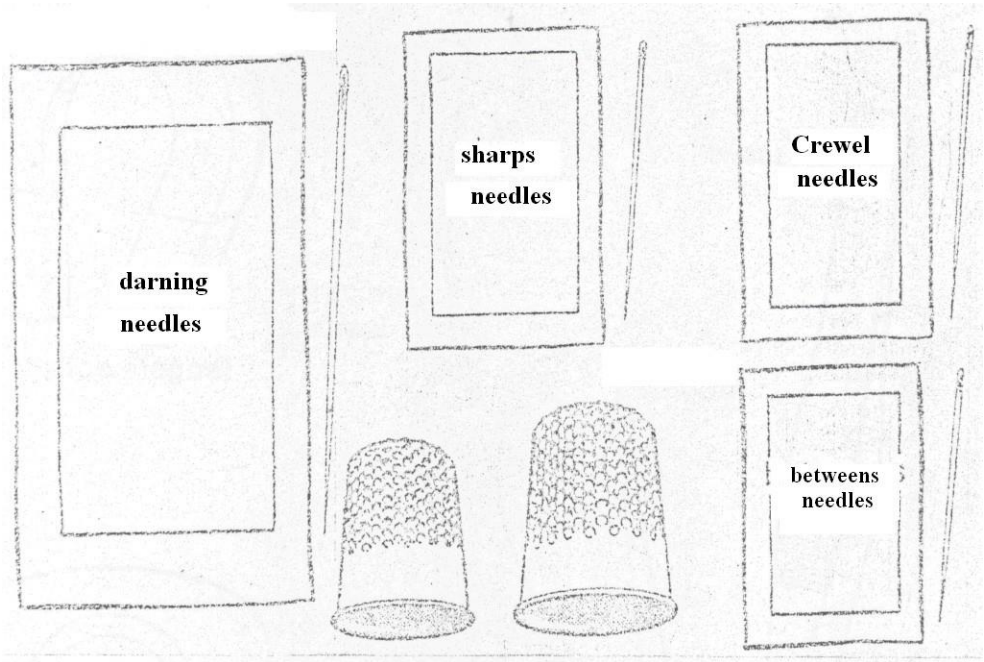
17. **Needle Threader:** An instrument commonly used by those who have difficulty in threading needles.
18. **Bodkin:** A thick, blunt needle of about 7.62cm long, with a large oval eye for threading tapes, elastic or ribbon through casing or eyelet holes in the fabric. It is usually made of steel.

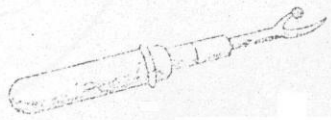


19. **Metric Stick:** This is used for measuring fabric and is marked in inches and centimetres. It could be made of wood or plastic.

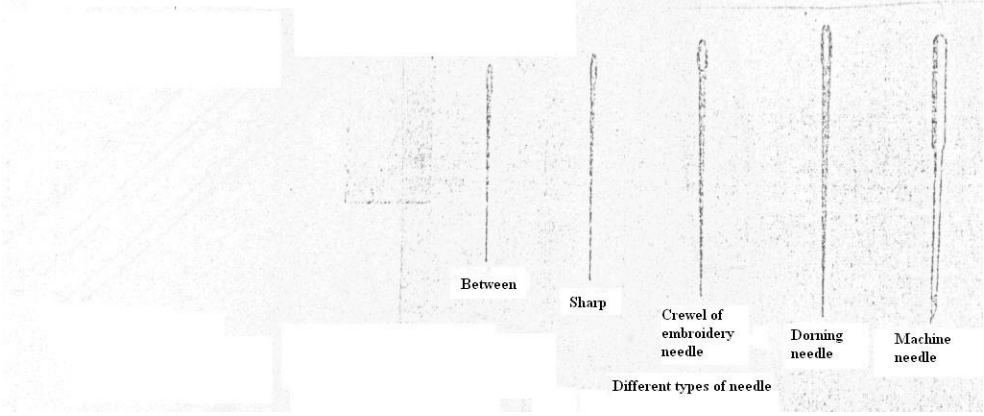


Drawings of Some Basic Sewing Tools





A Seam Picker



Different types of needle

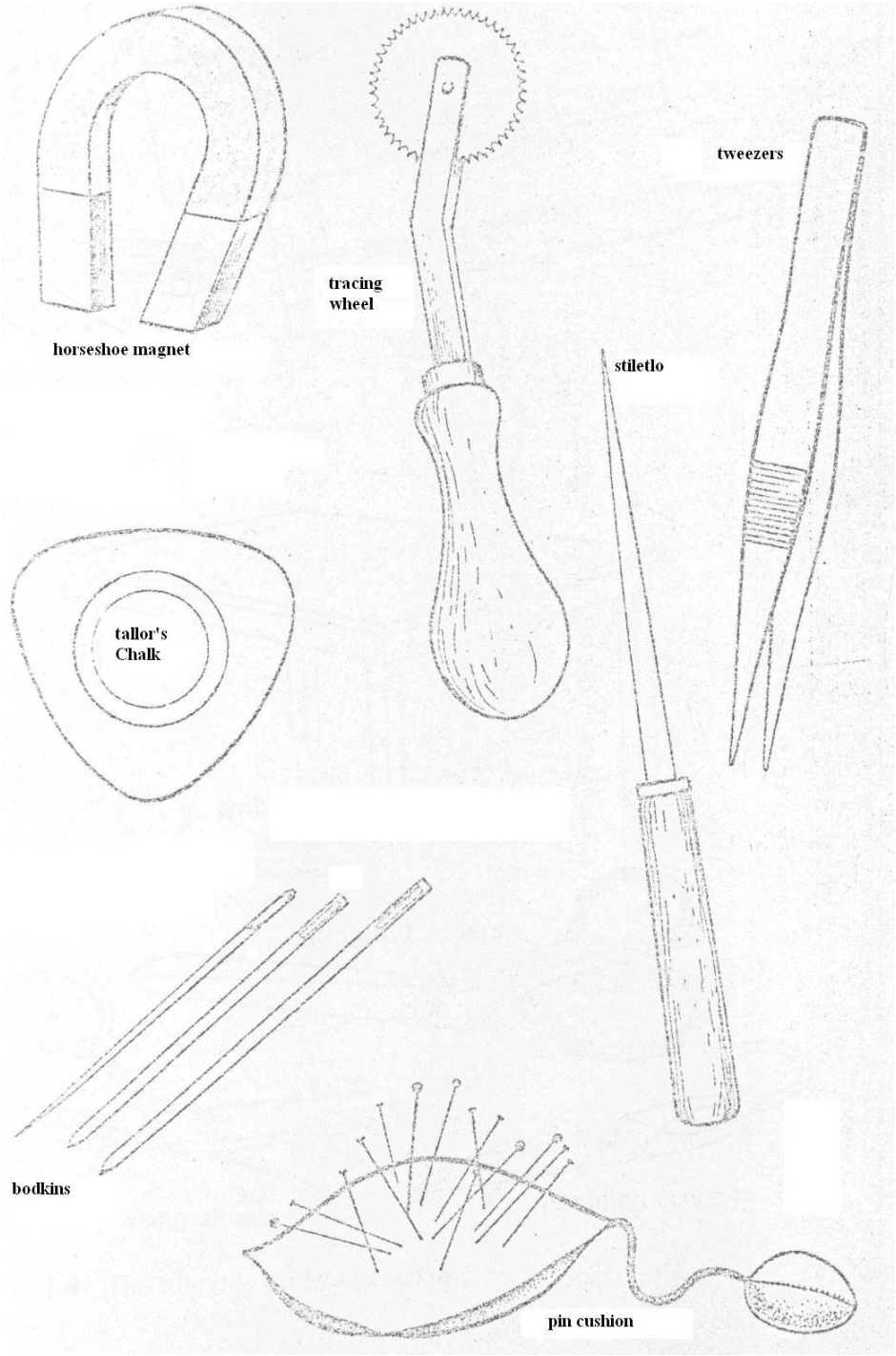


Figure 3.1: Selection of small items of sewing equipment

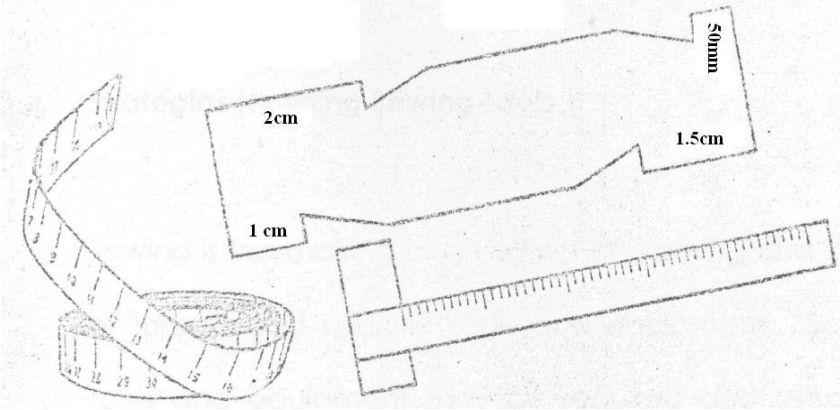


Figure 3.2: Measuring equipment

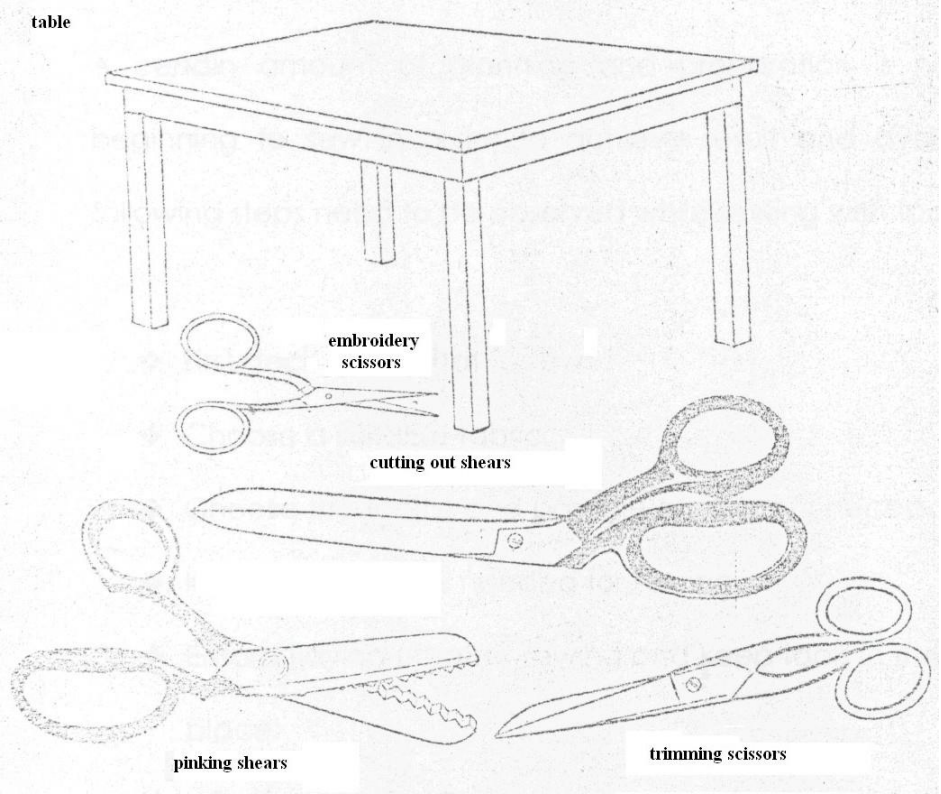


Figure 3.3: Cutting out table and scissors

3.3 Strategies for Using Sewing Tools

Sewing is the making of an article of clothing and or garment with the use of thread and specific tools and equipment. Sometimes one or more tools and equipment may be required and used in the making of an article of clothing.

A certain amount of planning and preparation is necessary before beginning to sew in order to achieve result and avoid disaster. The following steps need to be observed while sewing with tools:

- First decide on what to sew
- Choose a suitable fabric
- Choose the tool{s) and possible equipment necessary for sewing,
- Identify the space needed for sewing,
- Ensure tidying up after sewing and keep tools in their proper storage place:

3.4 Use and Care of Sewing Tools

Sewing tools are essential in the clothing industry. When they are appropriately used and cared for, they give long and satisfactory service. Quality should be considered when buying any sewing tool as it affects durability.

Type of Tool	Use and Care
Needles	needles are used for sewing, both hand and machine sewing. One should buy only the sharpest and finest rust -proof type when shopping for needles. Buy in mixed sizes so as to always have the right size of needle for a particular job.

1. Sharps are needles with medium length for ordinary sewing.

Sizes 5-7 are for tacking while sizes 8-10 are for hand sewing -depending on the fabric. The higher the number, the finer the needle. But the most useful sizes are 6, 7, 8 and 9

2. Betweens are needles of shorter length. These needles are available in sizes 1-10. The larger the number the finer the needle.

3. Crewels or embroidery needles have large long eyes for easy threading of embroidery thread. This should be preferably used by beginners in the lower classes. They are made of steel in different sizes as are the sharps and betweens.

4. Darning needles are longer than other needles and have large eyes. They are used for easy threading of wool. It is good to purchase a mixed packet of darning needles for coarse work and for fine work.

5. Bead needles are very fine needles for sewing on beads and sequins.

Choose good quality needles in assorted sizes and store in a container with a little talcum powder to prevent them from getting rusty.

Needles in use should be put on a pin cushion.

Tape Measure This is used for measuring fabric and also body measurement. There are cloth tape measures and paper ones. Choose a good quality make for durability.

Guage A guage is a tool used for measurement. Individuals can make personal guage from cardboard if they are not available to buy. They can be used to measure hems, seams and bindings very accurately.

A guage should be stored in a little container after each use.

T. Rulers, Protractor, and Compasses These are used when drafting patterns and are available from good book shops. They should be stored in drawers under the needlework tables for easy access.

Scissors A good pair of scissors is necessary for cutting out material or fabric. The blades should be sharp and about 15-22cm long. Stainless steel scissors do not rust.

To care for a pair of scissors:

(a) avoid dropping the scissors;
(b) use cutting-out scissors for cutting out textile material only. Do not use scissors to cut paper or heavy cardboard;
(c) keep scissors free from rust;
(d) oil the joint if there is difficulty in opening and closing the scissors.

Pinking Shears These are rather heavy scissors with large blades with zig-zag edge. They have a small hole for the thumb and a larger hole for two or three fingers which make them easy to use. They are useful for neatening the raw edges of materials that fray easily.

Paper Scissors: This can be any cheap quality scissors that can cut paper. Pinking shears or dressmaking scissors should never be used to cut paper.

Button Hole and Embroidery Scissors: This is a good quality stainless steel scissors with sharp pointed blade for nipping threads and trimming off turnings.

Any pairs of scissors should be stored in drawers when not in use and dropping them on the floor should be avoided as this affects their blades and make them blunt.

Tailor's Chalk: This is used to make pattern marks on material in preparation for sewing. After use, wrap in tissue paper and keep carefully in the sewing box.

Thimbles:

(a) These are worn comfortably on the middle finger of the right hand to protect the finger and also support the needle while sewing.

(b) The workmanship is improved when thimbles are used

(c) They are available in stainless steel, brass, plastic or bone in sizes 2-6. The higher the number, the smaller the size.

(d) Stainless thimbles should be chosen when buying as they last longer than plastic ones.

Pins

(a) Dressmaker's pins are usually made of stainless steel. They are sharp and fine.

(b) Office pins are thick and only meant for paper. They often leave marks on fabric.

4.0 CONCLUSION

In this unit you have been exposed to the identification, use, care and storage of some basic clothing tools. Ability to use them effectively depends upon practice. Patience and artistic creativity is needed while planning to use clothing tools. A lot of care is also required for avoidance of harzards and also to ensure durability.

5.0 SUMMARY

In this unit you learnt that:

- Tools are essential instruments in clothing industry
- Tools must be used appropriately
- Good quality tools should be used for the right job
- Tools should be well cared for and stored in proper place.

6.0 TUTOR -MARKED ASSIGNMENT

Visit 4-6 fashion houses/shops in your area and find out the following:

i. The sewing tools commonly used,
ii. How they are stored,
iii. The cost of each item.

7.0 REFERENCES/FURTHER READINGS

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UNIT 4 SEWING EQUIPMENT

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Identification, Choice, Use and Care of Sewing Equipment
    3.2 The Sewing Machines
    3.3 General Care of the Sewing Machine
    3.4 Machine Parts and Their Functions
    3.5 Common Sewing Machine Faults and Their Remedies
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Readings

1.0 INTRODUCTION

Having learnt about sewing tools you will need to know more about sewing equipment and some of the sewing equipment are advanced and more complicated to use than sewing tools. Sometimes the words tools and equipment are used interchangeably for the sewing gadgets.

Tools and equipment vary according to the work for which they are to be used. Equipment should be well looked after so as to give lasting service. Tools that can be kept in a sewing box should also be stored there for safety.

Sewing machines of various designs are available in the market today and they ease sewing work and could make sewing very pleasurable. Some sewing machines are automatic while some are manually or electrically operated.

While using the sewing machine, it is very important to adjust the tensions in the sewing machines to suit various fabrics. Sewing machine requires regular cleaning and oiling.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- identify, choose, use and care for sewing equipment
- identify the parts of a sewing machine
- list the fault1 causes and remedies in sewing machines
- thread the machine needle, and the sewing machine
- operate a sewing machine.

3.0 MAIN CONTENT

3.1 Identification, Choice, Use and Care of Sewing Equipment

In the previous unit, you were able to identify some sewing tools. It is also useful if you can make some simple personal and household items which you will produce with the identified sewing equipment.

It is important for you to choose the best sewing equipment you can afford and keep those that can be put together in a box) basket with lid or cover.

The sewing equipment that you need include iron, ironing board and sleeve board, work table, storage space, full-length mirror and so on.

(a) Iron

The iron chosen must not be too light because of the extra pressure needed for obtaining a good finish. It must be a controlled one to ensure adequate heat for different fabrics. There are many different irons. They include electric iron, steam iron, solid iron and coal iron.

Uses: All irons are used for ironing materials. They can be used for straightening out the ends of material before cutting out.

Care: It is necessary to take care of iron so that they can be durable. The flex of an electric iron should be kept as straight as possible when it is being used and stored. A frayed flex of an electric iron should not be used. The frayed flex should be professionally repaired or replace the whole flex with new one. After using electric iron, allow it to cool down before storage. It should be kept away from children.

Steam iron should be used with distilled water in order to avoid the deposit if hardened salt or fur from the ordinary water. The deposit of hardened salts can damage the water chamber or drip feed.

Solid flat iron and coal iron should be prevented from getting in contact with water to avoid rust. They can break if allowed to fall down.





(b) Ironing Board and Sleeve Board

It is important to buy on ironing board with outer covers made from white cotton fabric or blanket.

Uses: Both ironing and sleeve boards are used for pressing materials. Ironing board is specifically used for pressing garments to prevent formation of creases on the part of the garment which is not ironed. It is also used for pressing embroidery on garments and the thickness of fabric into which the pattern was made.

Sleeve board is used for pressing sleeves. It allows the pressing of sleeves satisfactorily. Pleats, gathers tucks can be ironed easily on the sleeve.

Care: The ironing board and sleeve board should be covered with blanket when ironing. The outer cover of the ironing board should be easily removable and washable. It is important that the outer cover should be washed regularly.



(c) Work Table

This equipment must be strong, large and have smooth surface. The height of worktable should be convenient for the user He/she should be able to stand and sit comfortably when the table is being used. The surface of the worktable should be large enough to hold the garment being cut.

Use: The worktable can be used for cutting purpose and for drafting patterns, Hand-sewing machine can be placed on it for use.

Care: Scratching by pins, scissors and other sharp objects should be avoided. Use clean duster to clean properly when it is dirty. It should not be lightly polished.



(d) Storage Space

Deep drawers are essential for keeping sewing tools and equipment. A cupboard is another valuable storage space for sewing tools and equipment. Hanging space is also good for keeping partly finished garments.

Use: Deep drawers are essential for keeping sewing tools, patterns, new material and fabric cuttings. It is very important to label the drawers so as to show the contents kept in each of them.

Care: Storage space should be kept clean and tidy regularly to prevent

cockroaches.

Full-Length Mirror

This type of sewing equipment can be fixed to wall or to the side or door of a cupboard or wardrobe. It is important to select one with high equality mirror and wood so that it my be used for a long period.

Use: Fill-Length mirror is used for fitting and deciding hem length. It is also used for appreciation of styles, colour and proper arrangement of garments. Satisfactory fitting can only be carried out if the wearer is able to see herself and where to make necessary alterations.

Care: Water should be prevented from getting behind the glass. The use of few drops of kerosene on the glass. The use of few drops of kerosene on the glass provide more sparkle. Crushed dry newspaper can be rubbed on the glass unit 1 all marks re removed.

(e) Dress Stand

Dress stand is also known as dress form. This equipment prevents undressing and dressing gin during the process of fitting. It is important to choose n adjustable dress stand if it is possible.

Use: Dress stand is an equipment used to test for fitting satisfactorily.

Care: Dress stand should not be allowed to fall down frequently to prevent breaking and cracking it should be dusted with clean duster daily to remove dust and dirt.

3.2 The Sewing Machines

The sewing machines are part of the equipment required for sewing. They are the most useful equipment a fashion designer should possess, sewing by machine is much faster and easier than sewing with hand. The modern machine is capable of doing most of the sewing jobs, such as sewing on button, making of button hotes embroidery and advance decorative stitches. It advisable to be buy your sewing machines from a well-known manufacturer so that you can readily get parts and requires as required. Sewing machines handled with care will give many you ears of good service.

Types of sewing Machine

There re three types of sewing machines. They can be used for tacking, gathering, sit1ching seams and fastening on and off the threads at the ends other functions include mending and can provide income for your family it you sew for others.



(a) **Hand sewing machines:** These types are portable, convenient and are operated by hand with the right hand turning the handle of the machine. There are also sewing machines designed for left-handed people, but they are very rare. Hand machines are easy to work but are slower than other types. The user has only one free hand to guide the work while sewing with the other hand. They are cheaper than the treadle or the electric sewing machines.



(b) **Treadle sewing machines:** These are operated with the feet moving rhythmically. The machines are usually fixed to stand. They are quick to use and the user has both hands free to guide the work.

Some of them are very useful as table tops when not in use. Treadle sewing machines are more expensive than hand models.

(c) **Electric Sewing Machines:** These are operated with electricity

with a motor attached to the machine while the needle moves when the footplate is pressed. They are made either for use on a table or are accompanied by a stand. They are faster than other machines. The user has both hands of'- to control the material. There are various models. Any type of hand or treadle sewing machine can be converted to an electric sewing machine by adding a motor.

3.3 General Care of the Sewing Machine

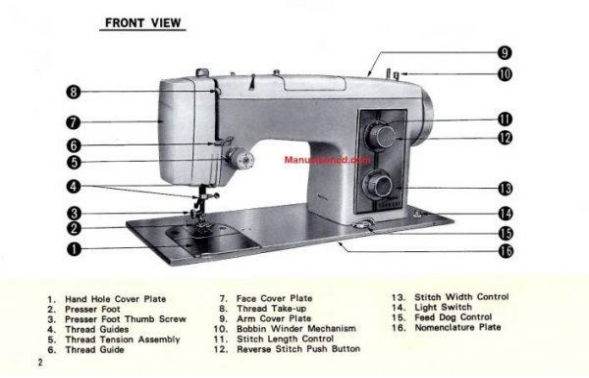
(a) While sewing, you will need to position the machine in a place with good light to avoid straining the eyes when sewing.
(b) Clean the machine after use, remove the feed plate and brush off fluff and dirt that have accumulated on the feed plate and the bobbin holder.
(c) Oil according to instructions (the machine guide book gives a diagram to indicate the oiling point)
(d) Before putting the machine away, place 'a piece of cloth on the feed plate to protect the needle and lower the presser foot.
(e) Cover the machine when not in use
(f) Do not place sharp things like scissors on the machine as these may scratch the paintwork.
(g) A sewing machine should be serviced regularly to ensure lasting service.

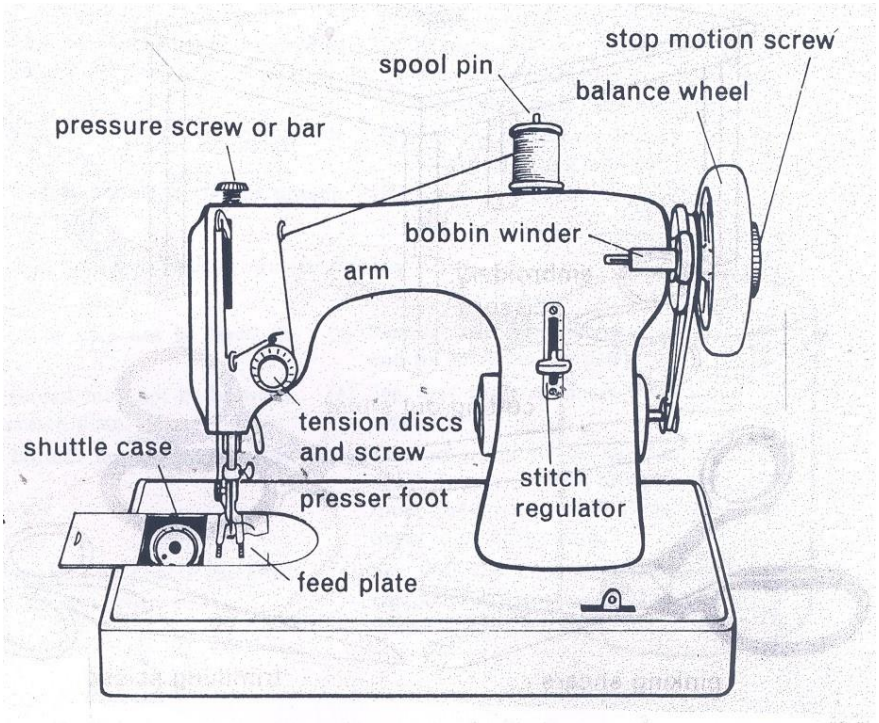
3.4 Machine Parts and their Functions

1. **Balance Wheel:** This should always turn towards you when sewing.
   The function of the balance wheel is to raise and lower the needle.
2. **Step Motion Screw:** Loosen it when filling the bobbin so that the needle remains stationery. Tighten it when sewing. It disengages the needle.
3. **Stitch Length Regulator:** Adjusting this alters, the length of the stitches. The numbers alongside indicate the number of stitches per unit length.
4. **Bobbin Winder:** Insert the bobbin into the winder when filling the bobbin with thread. It holds the bobbin in place.
5. **Feed Plate:** This helps to push the material forward.
6. **Presser Foot:** Lower presser foot just before sewing and raise the presser foot before removing the finished work. It holds the material firmly in place during stitching.
7. **Needle Clamp:** To insert needle, place flat side to the right. Tighten and the needle will be held firmly in place.
8. **Tension Disc:** This regulates the amount of tension on the upper thread.
9. **Presser Foot Bar:** this is for adjusting the pressure which is necessary when sewing different thicknesses of material.



You should be able to identify each of these parts and know how to use each of them. Practice will make perfection.





3.5 Common Sewing Machine Faults and Their Remedie

Faults and their Remedies

1. Yarn that keeps Breaking

	Cause		Remedy
(a)	The top tension may be too tight.	(a)	Adjust the tension.
(b)	The needle may not be fixed correctly.	(b)	See that the groove is to the left or outside of the machine and that the needle is set correctly, and screw firmly into position.
(c)	The thread may be twisted round the wire spring.	(c)	See that the machine is threaded correctly.
(d)	The eye of the needle may be de-fective and be cutting the thread.	(d)	Insert a new needle of the correct size and type.
(e)	The spool may be too full.	(e)	Remove some of the yarn from the spool to allow to revolve freely.
(f)	The fly-wheel may be allowed to go backwards.	(f)	Have, better control of the treadle and be prepared to touch the fly-wheel to keep it from running back.
(g)	The needle may be too fine for the material.	(g)	Use the correct needle and the right thickness of stitching yarn.
(h)	The sewing yarn maybe uneven and poor.	(h)	Use only reliable makes of cotton silk.

2. Loops may appear underneath the machine Stitching

	Cause		Remedy
(a)	The spool may not be fixed in correctly.	(a)	Remove the spool case and spool, and fix correctly (see p. 24).
(b)	The thread may not be between the tension discs.	(b)	See that thee, machine threaded correctly.

(c)	The bottom tension may be too tight.	(c)	The adjusting of the up tension usually puts this right, again the spool may be overfull If so, re-move some, of the yam.
(d)	The machine may not be threaded in the correct order.	(d)	See that the machine threaded correctly and the need threaded from left to right.

3. Seams may be puckered

	Causes		**Remedy**
(a)	The tension maybe too tight.	(a)	AdJusttl1etcnslon.
(b)	The material may not have been keep it from puckering	(b)	Hold the work firmly enough to held firmly while stitching. Under the machine, but not too tightly for the size of the machine but to be altered.
(c)	Very fine material may not have been reinforced with paper.	(c)	Tack very fine material on to issue-paper before machine stitching to keep It flat and so prevent stretching or puckering.

4. The Machine may miss Stitches

	Cause		**Remedy**
(a)	Tile needle may not be correctly fixed.	(a)	Unscrew and replace the needle as described on p. 23.
(b)	Pushing or pulling the material unduly during machine stitching.	(b)	Guide the work evenly.
(c)	The top and bottom yams may be of different thicknesses.	(c)	See that the yarn is the same thickness on the top and in the spool.

5. A Broken Needle

	Cause		Remedy
(a)	The work may be pulled roughly from the machine.	(a)	Pull the threads back between the pressure foot, and cut the yarn about 3 in. from the needle and 3 in. from the garment.
(b)	Pins left in the work.	(b)	Be sure to remove all pins before starting to machine stitch.
(c)	Clumsy hard knots in the way of the machine stitching.	(c)	Avoid clumsy knots when preparing work for the machine.
(d)	Many thicknesses of material or overlapping seams.	(d)	When approaching seams which are-extra thick, slow down the speed of the machine, and gently ease the needle through the thickness of the material. It may even be necessary to revolve the fly-wheel slowly by hand over this difficult part.

6. Variations in the Size of the machine Stitch

	Cause		Remedy
(a)	The work may be pushed or pulled through the machine.	(a)	Guide the work evenly.
(b)	There may be dirt or a piece of cotton in the Machine.	(b)	Make sure that the machine is in good running order.
(c)	The stitch regulator may not have been tightened after altering the size of the stitch.	(c)	Remember to fix the regulator firmly.

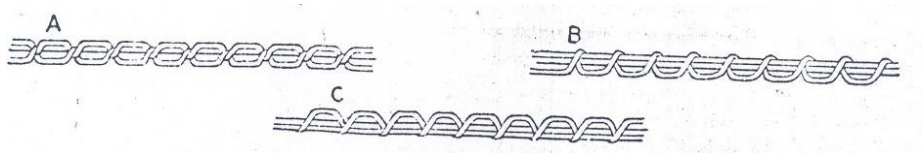


Figure 4.1: Tension of machine stitch.
A. Correct tension. B. Needle too tight. C. Needle tension too slack.

4.0 CONCLUSION

In this unit you have been introduced to various types of sewing equipment especially the sewing machine. The sewing machine is a very essential item for the family as it facilitates the construction, maintenance, and renovation of personal and family clothing items. It is advisable for persons to buy a durable and affordable sewing machine which is also easy to maintain. The sewing machine should not be an ornamental piece. It should be used and with regular practice, one becomes perfect with the use of the sewing machine irrespective of the type.

5.0 SUMMARY

In this unit, you have been able to identify sewing equipment and the three types of sewing machine available in the market and possibly their prices. You have also gone through how each can be used, cared for and put away after use. These processes guarantee the longevity of the sewing machine. The various sewing machine parts have been described for ease of identification and possible usage. When caution is taken especially on the areas that may cause faults in the sewing machine, sewing could be pleasurable and done without tears.

6.0 TUTOR MARKED ASSIGNMENT

1) Visit the market and make a list of the brand names, and prices of sewing machines you see and make a recommendation of the one which is easily affordable and with warranty too.
2) From your experience in the use of the sewing machine, what other (if any) fault(s) have you discovered?
3) Tabulate the common faults in the sewing machine, their causes and remedies.

7.0 REFERENCES/FURTHER READINGS

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MODULE 2 SEWING PROCESSES

Unit 1 Essentials of Clothing Construction
Unit 2 Clothing Construction Processes I
Unit 3 Clothing Construction Processes II

INTRODUCTION

Using sewing processes, fabrics are given their desired shape, design and look. Specific sewing processes are required for specific fabrics in order to achieve results.

This module assists you in discovering these sewing processes. Your mastery of these processes to a large extent depends on your keen interest and ability to practice these processes on your own. Remember, practice makes perfect.

UNIT 1 ESSENTIALS OF CLOTHING CONSTRUCTION

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Fabric Knowledge
    3.2 Basic Stitches
        3.2.1 Types of Stitches
        3.2.2 Temporary Stitches
        3.2.3 Permanent Stitches
        3.2.4 General Rule for Working Permanent Stitches
        3.2.5 Simple Decorative Stitches
    3.3 Seams
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Readings

1.0 INTRODUCTION

Sewing is an artistic and exciting exercise and business. It requires skill, patience, and dedication. Specific tools and equipment should be used in order to produce the desire article. It is not enough to know how to sew. You should also be able to select the right pattern for your figure and

contour to give a professional look. You should also be able to sew for other people to their satisfaction.

Patterns are drafted in sewing and used to ensure good fit. There are ready-made dress patterns in the market but these are rare and are not cheap.

You can make your own pattern. This is referred to as home made pattern. When a pattern is drafted for a particular size, it is easy to use and adapt as it saves time, material and labour.

Some people do free-hand cutting straight on the fabric without using any pattern. This requires a lot of care, skill and accurate body measurement. Body measurement must be taken in order to ensure that clothing items fit the wearer very well.

It is important for you to be able to take your own measurement. Body measurements determine figure types.

2.0 OBJECTIVES

At the end of this, you should be able to:

- identify and learn the correct method of working stitches
- state and comprehend the processes for working different types of seam
- prepare folders for working of different stitches and seams
- make various stitches and seams.

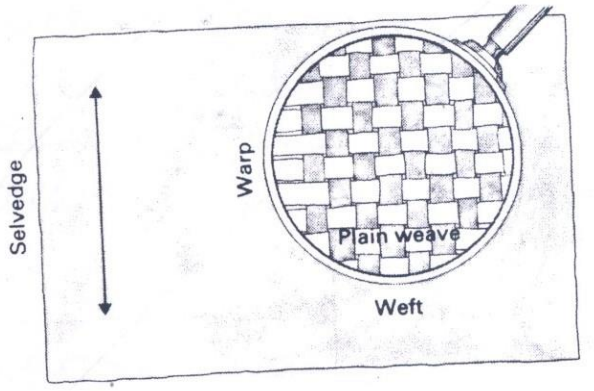
3.0 MAIN CONTENT

3.1 Fabric Knowledge

It is necessary to understand the 'grain' of the material before you cut any part of it. The thread running the length of the material parallel with the selvedge is called the 'warp' or lengthwise grain. The thread running at right angle across the selvedge grains is called the 'weft', or cross wise grain. The warp threads are usually stronger than the weft threads. The warp way of materials stretches less than the weft. The edge made by the weft thread turning over the warp thread is called the selvedge. The warp threads usually run down a garment from head to foot unless there is a reason to add interest to style as in striped fabrics.

During weaving, the warp threads are the first set of threads laid in reparation for weaving. Weft threads are passed through or in between

the warp threads so that the two sets of threads are interlaced during the weaving process





The structure of woven fabric

The grain of a material.

3.2 Basic Stitches

There are many types of stitch used for sewing. Some are temporary stitches while some are permanent stitches. Some stitches get their names from the way they are formed e.g. running stitch back stitch, chain, loop etc.

3.2.1 Types of Stitches

There are four types of stitches. The different types are:

1. Temporary stitches
2. permanent stitches or joining stitches
3. Decorative stitches
4. Neatening stitches

3.2.2 Temporary Stitches

These are stitches used to hold fabrics temporarily before permanent stitches are fixed. The stitches re often removed after permanent stitches have been worked on the material being sewn: In view of this soft, cheap white tacking cotton thread is often used for working temporary stitches. Temporary stitches include tacking (even tacking and long and short tacking) diagonal tacking, thread marking, tailor's tacking, slip basting and fishbone stitch.

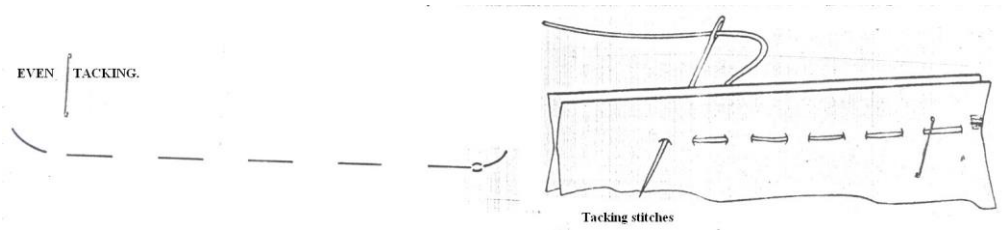


Tacking

This is also referred to as basting. It is temporary stitch commonly used for holding material also in position. There may be two or more layers of material tacking or bashing is worked with simple thread on either the right or wrong side of material. It is worked from right to left and being temporary stitch, it should be started with double back stitch. There re different types of tacking stitches. They are even tacking, long and short tacking, diagonal tacking, thread-marking and tailor's tacking. Other include slip basting and fishbone stitch.

Even Tacking

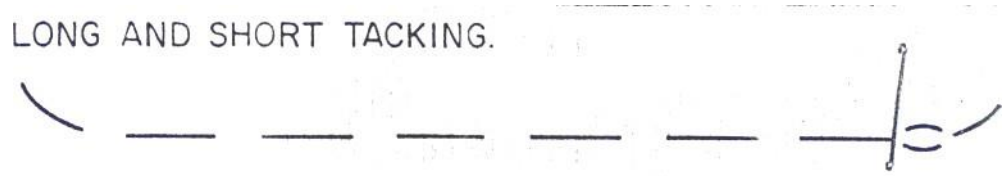
Even tacking is produced when the length of each stitch is equal on both front and back of material. There are always equal spaces produced between two stitches. It is the simplest form of tacking. Even tacking is used to hold temporarily seams, hams, facings and others.



Long and short Tacking

This is another type of temporary stitch and tacking. It is also known s uneven tacking or irregular tacking in this type of tacking unequal amount of material is passed over as is picked up. The top stitch may be longer than the bottom stitch or vice versa. The long and short tacking otherwise

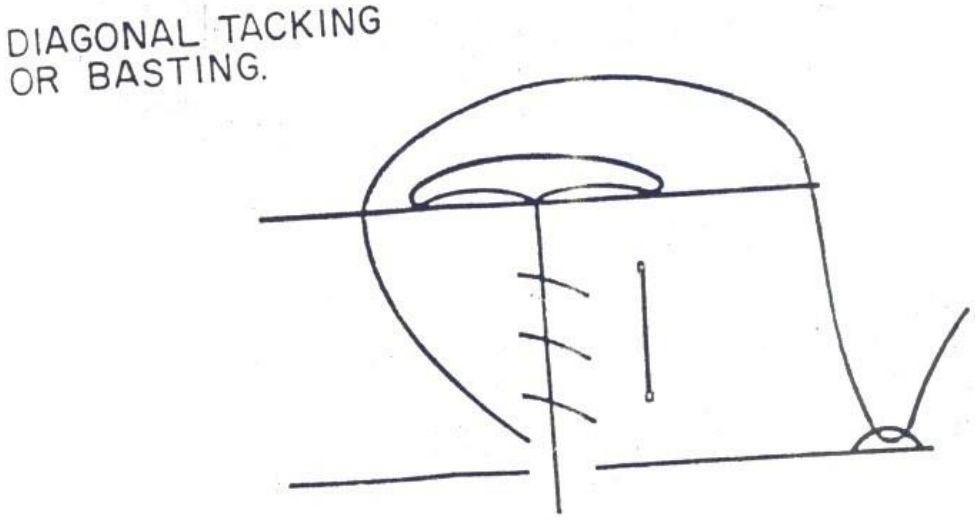
known as uneven tacking is worked on single material for marking out purposes. Long and short tacking is faster than even tacking. It is very good for holding in position heavier materials before permanent stitch is worked on the material, it helps to hold heavier materials firmly temporarily.



Diagonal Tacking

This is another form of temporary stitch and tacking stitch. This type of tacking stitch or temporary stitch is very good for joining together temporarily two or more layers of material to avoid them from slipping

out of position until permanent stitches are finally fixed diagonal tacking is useful for fixing collars, livings, waist bounds and pleats temporarily.



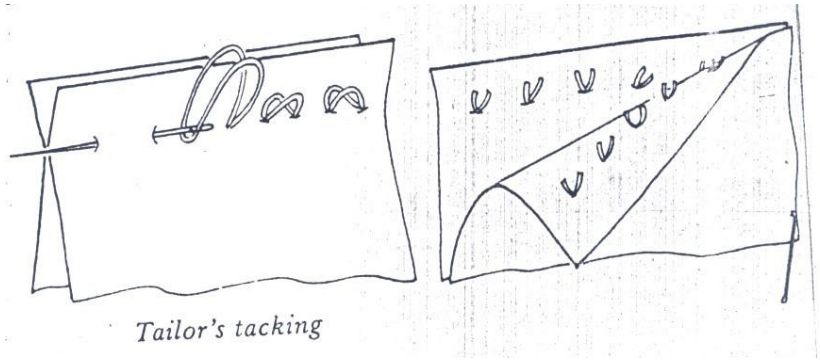
Thread Marking

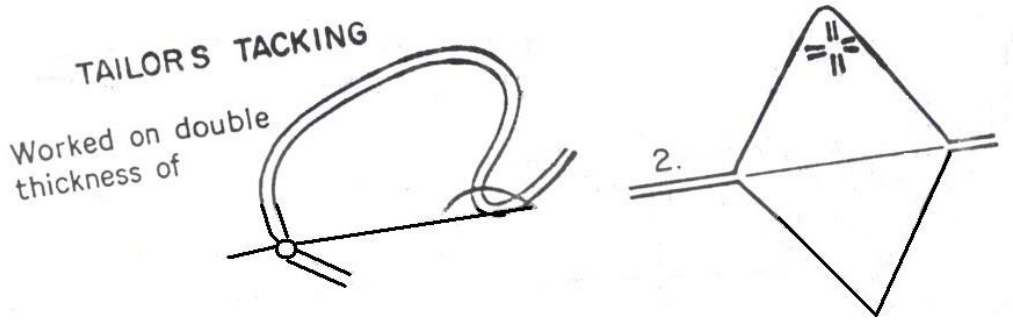
This is another type of tacking stitch and temporary stitch. It is used for marking out fitting lines, pleat lines and so on. Thread marking is produced with double thread on two or more layers of materials. Series of loops are produced when thread marking is being worked. The layers of materials are gently separated apart through the use of a pair of sharp scissors for cutting between the threads. After being cut, series of identical and clear lines are formed on the pattern pieces. Thread marking does not require fastening on and off.

Tailor's Tacking

These are used to transfer construction marks, e.g. seam notches, darts etc., from a pattern to the cut-out material. These are also temporary stitches.

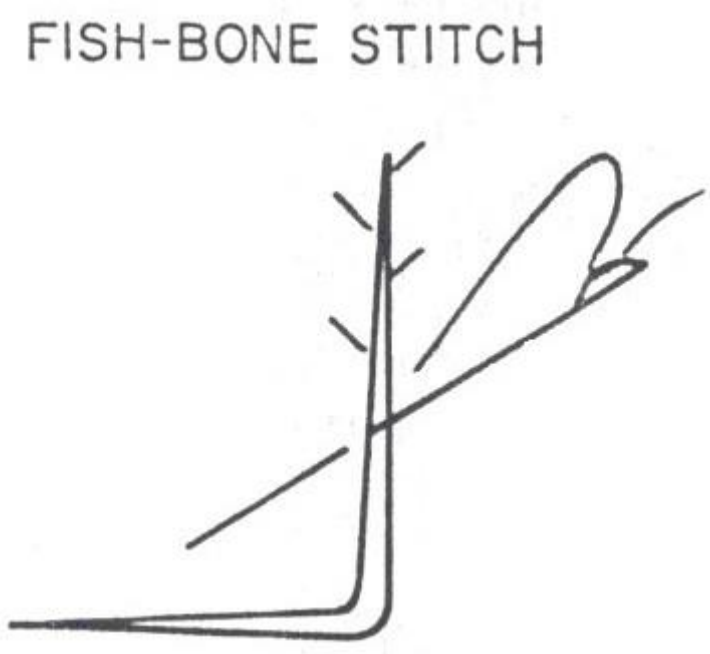
Use the cotton double in the needle and have contrasting colour from the fabric. When all the tailor's tacking has been done, remove the pattern; separate the layers of fabric and cut the cotton between the two layers.





Fishbone Stitch

Fishbone stitch s used to draw the edges of a clean straight tear along warp and left together before darning this is another form of tacking and it is removed after the darn has been worked with very fine matching thread or a thread drawn from the fabric itself. In some cases it may not be necessary to remove the fishbone stitch so as to help in catching the fabric at the sharp point. Fish bone stitch is mostly used for hedge tear darn.



3.2.3 Permanent Stitches

These stitches are also referred to as joining stitches. They are used to join together two or more layers of fabric and different parts of a fabric permanently. They are worked with matching thread depending on the type of fabric being used. For example, cotton thread is suitable for cotton fabric but, it is not suitable for silk and woolen materials. There are many permanent stitches. Examples are running stitch, backstitch, over-sewing and overcastting stitch.



3.2.4 General Rule for Working Permanent Stitches

1) Select the right stitch for the work to be carried out Diagonal tacking is temporary stitch. It can be used to hold together collars, waistbands and pleats before applying permanent stitch.

2) Ensure that you make use of the right size of needle for the material to be sewn. Number nine (9) needle is suitable for sewing lightweight and delicate fabrics.

3) Use the right type of thread for the material being sewn. Rayon thread is suitable for rayon fabric while synthetic thread is suitable for synthetic fabric.

4) It is essential to fasten on properly at the beginning of a stitch and fasten off stitches securely at the end.

5) Work one stitch on a material at a time.

6) It is very important to put on thimble on the middle finger of the hand used for sewing with needle. This is an attempt to void sore on the middle finger while pushing the needle through the material.

7) Avoid the use of a knot for fastening on stitches. Knots may become loose and can also form tiny lumps in stitches when the material is being pressed.

Running Stitch

Running stitch is permanent stitch worked by hand. It is suitable on soft materials used for under clothing. It is good on pitch knickers, under slip, and pillow slip. This stitch is also used for gathering materials. When working running stitches, they should be fastened on with back stitch fastened off securely with another back stitch. Running stitches should be small and equal spaces between the stitches should be regular and

equal.

Working

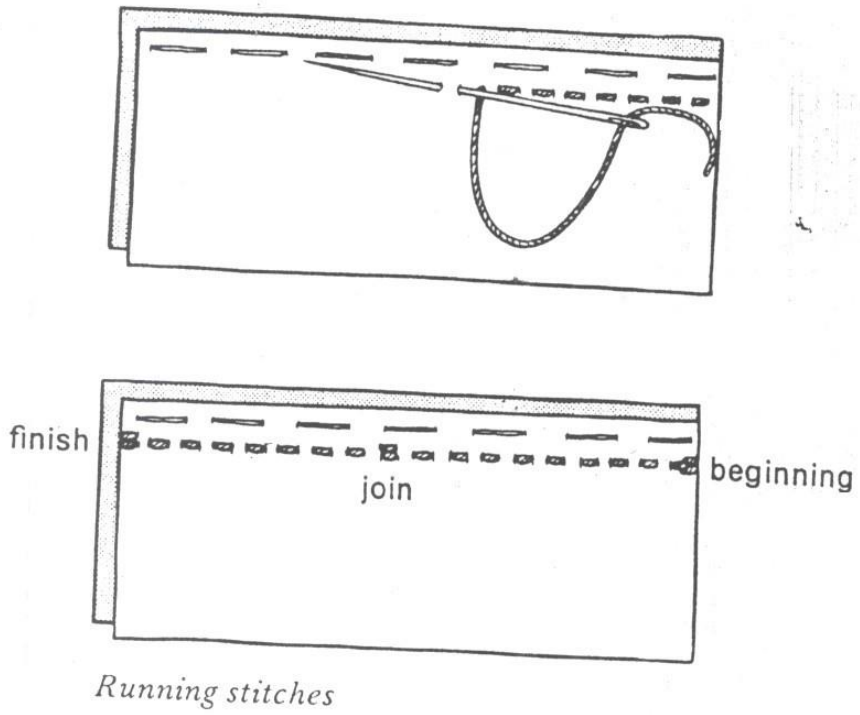
Running stitch is worked from right to left on two layers of fabric. One stitch is worked at a time

1) Fasten on thread at the beginning with two or three back stitches on the stitching line.
2) Work the stitch one by one to the end of the stitching line

3) Stitches produced should be equal in length.
4) There should be no space between the stitches
5) Fasten off thread securely at the end of stitching line with 2 or 3 back stitches.

Running Stitches

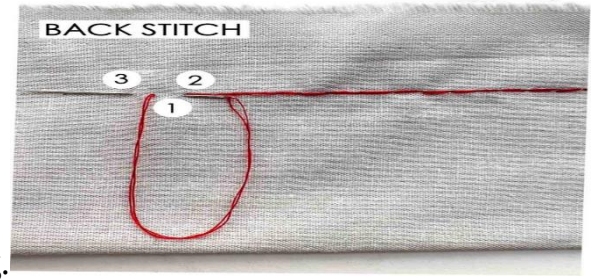
These permanent stitches are used chiefly to sew two pieces of material together. Begin and end with double stitches. Stitches and spaces should be small, regular and equal.



Running stitches

Back Stitch

This is another form of permanent stitch. It is stronger than running stitch. It looks like machine stitch on the right side of fabric. It is one of the strongest of hand stitches useful when sewing machine is not available. Back stitch can be used to join together baby's dresses permanently, on parts of a garment that require added strength and on materials that require frequent washing. It is a stitch that is very useful for fastening on and off securely in hand sewing.

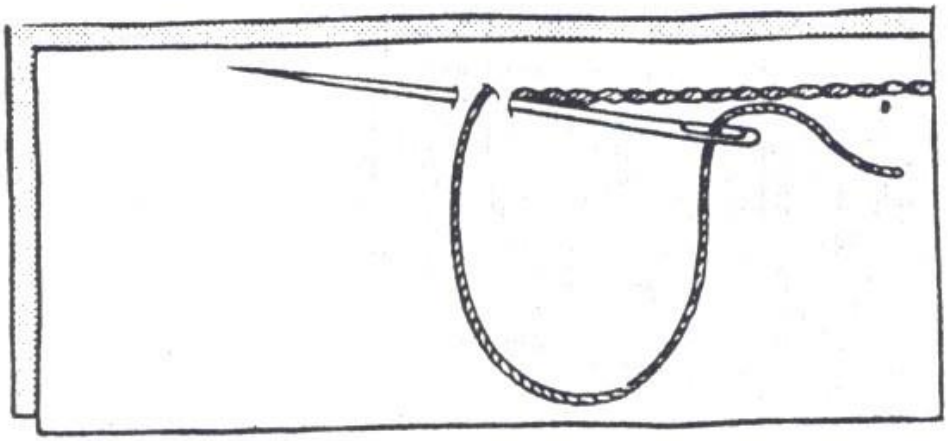


Working

It is worked from right to left

1) Fasten on at the beginning with 2 or 3 back stitches on the stitching line

2) Work the stitches long the stitching line
3) Fasten off securely with back stitches at the end of the stitching line.



Back stitches

Over-Sewing

Over sewing is a permanent stitch. The stitch is also known as topes wing and used to join two folded edges or selvedges together. It is worked from right to left. The side of the material being over sewed is usually held away fro the worker. Matching thread should be used for over sewing. It is also used for attaching lace.

Working

1) Begin with 2 or 3 back stitches on the stitching line
2) Tack the two turned-in edges t the same level.
3) Fasten off securely with back stitches at the end of the stitching line.

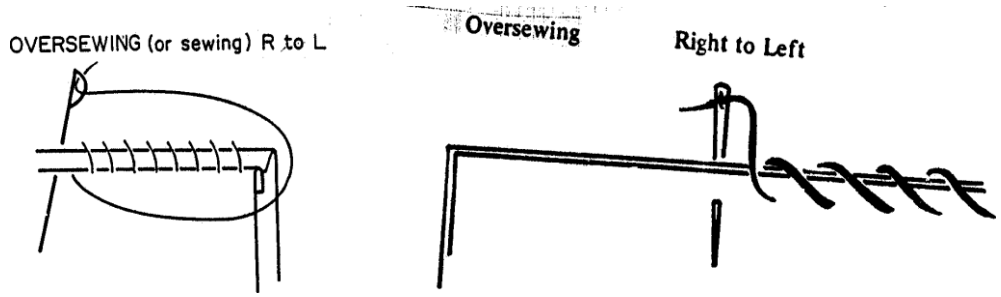
Over Sewing

Over sewing is a permanent stitch. The stitch is also known as topse wing and used to join two folded edges or selvedges together. It is worked from right to left. The side of the material being over sewed is usually held away from the worker. Matching thread should be used for over sewing. It is also used for attaching lace.

Working

1) Begin with 2 or 3 back stitches on the stitching line
2) Tack the two turned-in edges at the same level.

3) Hold the edges between the thumb and the forefinger of the left hand.
4) Pass the threaded needle through the edges of both folds with needle point coming straight towards you.
5) Repeat this several times until the edge is finished



Overcastting Stitch

This stitch is used for neatening the raw edges of single fabric. It is necessary for materials that fray easily. Overcastting stitch is worked from left to right. The stitch should not be worked tightly.

Working

1) Get the edge ready for the stitch
2) Insert the needle for each stitch from the underside of the fabric. Bring out the needle on the top side of the fabric
3) Repeat several times until the whole edge is overcast than their depth.



Use: neatening raw edge of *single* fabric.
NOTE: Work from *left* to *right*.

3.3.5 Decorative Stitches

These stitches are also called embroidery stitches, Decorative stitches should always be worked with crewel needle. They re always worked on the right sides of fabrics to make them more attractive. These types of stitches are often worked on table cloth, pillow slip, children's

clothes, women's dresses such as caftan, bou-bou and blouses. The starting, finishing and joining of embroidery threads should not be seen. The final work should be neat and attractive. Knots should not be used when working decorative stitches. There are many types of decorative stitches. Examples are chain stitch, herringbone stitch, satin stitch. Others are cross stitch, blanket stitch and so on.



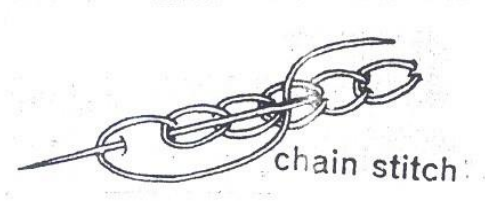
Chain Stitch

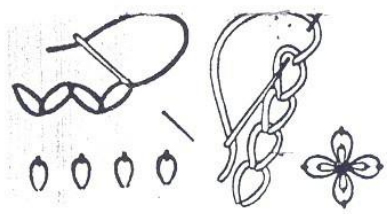
Chain stitch is produced by series of loops on the surface of the fabric. It is used as an outline stitch. The appearance of chain stitch looks like a line of backstitches on the wrong side of fabric.



Working

1) Begin the stitch with a back stitch
2) Bring out the needle on the line of stitching
3) Hold the thread firmly and insert the needle into the thread hole.
4) Bring the same thread out and allow a short length of thread over and above the loop of thread
5) The loop should be tightly pulled and return the needle back into the same hole
6) Repeat the stitch until work is completed.





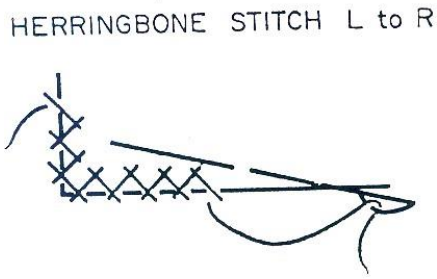
Herringbone Stitch

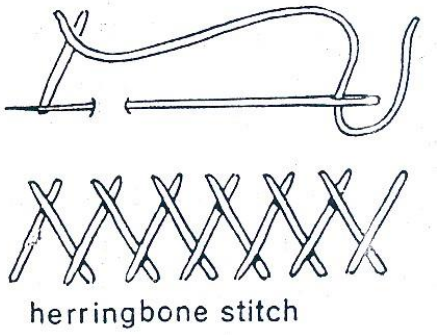
This stitch is worked from left to right. The stitches should of the same depth and the space between the stitches should be equal.



Working

14) Begin the stitch with one or two backstitches
15) Put the needle on the lower line
16) Make a small backstitch along the top line leaving a short space on the top line.
17) Go back to the bottom line and make another backstitch
18) Repeat these two processes along the fabric.





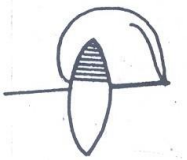
Satin Stitch

This is an embroidery stitch. It is used to fill in shapes of different sizes.
It is worked from the top down.



Working

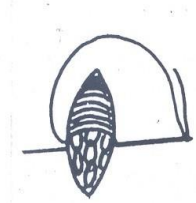
1) Begin with a back stitch
2) Draw out the needle on the left hand side of the fabric
3) Put the needle point at the top right hand side of the fabric.
4) Draw the needle out on the left hand side nearer to the thread at the beginning. Ensure that the next stitch touches the previous one.



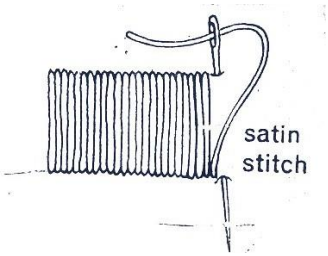
Insert on the right hand side to touch the previous stitch and so on. It is very important that this stitch is worked very evenly and that the stitches are quite parallel.



Sometimes to give a better effect the stitch is worked diagonally across the shape. Be careful never to make the stitches too long, or they will be easily pushed out of position, especially during laundering.



Sometimes a raised effect can be more attractive. This is obtained by working a' few running stitches in a small area, or chain stitches in a larger area, before working the satin stitch.



3.3 Seams

A seam is a method of joining two or more pieces of material together. It is an essential process in dress making. Seams must be strong so that they can stand the strain of hard wear. The type of seam must be suitable for the fabric and garment on which it is used.

There are two types of seams namely, the flat seam and the ridge seam. Flat seams are suitable for garments which touch the skin while ridge seams are suitable for outer garments.

For sewing purposes, it is important to know how to make different types of seams.



Run and Fell Seam

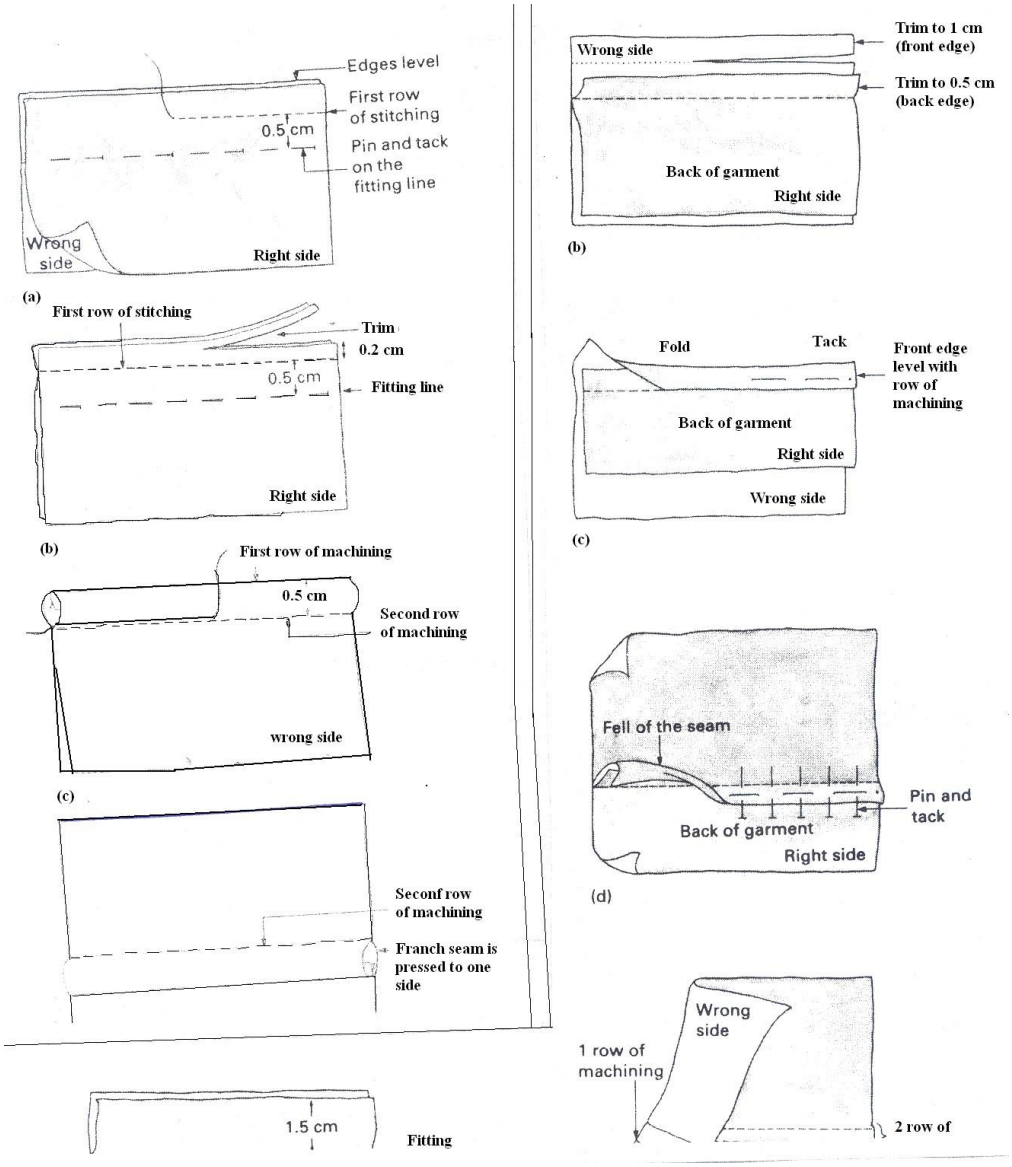
This seam is flat and is used for under garments. The machine run and fell seam is a strong seam with two rows of machining showing on the right side. It is often used on shirts, jeans and pyjamas. The seam is flat and it is made on the right side of the garment. The seam can be decorative especially if stitched with thread of contrasting colour. For printed materials, it is made on the wrong side of the garment.

Running stitches and Hemming stitches are used for a run and fell seam which is worked by hand on the wrong side of the garment.

Activity; How to make Run and Fell seam:

1) Place two pieces of material together with the wrong sides facing each other;
2) Tack and machine on the fitting line or use running stitches for a run and fell seam;
3) Trim away the seam allowance on one turning (back edge) to about O.5cm
4) Trim the seam allowance of the other turning (front edge) to about 1 cm;
5) Fold the front turning over the shorter back turning and tack through three layers of material;

6) Open up the material so that the folded edge lies towards the back of the garment. Press flat and tack the folded edge down.
7) Machine close to the folded edge or use hemming stitches for run and fell.
8) Remove tacking and press



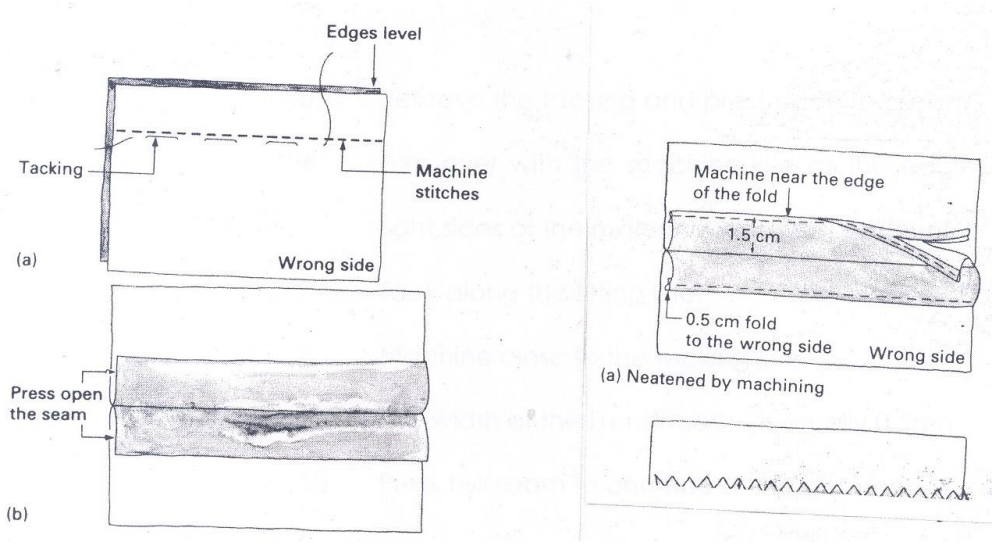
Open/Plain Seam -This is a flat seam which shows no stitching on the right side of the garment. It is often used to join shoulders, sides and sleeves of blouses and dresses. The seam is not bulky (thick) and is particularly suitable for sewing cotton fabrics.

Activity: How to make an open/plain seam:

1) Place the right sides of the material facing each other and with the edges level. Pin and tack along the fitting line;
2) Remove the pins and machine just a little above or below the tacking;
3) Remove the tacking and press open the seam;
4) Neaten the open seam by one of the following ways:

(a) machine -fold in O.5cm of the raw edge and machine very near to the edge

(b) pinking the edges with pinking shears
(c) over casting the raw edges
(d) loop-stitching the raw edges: this is suitable for flannel and brushed cotton
(e) binding -by using crossway strip. This method is suitable for arm hole and waist line seams. Binding should be used on flimsy material otherwise the thickness of the seam will cause wear and tear around the areas.



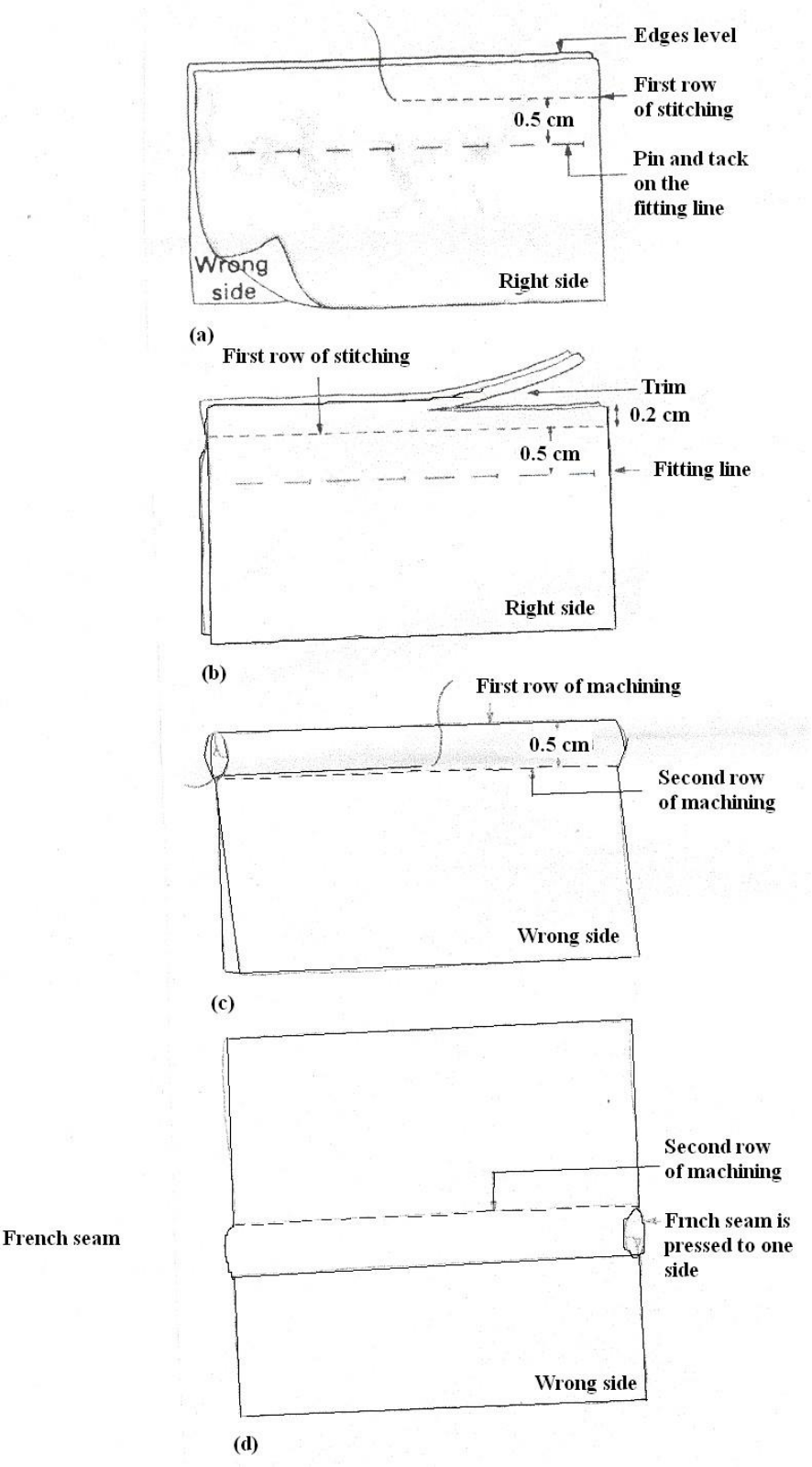
Plain seam

Open/Plain Seam

French Seam: This has a ridge and is most suitable for flimsy materials i.e. those that fray easily and also for children's garments.. The seam is strong as it has two rows of stitching. It is neat as the raw edges are hidden within the seam.

Activity: How to make a French Seam:

1) Place the wrong sides of the material facing each other with the edges level;
2) Pin and tack on the fitting line;
3) Remove the pins and machine O.5cm above the fitting line;
4) Trim the seam allowance to less than O.5cm from the machine line;
5) Remove the tacking and press open the seam;
6) Turn over with the machine line at the edge and the right sides of the material facing each other;
7) Tack along the fitting line;
8) Machine close to the tacking line;
9) The width of the French seam is usually O.5cm.
10) Press the seam to one side of the garment



4.0 CONCLUSION

This unit is a very practical one. You have learnt that fabric knowledge is essential not only in choosing the type of stitches to use for sewing but also in determining the type of seams to use and how to place the

material for cutting. Specific seams are used for sewing specific articles or even parts of articles. For example the French seam is usually used for flimsy materials and children's garments.

5.0 SUMMARY

This unit has discussed the importance of stitches in sewing. You have also learnt about the structure of fabrics in terms of their weaving. You have also been able to make specimens of various stitches and seams. You should be able to assess your specimen book.

6.0 TUTOR-MARKED ASSIGNMENT

1) Prepare folder on basic stitches
2) Prepare folder on seams
3) Submit your folders for assessment

7.0 REFERENCES/FURTHER READINGS

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UNIT 2 CLOTHING CONSTRUCTION PROCESSES I

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Finishes
    3.2 Openings
    3.3 Fastenings
    3.4 Summary of Openings and Fastenings
    3.5 Edge Finishes and Trimmings
    3.6 Simple Embroidery Stitches
4.0 Conclusion
5.0 Summary
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1.0 INTRODUCTION

In clothing construction, knowledge and ability to use the sewing machine and its various attachments to the fullest is very important. There are different types of machines in the market today and they reduce the labour of stitching. This unit will still lead you into other processes involved when making clothes. By now you must have become more familiar with machine stitches and you will be able to put good finishes on your articles when making them by the time you would have gone through this unit.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

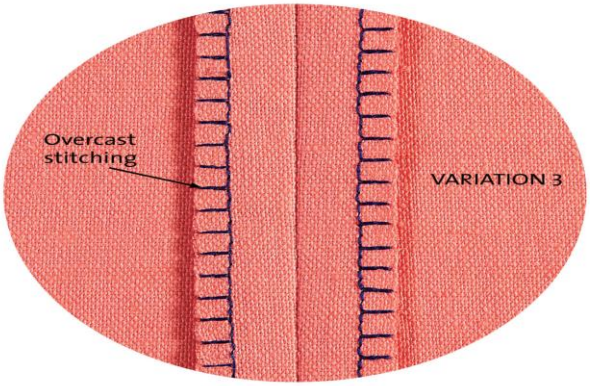
- put good and correct finishes to your garments during construction
- use the sewing machine more effectively
- attach zip very well on an article of clothing
- identify the types of openings that can be put on garments
- make specimens of zips, buttons, hooks and eye or press studs on articles
- distinguish between the different types of edge finishes
- learn how to make an edge finish e.g. false hem and apply to their garments.

3.0 MAIN CONTENT

3 1 Finishes

The armhole, neckline, waist of skirt/trousers and lower edges of dresses all have to be neatened to protect the raw edges and give the garment a strong finish, give a smart look and make the article last longer. Edge finishes can also be decorative. The different ways of neatening edges include:

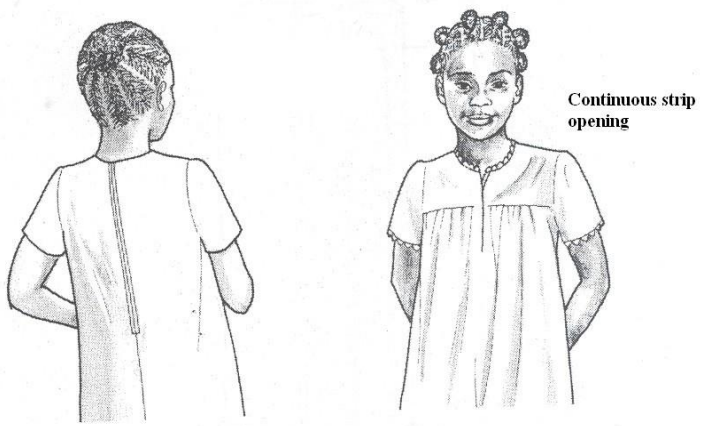
- Shell edging by turning the raw edge of the article;
- False or faced hem by turning the raw edge of the article;
- Binding by using pieces of fabric cut on the cross;
- Hemming by turning the raw edge of the article
- Facing by using shaped pieces of fabric;
- Piping by using pieces of fabric cut on the cross.



3.1 Openings

Openings are provided in outfits to make them easy for wearing and removal. It is impossible for one to wear a tightly fitted frock or blouse without damaging the outfit if there is no opening. Opening therefore makes it easy to wear a garment and take it off. Openings should be long enough to allow for ease of wear and removal to serve a useful purpose. They must suit the type of garment and must be at the right place. They should be strong and neatly finished. There are many types of openings and they include:

- Zipped opening
- Continuous strip opening
- Faced slit opening
- Bound opening



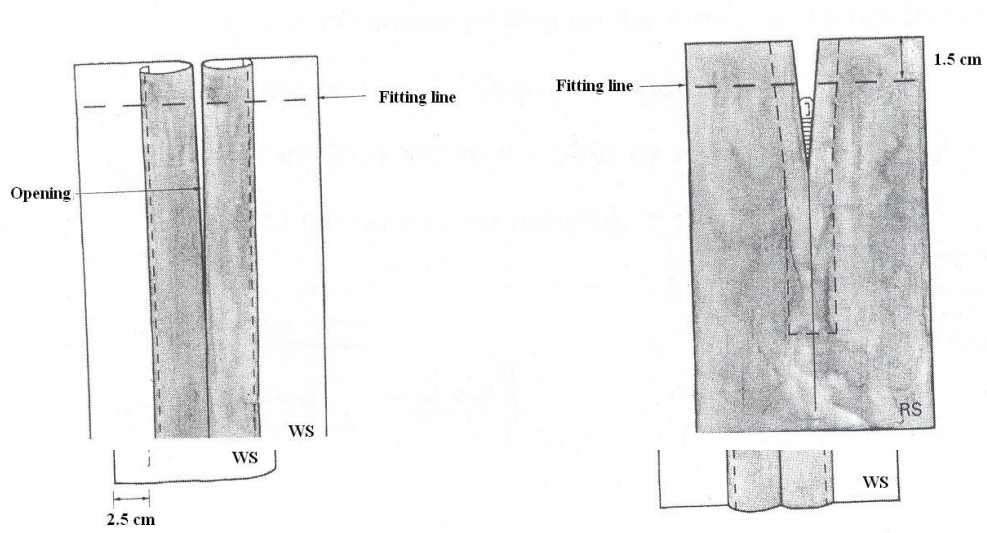
Points to remember when making openings

1. The opening should be of suitable length. Too short an opening will cause too much strain and the base of the opening will tear;
2. The position of the opening should be such that it can be fastened easily;
3. The two sides of the opening should be of the same length
4. The opening should lie flat when fastened;
5. The stitching must be strong, especially at the base;
6. The wrap or the overlapping part should be wide enough to prevent gaping;
7. Choose an opening suitable to the type of garment.

Zipped Opening: These are very popular on both adults' and children's garments. They can be sewn on quickly, are easy to use and wear well. Zips are available in different lengths and colours. They are made from plastic or metal. While sewing, choose a zip that is of the same length as the opening of the garment and which matches the colour of the material.

a) Tack on fitting line. Machine to the base of opening

b) Attach the zip to the opening

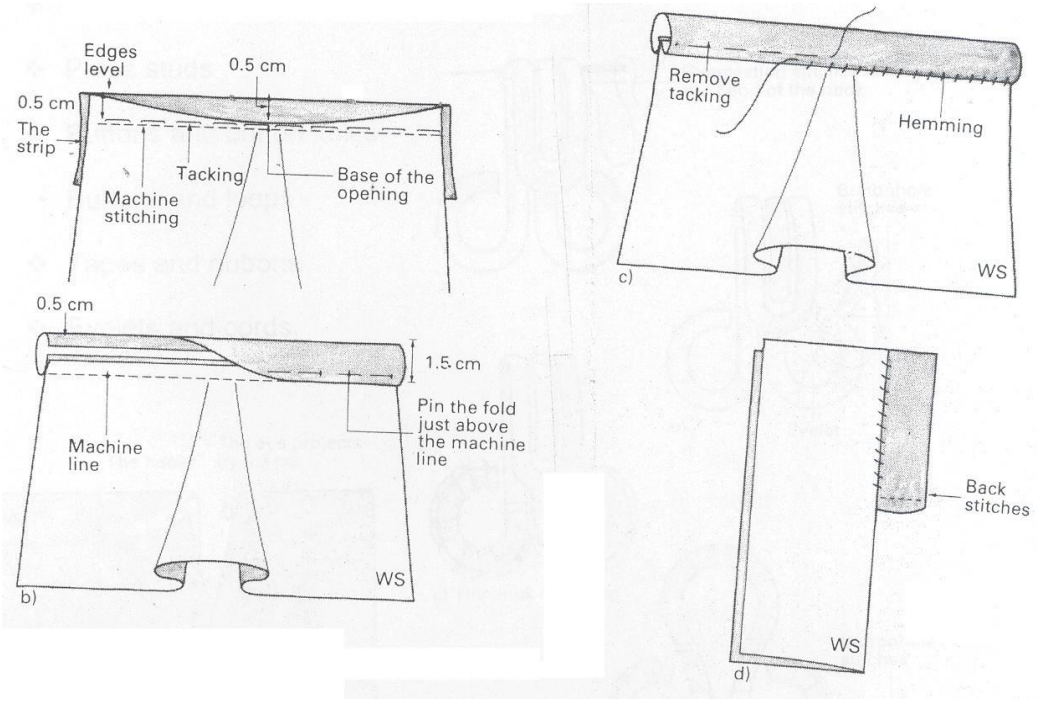


Continuous Strip Opening: This is a short opening suitable for children's dresses, night-dresses or openings on sleeves.

How to make a Continuous Strip Opening:

1. Cut a slit the length of the opening
2. Cut a strip of material along the straight grain with length = twice length of opening + 2.5cm, and width = twice finished width + 1 cm.
   For an opening 10cm long with a wrap 1.5cm wide, the strip should be 22.5cm long and 4cm wide.

3. Place the right side of the strip facing the right side of the garment
4. Treat the opening as a straight line and tack the strip to the opening so that the base drops O.5cm from the edge of the strip
5. Machine along the tacking line
6. Press the seam flat
7. Turn in O.5cm of the raw edge of the strip and place it on the wrong side of the opening along the machine line.
8. Hem the strip in position picking up the machine stitches so that no stitches show on the right side of the opening.
9. Press opening and secure the base by sewing back stitches along the wrap at the base of the opening.



Continuous strip opening

3.2 Fastenings

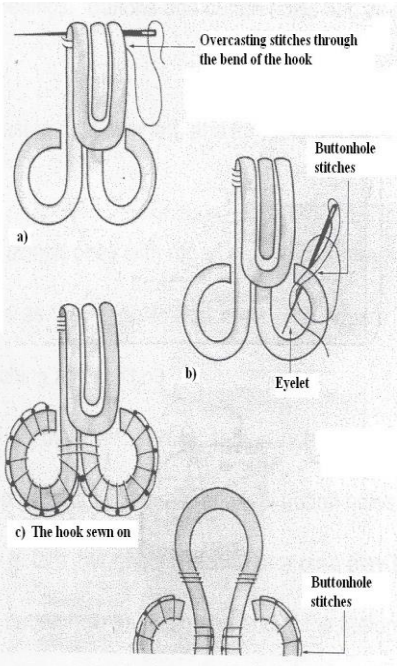
There are many types of fastenings available in the market. The type chosen should be suitable to the type of opening and the garment.

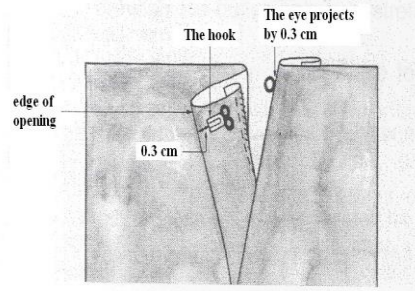
Some fastenings can be seen while others are concealed between the wrap of the opening.

Fastenings should be sewn on double thicknesses of material. They should be sewn directly opposite to each other so that the opening will be flat when fastened. They should be sufficient in number so that the opening does not gape open when the garment is worn. A fitting garment will need more fastening than a loose fitting one.

There are many types of fastenings and they include:

- Zips
  - Hooks and
  - eyes/bars Press
  - studs
  - Buttons and button
  - holes Buttons and
  - loops





Position of the h

3.3 Summary of Openings and Fastenings

Type of Opening	Uses	Method of Fastening
Simple continuous	Garments where fastening is on the bend only, e.g. sleeve, knickers, wrist openings, skirt	Button and button hole
Bound Opening	Back or front of children's garments	Button and loop, hook and eyes, ribbon or tape
Faced Opening	Blouses, children's garments jumpers	Button and loop, hook and eyes/bars
Converted continuous opening	Garments where fastening is expected to extend beyond hip line-knickers, shorts or slacks, sleeve opening	Button and button holes
Lapped Seam opening	Back of dresses, front of dresses, side of skirt, ' slacks or shorts	Zippers

Fastenings must suit the type of openings. Buttons and button holes and zippers are most commonly used.

For women's and girls' garments, fasten right over left, and for men and boys, left over right.

The strongest button holes are horizontal ones with round end near centre front.

This will accommodate the buttons as they slide to that end. The square end prevents the button hole from stretching and splitting.

Where designs on fabrics have to be matched, vertical button holes are used.

These should have either two round ends or two square ends. If button holes are placed vertically to attach straps, e.g. to a pair of boys' shorts or a girl's play suit; make a round end at the top of the button hole and a square end at the button.

Where button holes have to be made where there is no centre line e.g. opening on left side of knickers, mark the button hole half the diameter of the button from the edge of opening inwards.

Buttons should be stitched on securely. Attaching buttons on openings with snap fasteners or press studs behind because it is too difficult to make. Hutton hole is not encouraged. Buttons fasten and decorate garments at the same time. Place for buttons are marked at regular intervals and button holes decide exactly where the buttons should be, so that these should be made first. Loop behind the buttons prevents undue strain on the garment fabric. When a thick fabric is used and a row of buttons are necessary for fabrics as in garments opened right down the front, a tape or ribbon 12.5cm wide placed on the line where the buttons are to be stitched on, will act as a stay and prevent direct strain on fabric of the garment.



Press Studs: are used on children's dresses where there is little strain, when using press stud, sew the ball part of the press stud on, pin the opening on closed position, press the ball so that it leaves a depression on the fabric. This depression determines the position of the socket. The socket should be on top of the opening.

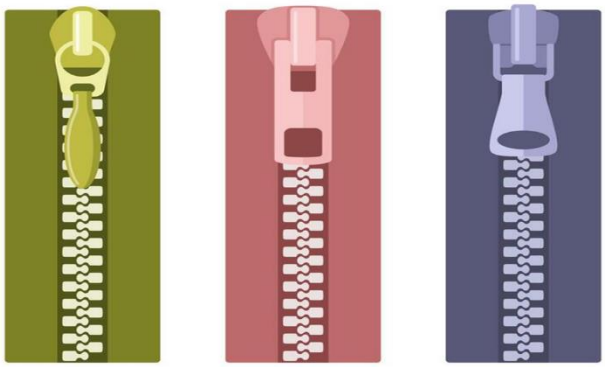


Hooks and Eyes: are used where there is strain as in belts, top of neck opening, end of zippers stitched on back opening of garment, select the size of hooks to match the fabric. Size 00 is for very flimsy fabric; size 0

for cotton and linen, while size one or two is for band on skirt or knickers where there is greater strain.



Zippers: are either metal or nylon quality. Nylon zippers are for synthetic fabrics while cotton zippers are for cotton and linen fabrics. Zippers should not be conspicuous after stitching them on fabrics.



Piping foot (a machine accessory) can be used to stitch the zipper on garment. End of zippers should be neatened by loop stitching them to seam turnings.

Eyelets and Cords



3.4 Edge Finishes and Trimmings

Edge finishes are important in the art of dress making. The method of finishing each edge depends entirely on the edge to be finished and the style of the garment. An edge could be finished by merely turning down a hem and stitching it down, or by using another piece of material, or by attachment of trimming. Whichever method is used should be suitable and strong. Edges could be decorative and decorative edge finishings include:

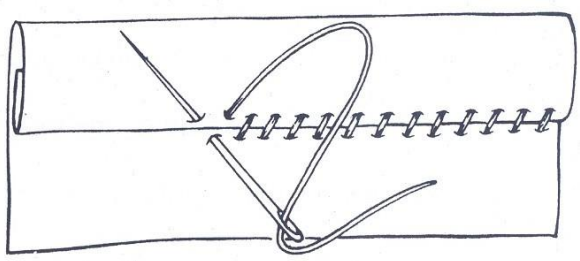
(a) attaching lace or trimmings
(b) scalloped edges
(c) bound and faced edges using contrasting materials
(d) rouleau attached with faggoting
(e) shell edging
(f) decorating edges with embroidery stitches.

Simple Hemming: This is suitable for garments that require frequent washing like lingerie and children's dresses.

Method

(a) Turn down the required width of hem and tack

(b) working from right to left, pick one thread on single material below the fold and slant needle through the fold. Finish off with double stitches



Simple Hemming

Slip Hemming

This is suitable for finishing the hems of dresses and skirts especially when stitching should not show.

(i) Turn down hem, pin and tack.
(ii) Place a stitch through the fold, about 6 mm in length.
(iii) Pick up only one or two threads of under fabric.

Simple Hemming

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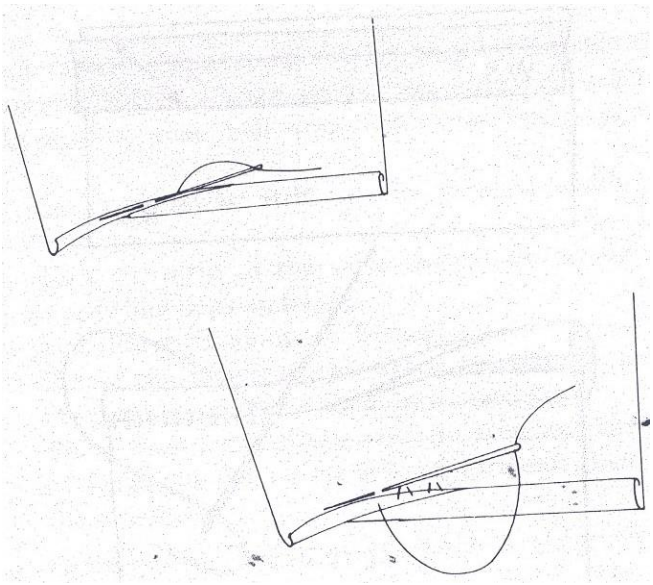
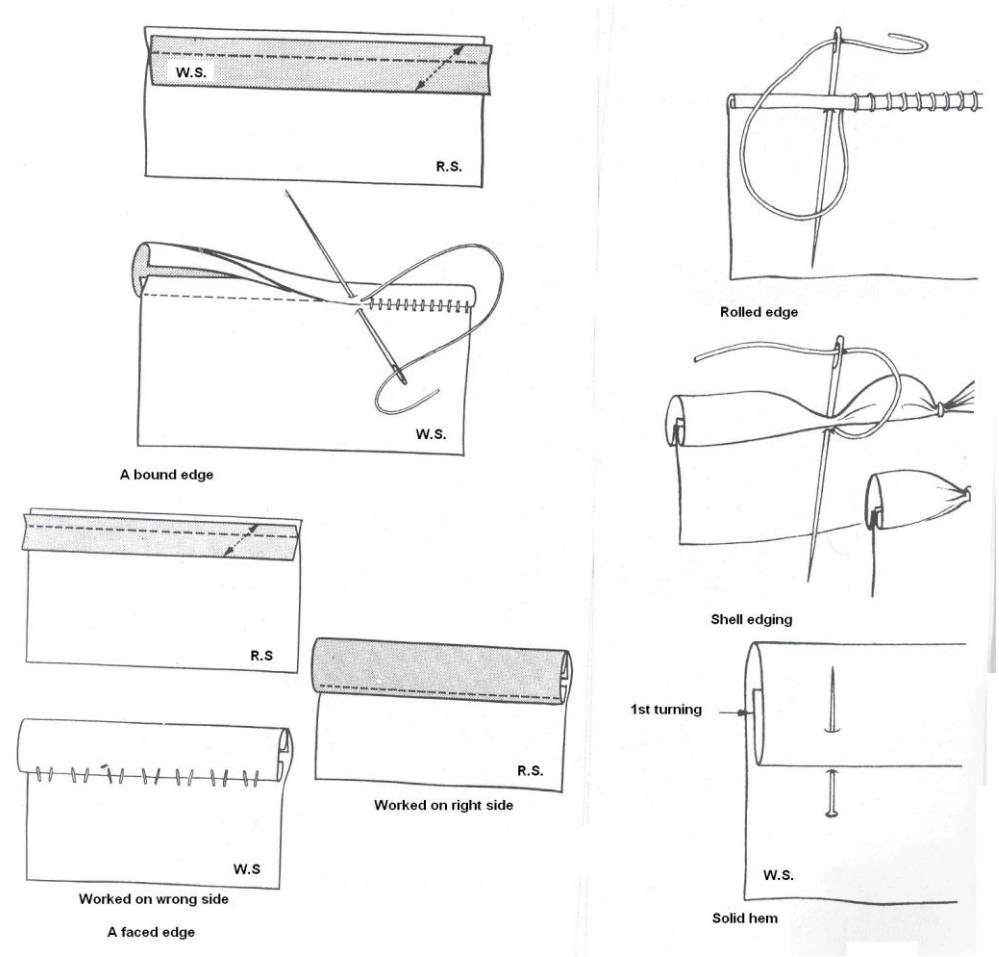


Slip Hemming

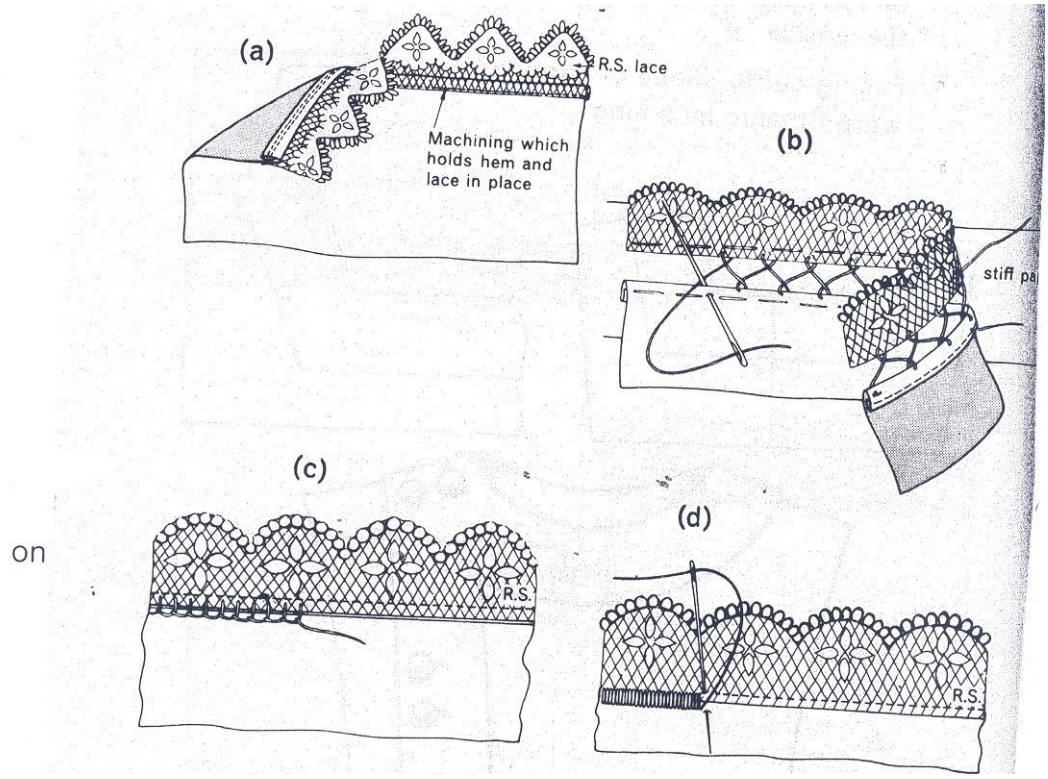
The hem could be wide or narrow depending on the edge to be hemmed. A wide hem is usually 5cm and a narrow hem is 12mm. When another piece of material is stitched to the edge and turned completely to the wrong side of the garment it is termed a false hem. Edges could be finished by applying a false piece in facing, binding and piping. Facing is decorative; it could be straight, shaped or crossway. Lace could be used as an edge finish to an under garment. Where this is not available, the edge could be neatly rolled and hemmed or shelled.



Type of Edge Finish	Method	Finish
Hem	Turn and lay and make a hem. Narrow hem - the width of the hem. Wide hem is usually 5cm with 6mm lay. Wide hem on shear or thin fabrics -the width of the lay is equal to width of the hem'	Finish on wrong side of garment using hemming or slip stitch.
False hem (not decorative)	Place right side of false piece to right side of garment. Stitch on fitting line and press seam open. Turn false piece completely to the wrong side of garment,	Turn down a lay of 6mm wide and slip stitch.
Straight facing (decorative)	Place right side of false piece to the wrong side of garment. Stitch along the fitting line, press seam open and turn to the right side of garment.	Turn down a lay of 6mm wide and sew in position using invisible decorative stitch.
Shaped facing (decorative) The warp threads of the edge of garment to be finished run in the same direction as those of the false piece.	Place right side of false piece to the wrong side of garment. Tack, stitch along the fitting line, turn completely to the right side.	Finish on the right side of garment using invisible or decorative stitch,







on

Attaching Lace

(a) Machine stitching
(b) Faggoting
(c) Blanket stitching
(d) Satin stitching
(g) machine
(h) faggoting
(i) blanket stitch
U) satin stitch

Choice of Lace

1. Choose lace which is the same fibre and texture as the main garment;
2. Choose the correct width for different parts of the garment, to make it lie well;
3. Join the lace where it meets firmly but inconspicuously.

Scalloped Edges: Trace the scallops unto the material. If the edge is to be neatened with satin or button hole stitch, pad the width of the scallops with running stitches.

Faced Scallops should be worked following the instructions on simple facing.

Type of Edge Finish	Method	Finish
Crossway facing	Place right side of crossway strip to the wrong side of garment easing on for concave curves and stretching for convex curves. Tack and stitch along the fitting line. Turn to the right side of garment	Finish on the right side of garment with decorative fine machine or stitch very close to the edge of the fold
Shaped false hem	Warp and weft threads of false piece fabric run in the same direction as those of garment to be finished	Turn to the wrong side of garment and slip stitch in position
Crossway Binding (decorative)	Tack right side of crossway strip to the right side of garment. Slightly for convex ease. Stitch and turn seam away from garment. Turn a lay on false piece to meet the edge of seam.	Hem the turned edge to the stitching line.
Crossway Piping (decorative)	Tack right side of crossway strip to the right side of garment along the fitting line, stretching slighly for concave curves and easing for convex curves. Stitch, turn seam away from garment and trim to the required width. Turn crossway strip to the wrong side leaving just the width of seam to show on the right side of garment. Tack firmly.	Stitch on the right side into the groove of first stitching between the garment and crossway strip. Loop stitch raw edge of crossway strip on the wrong side of garment.

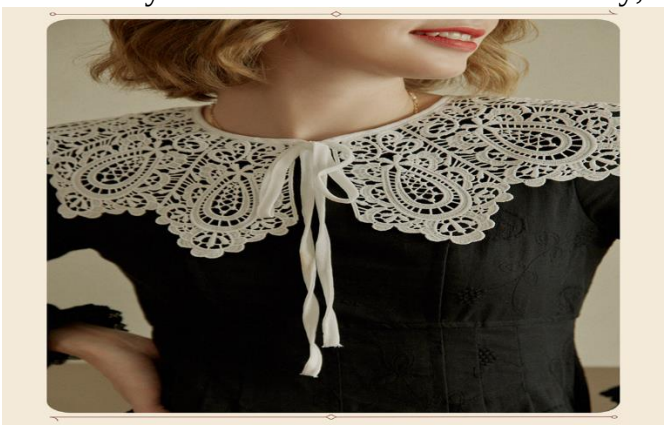
3.5 Simple Embroidery Stitches for Finishing Edges

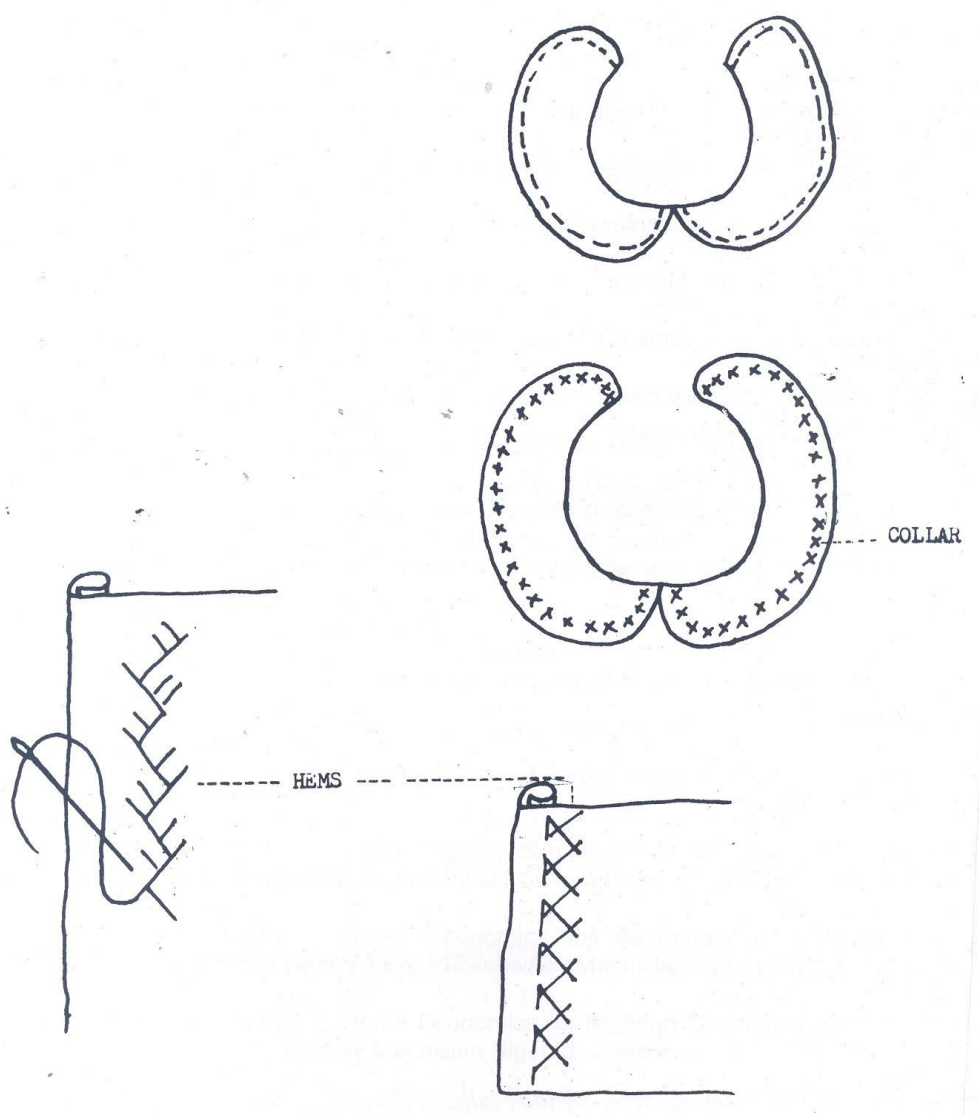
Embroidery stitches could be used to finish edges of garments, e.g. neck edges and hems of lingerie, including the legs of knickers and hems and collars on children's garments.

Turn down a hem about 6mm wide on the wrong side of the garment and tack neatly. For edge of collars, use a gauge to thread mark even width right round the edge of collar. Embroidery stitch should be finished before collar is attached to the main garment.

Choose any good quality soft mercerised embroidery cotton that matches the fabrics. Try out the type of stitch chosen on the same thickness of

fabric. The embroidery stitch is to be sewn on with three strands of embroidery cotton. If this is too heavy, use two strands only.





Embroidery Stitches on Edges

4.0 CONCLUSION

This unit has dealt extensively on various clothing construction processes which require serious practice. It is expected that when you apply the techniques shown and discussed in this unit, you will derive comfort and

joy as you sew any type of clothing item.

5.0 SUMMARY

In this unit you have learnt about finishes and for what purposes they are used. You have also learnt about openings and their importance in dressmaking. This unit has also introduced you to edges, trimmings and how to use some simple embroidery stitches in dressmaking. You are encouraged to apply the various steps for each process you would wish to use while sewing. You will be able to produce a neat, strong and reliable product which will give the user satisfaction.

6.0 TUTOR-MARKED ASSIGMENT

1) Make folder on different types of opening
2) Prepare folder on different fastenings and edge finishes
3) Make a cloth specimen showing the use of embroidery stitches on garments
4) Submit all the folder for assessment

7.0 REFERENCES/FURTHER READINGS

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UNIT 3 CLOTHING CONSTRUCTION PROCESSES II

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    3.2 How to Make Simple Apron
    3.3 Making a Scarf
    3.4 Making a Tray Cloth
    3.5 Finished Mat
    3.6 Oven Mittens
    3.7 Pot Holders
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Readings

Dressmaking is a hobby and business for many people and has continued to be popular. Dressmaking business has a lot of value to Nigerian economy. Having gone so far in the clothing and Textile course, you must have developed more desire to excel in the course as you must have acquired more skill and knowledge from the previous units.

Making household articles for yourself could be interesting and fun as well as being enjoyable and satisfying. Having studied the topics on stitches and seams, you should now try your hands on the suggested simple articles in this unit. As you develop the skill, you may even find yourself generating some income from this practice.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- cut out a s1mple pattern
- sketch designs to show how apron styles could be varied
- make an apron and cap or pillow slip or any other household article.

3.0 MAIN CONTENT

3.1 Making of Simple Articles

Some useful household articles can be made at reasonable cost from cheap materials and materials left over from your sewing. Such articles include pot holders, oven mi1tens, tray covers, fringed mats, tray covers, scarfs, aprons, caps and bags

3.2 How to Make a Simple Apron

Aprons are worn to protect our outer garments when we are cooking or doing work within the house or in our workshops. Aprons can be made in different styles and shapes depending on taste and ability. There are three main apron styles namely: simple carpenter's style, duchess apron and waiter's apron. The style most commonly used in schools and homes is the carpenter's style. It is easy to make and keep clean. It is also cheap in time of fabric and money.



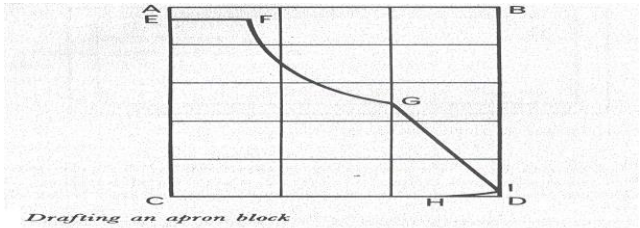
Materials required:

1. 1 metre of plain or floral cotton fabric (the length should be long enough to cover the clothes over which it is worn), with a width of 90cm. The bodice should be 8cm below front neckline to waist;
2. matching thread
3. embroidery thread (optional)

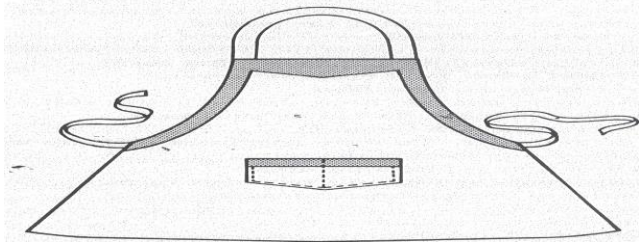
Instructions for Drafting an Apron Block

1. draw a rectangle, one side being the full length of the garment, the other side being half the hip measurement;
2. label the rectangle ABC and D
3. divide the rectangle into three lengthwise and five widthwise. A to C is the centre front of the apron;
4. A to E is 8cm from centre front neck;
5. E to F is the front chest measurement less 10cm
6. G is a quarter of the waist measurement;

7. I is 2.5cm from D.
8. Join FG to form the armhole curve;
9. Join GI for side of apron
10. Curve I through H straight to C for hem line
11. cut out the block and label it apron



Drafting an apron block



Finished apron

Cutting Out

1. Layout the material and the pattern. Fold the cotton fabric into two with the right side end the selvedges together. Place the pattern on the fabric, with the centre fold along the folded edge of the material; i.e. place EC on fold of fabric and Cion cut edge of fabric. This arrangement will allow large pieces from the armhole to be used for pockets.

2. Pin and cut out. Remove the pattern and mark the seam lines.

How to make up the Apron

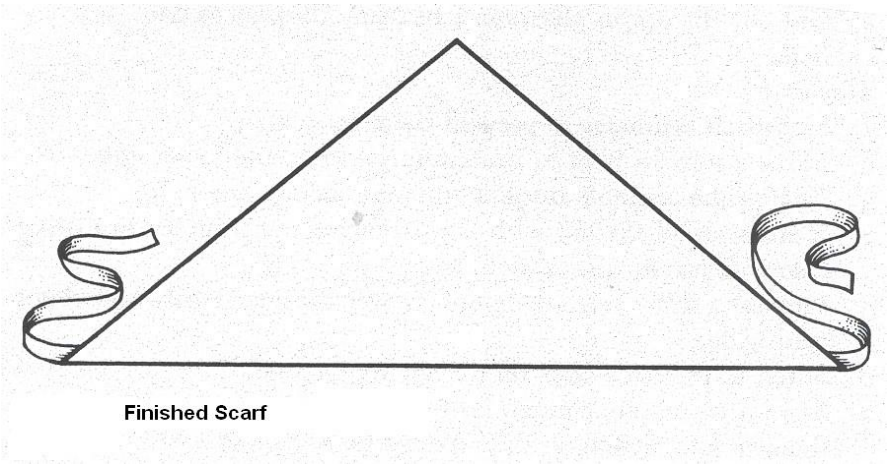
1. Staystitch armholes to prevent them from stretching;
2. Make a narrow hem to neaten apron sides and lower edge;
3. Neaten the armhole using a cross facing (refer to crossway facing already discussed in Unit 6…
4. Neaten top of the bib with shaped facing cut from a contrasting colour fabric for decoration;
5. Prepare a strap long enough to go over the head easily and about 5cm wide;
6. Stitch to the neck edge on the square of itself;
7. Sew on tapes long enough for tying the apron at the waist end of the armhole. Stitch on the tapes at G;
8. Face the top of pocket with a crossway strip. Turn and lay along the lower edge of the pocket;
9. Try on the apron and pin the pocket on at the right height where there will be no strain in putting the hands into the pocket;
10. Stitch the pocket on securely. Stitch through the centre of the

pocket to divide it into two. Press apron and put away.

3.3 Making a Scarf

This can be made from a triangular piece of fabric. It is tied on the head while cooking or doing housework. A square piece of material 90cm by 90cm folded diagonally will give two scarves.





Finished Scarf

How to make a Scarf

1. Turn narrow hems along each of the two short edges. Tack and stitch.
2. Turn narrow hems along the base of the long edge;

3.4 Remove the tacking thread and press the work.

Making Tray Covers

Material required:

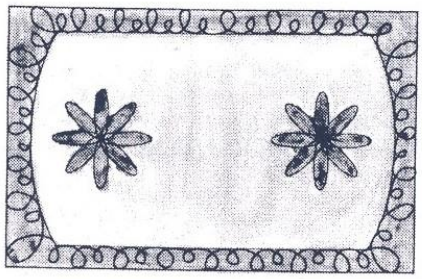
1. Half a metre firm cotton fabric -90cm wide
2. Embroidery thread

A tray cloth may be oblong, oval or round depending on the shape of the



tray to be covered.





Working designs on tray covers

How to Decorate the Tray Cloth

1. The edges of the tray cover may be finished in a decorative way by using an embroidery stitch like loop stitch (closely worked) or the edge may be bound by using a matching or contrasting bias binding;
2. To finish the edges of the oblong tray cover, make narrow hems of 1cm wide on the four sides (opposite edges first). Tack and stitch using a decorative stitch such as herring bone, cross stitch, fly stitch etc.
3. Decorative designs or motifs may be worked on the tray cover to make it more attractive.

3.5 Fringed Mat

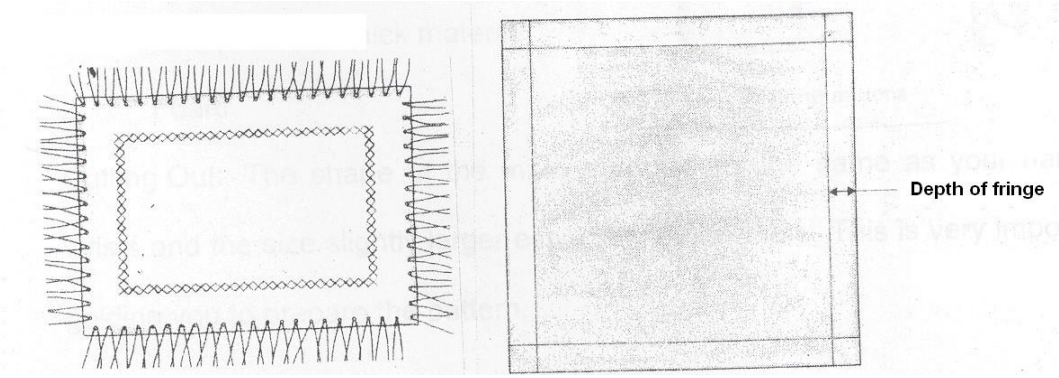




Material required:

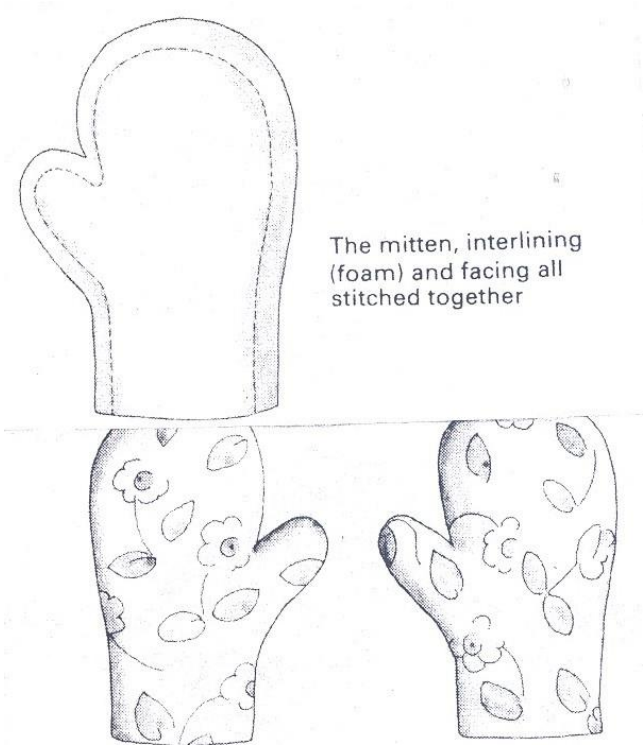
1. Half metre fabric 90cm wide
2. Embroidery thread

How to make the mat



1. Straighten the material by pulling out some thread. Trim this off.
2. Decide on the depth of the fringed mat this on the fabric
3. Draw the threads from the sides, stopping at the marked lines"
4. To prevent fraying stitch the end of the fringing.

The edges of table runners, chair backs, a table cloth and dressing table mats may all be finished in similar ways.



Making mittens



3.6 Oven Mittens

Materials required:

1. Odd pieces of thick material t
2. Foam

Cutting Out: The shape of the mittens should be the same ~s your hand and wrists and the size slightly larger especially-at the wrist. This is very important in guiding you to prepare the pattern.

1. cut out four shapes from the thick material (two for each hand)
2. cut out two pieces from the foam.

How to make up the Mitten

1. Place the foam on the wrong side of a mitten piece;
2. Right sides together, and edges even, place the second material piece on the inter lined 'piece;
3. Tack through all the thicknesses;
4. Snip the seams and corners
5. Turn the work to the right side and press
6. Repeat as above for the other mitten.

3.7 Pot Holders

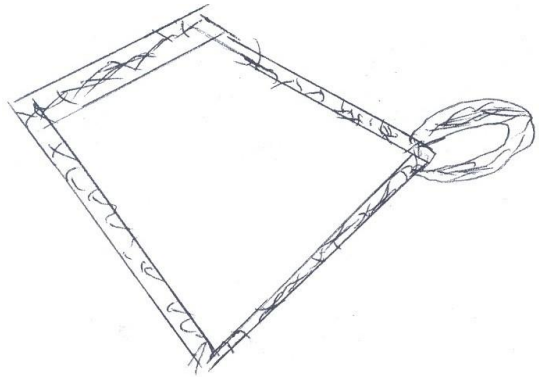


Materials Required

1. Odd pieces of thick cotton fabric or toweling
2. Bias strip

How to make the pot holder

1. Cut the required shape -oblong or square;
2. Neaten the edges by binding or making narrow hems;
3. Prepare a loop and attach to a corner



Bound pot holder

4.0 CONCLUSION

The simple household articles discussed in this unit are very essential in the home. They are very protective, give some professional touch to your task and give some aesthetic effect when and where they are used. When they are produced in large quantity, they can yield a reasonable amount of income that can boost family economy. It is hoped that practising the making of these articles has given you some sort of joy and satisfaction.

5.0 SUMMARY

In this unit, some additional clothing construction techniques have been displayed. Particular focus has been given to the making of some simple household articles such as apron, tray cover, scarf, oven mittens, fringed mats and pot holders.

The principle of 'waste not, want not' has been applied in the making of some of these articles as some of them have been made from off cuts from fabrics or some odd materials which could have been thrown away as wastes.

6.0 TUTOR-MARKED ASSIGNMENT

Make a cloth bag to match with your apron or pot holder or oven mitten

7.0 REFERENCES/FURTHER READINGS

Oseni, D. O. (1986). *Junior secondary Home Economics*. Book 1 Lagos: Longman Ltd.

NERC (1972). *UPE Home Economics Students Book 2*. Lagos: Macmillan Nig. Ltd.

MODULE 3 PERSONAL CLOTHING AND HOUSE HOLD CLOTHS

Unit 1 Choice of Clothing
Unit 2 Renovation and Clothing Maintenance

INTRODUCTION

Individuals have their personal clothing items and households maintain some cloths for various reasons, with exception of some cases where personal clothing and household cloths are presented as gifts people choosing their clothing and that of their households and also maintain them.

It is believed that you will be able to make better informed choices of your personal clothing after going through this module.

UNIT 1 CHOICE OF CLOTHING

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Choice and Use of Sewing Accessories
    3.2 Study of Figure types
    3.3 Dress Sense
    3.4 Fabrics
    3.5 Drafting of Simple Pattern
    3.6 Measurements Taking for Simple Garment Construction
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Readings

1.0 INTRODUCTION

Clothing has ever been one of the basic needs of man. Everyone likes to look good when we wear clothes. Physical attractiveness is therefore one of the reasons for wearing clothes.

While trying to enhance physical attractiveness, one also needs to exhibit some degree of dress sense. This implies wearing the right clothes for the right time and right occasion.

Generally, different clothes are worn at different times of the day for the following reasons:

(a) comfort and protection
(b) suitability and utility
(c) practicability and durability
(d) elegance and resiliency

Various factors influence the choice of clothes and they include:

1. **Figure:** The style chosen should compliment the figure by enhancing good points and covering up bad ones;
2. **Colour:** the colour should emphasize the hair and skin colouring whether the dress is to be worn in daylight or artificial light should also be a deciding factor;
3. **Fabric:** fabrics which suit the individual's requirements within the limits of fashion should be chosen;
4. **Occasion:** clothes should be chosen with special regard to the occasion on which they are to be worn;
5. **Time:** the time of the day when the clothes are to be worn should be considered;
6. **Age:** certain styles are only suitable for certain age groups. It is a bad taste for a grandmother to dress like an adolescent school girl;
7. **Activity:** choice of clothes should be influenced by where you are going to wear them, e.g. work, recreation, games and sports, weddings or business interviews.

2.0 OBJECTIVES

By the end of this unit, the student should be able to:

- re-examine his/her wardrobe for the choice of designs and fabrics for his/her figure
- highlight the type of fabric designs that best suit different categories of figure types
- talk about various household cloths such as curtains, household linens etc and how to take care of them
- discuss the relevance of accessories in personal clothing
- identify the factors which influence the choice of clothes for different occasions
- apply the knowledge of art principles in the selection of garments and accessories
- draft simple patterns for themselves and others.

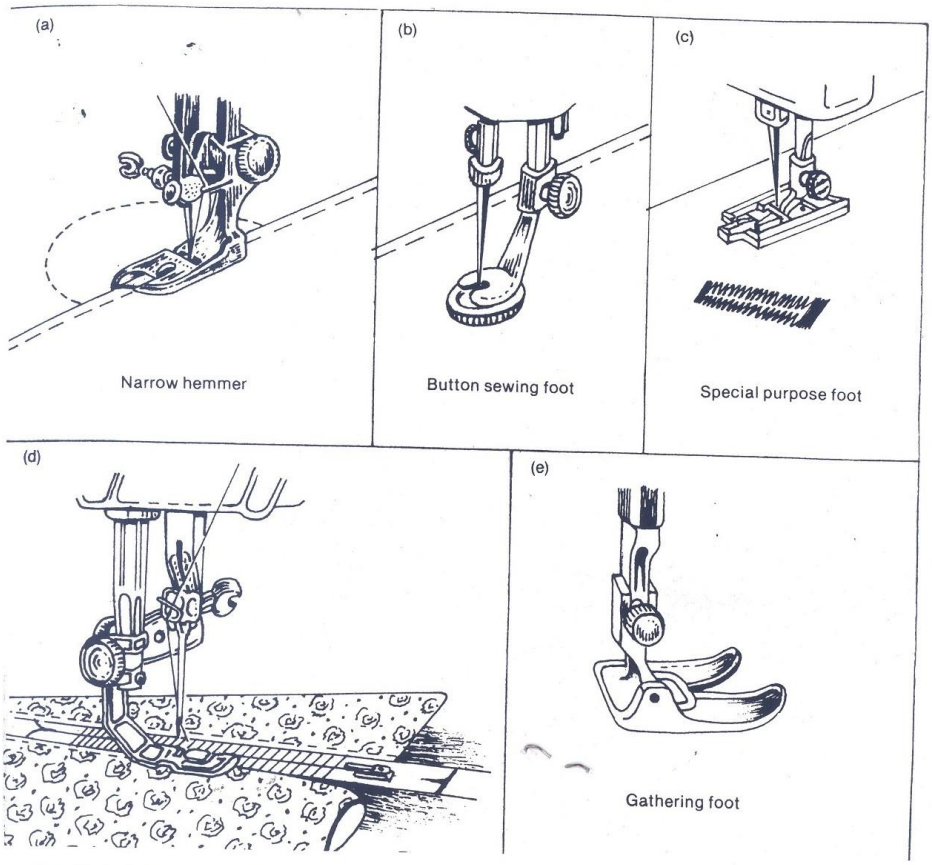
3.0 MAIN CONTENT

3.1 Choice and use of Sewing Accessories

An accessory is something extra, helpful, useful but not essential. Clothing accessories are items like gloves, handbags, shoes, jewelry, scarfs, hats, head gear etc that compliment dressing. They are as important as the main outfit.

A principle to be considered in the choice of clothing outfits is that they should be of good quality that would be durable and should be chosen to match, tone or contrast with the main outfit.

There are also some sewing accessories or machine attachments. These are sold separately or together with some straight-stitching machines to enable them do some simple processes like binding, ruffling, piping, attaching zip fasteners and buttonholing. Modern technology has introduced many processes like sewing on buttons, darning, blind stitching, buttonholing and embroidery which can be done by simply setting or adjusting levers on the machine. It is also possible to sew with two needles and two or more sets of sewing threads on some types of sewing machines.



Ma**chine Accessories**

(1) **Narrow Hemmer -** This is attached to a sewing machine in place of a regular presser foot to form and stitch a narrow hem without tacking first. It can be used for edging ruffles and for lace insertion;

(2) **Button Sewing Foot -** is short and open footed. It is used for buttons with two or four holes. A special throat plate is used along with this attachment;

(3) **Special Purpose Foot -** This accessory is used for making closely-packed zigzag stitches when making buttonholes. It is also used for decorative stitching like satin stitch.

(4) **Zipper Foot -** is used when it is necessary to stitch close to a raised edge, for example when inserting a zip fastener or sewing corded seam (piping);

(5) **Gathering Foot -** used to place a single or multiple gathering stitches that are evenly spaced. It is particularly suitable for shirring.

(6) **Seam Guide -** used to achieve uniformity in seam width;

(7) **Edge Stitcher -** excellent for placing stitching at the edge of a fabric. It has a series of slotted guides that regulate the process -edge stitching. It is for inserting lace, piping and seam finishing;

(8) **Darning and Embroidery Attachment -** This attachment holds the fabric firmly together thereby enabling the worker to darn and make embroideries easily.

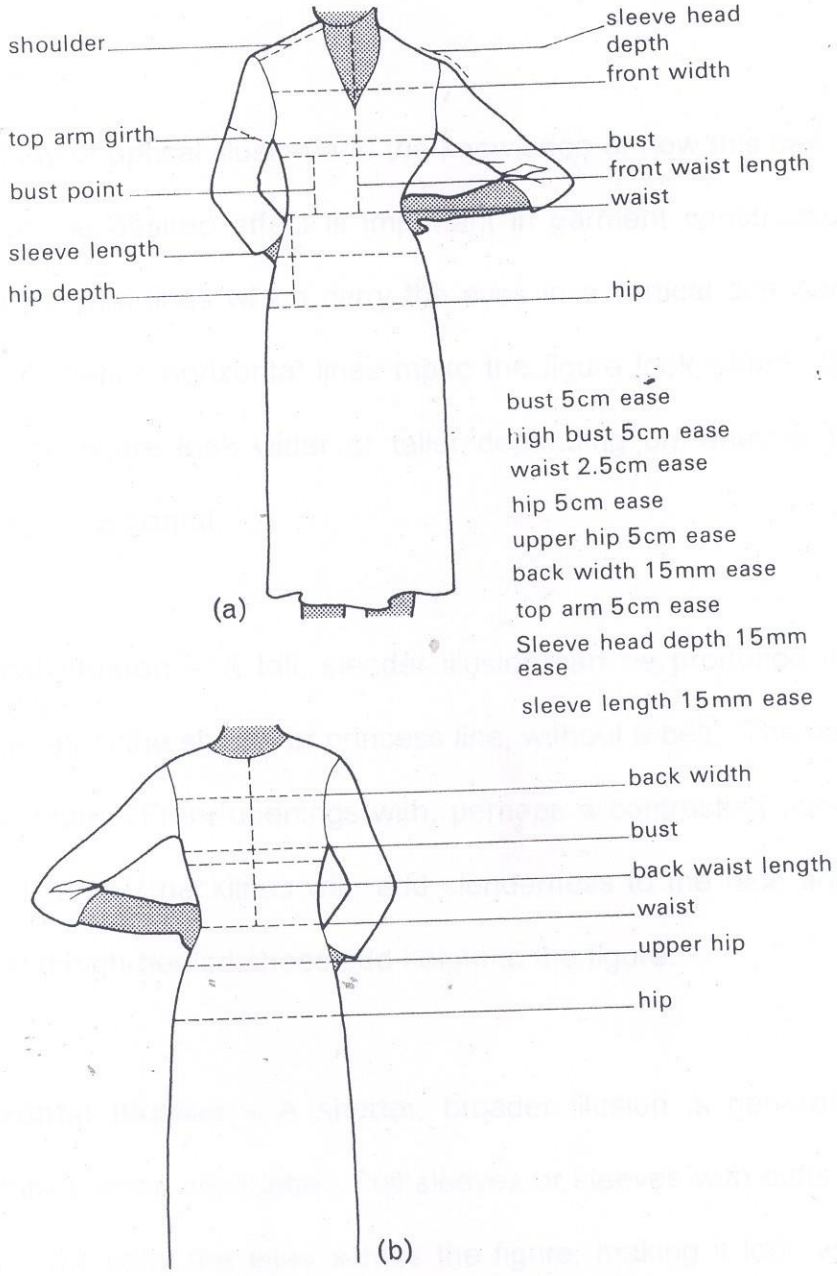
3.2 Study of Figure Types

People naturally have different figures and are of different sizes. Some of us have a good figure, but some of us are less fortunate. If you fall into the latter category, there are ways and means to manage yourself and conceal the defect, if you know how. Our physical conditions influence the choice of style and fabric we should wear. These physical conditions must be thought of as there is no perfect or average figure. A figure could be proportionate.

Line has an important part to play when making garments. Lines define the basic body outline and they separate the figure into various areas. Necklines, sleevelines, hemlines, waistlines and dividers which form shapes and spaces. Lines have functional and emotional significance.

Straight and curved lines are involved in garment construction and they offer infinite variety if they are arranged vertically, horizontally, diagonally, obliquely or combined into angles.

Straight lines are still and make the figure look taller, vertical lines give a feeling of dignity and sophistication and make the figure look taller while horizontal lines are calm, gentle and broad. They make the figure look broader. Diagonal lines are combinations of both and give a more relaxed feeling. Curved lines show feminity



Dress measurements (a) Front (b) Back.

Dress measurement and lines and stripes

The eyes will follow the strongest or most determinant lines. This makes it practicable to emphasize figure assets with lines and minimize faults by attracting the eye away from certain areas.

The study of optical illusion and the knowledge of how this can be put to work to produce the desired effect is important in garment construction. It is good to remember that lines which carry the eyes in a vertical direction make a person look taller while horizontal lines make the figure look wider. Diagonal lines will make the figure look wider or taller depending on whether their emphasis is vertical or horizontal.

Vertical Illusion -A tall, slender 'illusion can be produced if the silhouette is tubular as in the sheath or princess line, without a belt. The garment should just fit the figure. Front openings with, perhaps a contrasting panel will add height.

Deep U and V necklines will add slenderness to the face and neck. Scarves, hats and high-heeled shoes add height to the figure.

Horizontal Illusion -A shorter, broader illusion is generally produced by a bouffant-shaped silhouette. Full sleeves or sleeves with cuffs at the bust line or hipline will carry the eyes across the figure, making it look wider. Pockets will create the same effect; wide belts make the figure look broader at the waist line.

Suits, two piece dresses, shawl collars and jackets which cut the figure in half have the tendency to shorten the figure. To make a thin face seam fuller, round, bateau or square necklines, high close necklines and peter pan collars can create a broadening effect.

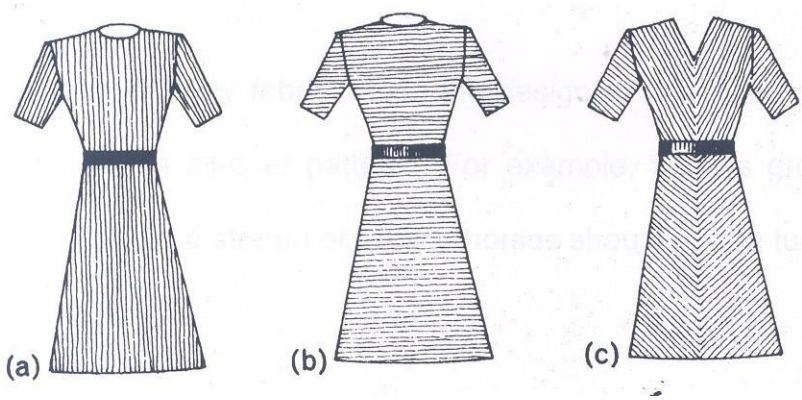
3.3 Dress Sense

Patterns and Designs on Fabrics

Patterns and designs are sometimes printed on or woven into materials to beautify them, as in the case of printed cotton or lace, where various designs are used. Plain woven fabric looks monotonous. Designs have to be incorporated to make it cheerful. This is done by hand or machine printing.

In checks, the designs are obtained by arranging colours of warp thread on the loom and by weaving with different coloured yarn to form checks. Stripes can be printed on a fabric or woven in. Nap often occurs on velveteen, corduroy velvet, brushed cotton and flannel. The nap pile should run up for velveteen and corduroy and down for wool, broad cloth and panel velvet.

There are certain patterns and designs which flatter the figure most. Some are more suitable for people of different age groups and figures and others. Designs for children's and babies' dresses need to be small. Large flowery designs when worn by tall, slender girls make them appear plump. Horizontal stripes give the illusion of a decrease in height and consequently make the figure broader.

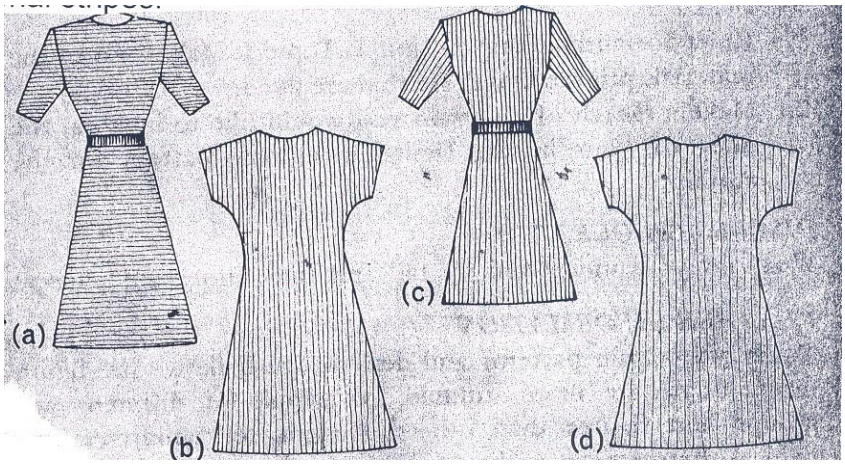


Lines and stripes (a) Vertical (b) Horizontal (c) Diagonal

Vertical Horizontal Diagonal

Lines and Stripes

Short slender girls may choose mainly vertical lines to give an appearance of height, Tall plump girls will need vertical lines or stripes to break the width, Short plump girls should avoid large flowery designs and choose vertical stripes, rejecting horizon and diagonal stripes.



Diagrams showing four ways with stripes

(a) Tall thin girl (b) Tall plump girl
(c) Short thin girl (d) Short plump girl

Tall Thin Girl **Tall Plump Girl**

Diagrams showing four ways with strip

Before cutting out any fabric, study the design to see if the material has a one way design or an all-over pattern. For example, flowers grow upwards and a duck drinking from a stream or trotting horses should not be turned upside down.

Fabrics

Fabric Designs -Optical illusions can be created by proper use of lines on certain designs or patterns in fabrics. Stripes are popular and the effect their arrangements have on a garment is flattering. Usually, stripes arranged vertically make a person look taller and slimmer but this depends on the width of the stripes and the spaces between them. When stripes are arranged horizontally they can make a person look broader, again, depending on the width of the stripes and the spaces between them.

Prints can have the same effect as stripes. However, prints make the figure look larger than a plain fabric in the same colour. Light and bright colours of sharp contrasts and large designs will make the wearer look bigger while darker all-over-patterns make the figure appear smaller. Motifs which are arranged to give an upright design add height to the wearer. When the motifs are sharply contrasted, and widely spaced, attention is drawn to the size of the wearer. This type of design is not suitable for a plump person but will add body to a thin person. If a border print is used along the hemline, it attracts the eye and shortens the already short person. On the other hand it is ideal for showing off pretty legs and is more becoming on a tall slim person. One way of creating a lengthening effect is by using the border print as a centre panel, particularly if the panel is not too wide. Fabric texture and type can also affect the appearance of the wearer. A fabric may absorb light, be rough (velvet or corduroy) or smooth (silk), stiff (white drill or pique) or clinging (like silk or nylon); each finish will have a different effect on a person's appearance.

Light Fabrics -Shiny fabrics (such as satin) which reflect a great deal of light will make the figure seem larger while dull fabrics make the figure appear smaller. Velvet reflects and absorbs light as the pile catches the light and also casts shadows. When cutting out velvet fabric to make into a garment, ensure that the pile runs downwards.

Texture of Fabrics -If the texture is rough, the fabric will tend to look bulkier than it really is and, naturally, will increase the apparent size of the figure. Heavy tweed wool, velvet and corduroy have this effect.

Stiff -materials such as white drill and pique conceal the outline of the figure because they stand out slightly. Although they could be used to conceal faults such as a hollow back or large hips, they make the figure appear larger. A plump person should avoid this type of fabric. Clinging Textured Fabrics -can be very flattering if dragged into soft silhouettes. If used for straight shift dresses, they outline the figure making it look either larger or smaller.

Transparent Fabrics -reveal the outline of the figure and show up faults or defects that could well be hidden or camouflaged with a good textured fabric.

Colours: Colours produce illusions just as lines, textures and light do. There are three basic primary colours, yellow, red and blue, which if combined equally in pairs, will produce the secondary colours -orange, green and purple. Colours may vary depending on their composition. They have qualities of lightness and darkness, brightness and dullness. Eyes react to these colours in different ways.

Colours can make a person feel cooler or warmer, look bigger or smaller. White and light colours are cool; red, orange and black make a person feel warmer because they absorb light. These points should be borne in mind when choosing fabrics to wear at different times of the day or the year.

Colours seem to add or subtract from size. Red and yellow are called advancing colours; they bring a person closer and seem to make the person larger. Blue is a receding colour and makes an object seem to be farther away and therefore smaller.

Colour of the skin should be considered when choosing fabric for garment construction. The skin tone contains varying amounts of brown beige tinge.

Choose a colour in contrast to the skin and not the one that will match it. Choose light pastel shades of blue, mustard, pink, light turquoise and light new leaf green. White stands out more on a dark-coloured skin. Though colours are usually chosen to enhance the beauty of the face, their effect on the figure must not be forgotten. The tall well-proportioned figure can wear almost anything. In the same way the tall, angular figure can choose and use colour in many ways to give the soft roundness effect necessary for the figure.

Summary of Suitable lines, colours and fabrics for the different figure types

1. Normal or proportionate figure. The owner can choose any style, colour and fabric. He/she has no problem.

2. Enlarged and Heavy Hip. Many women have this problem. They should avoid straight tight skirts. Use flares and gores and allow extra inches at the back of the skirt to make room for the hips. Do not wear jackets and over blouses or anything which draws attention to the hip. Avoid any contrast along the hip line. If the waist is tiny and the bust well proportional, buy patterns which fit over the hip and take them in at the waist. Use a good foundation garment.

3. Heavy bust. Choose a good foundation garment that will mould the bust beautifully. Avoid too much fullness at the bodice. Avoid low neckline aesthete draw attention to the bust. Avoid bright light shiny fabrics on the bodice.

4. Drooping Shoulders -Use necklines with angular collars and loose bodice. Use shoulder pads to raise the shoulders. Move the shoulder line slightly backwards, away from the normal line.

5. Narrow shoulders -Wear:' set-in sleeves over extended shoulder pads to add with. Avoid magyar, cap, kimono, raglan and dolman sleeves.

6. Hollow back -Use a good foundation garment to fill up the space. Allow extra inches for the hip. The waistline must not be too tight. Allow the bodice to drape over the hollow softly.

7. Short and Plump -Use vertical lines which make the figure seem slimmer. Diagonal lines also slenderise. Front opened garments, princess lines, flares or shifts are recommended. Avoid jackets, as they cut the figure in two and heavy, crisp coarse and shiny fabrics. Choose dull soft fabrics with blurry indistinct features. Avoid large bulls-eye prints.

8. Tall and thin -use full curves with bouffant skirts, wide collars and full sleeves, preferably gathered into curfs, or flared sleeves. Wear peplums, hip length jackets, bright colours all of which add to the figure. Choose stiff fabrics which add fullness, medium weight fabrics to drape well and fairly heavy weight fabrics with smooth surfaces like Velvet or valveteen. Avoid fabrics which cling to the skin. 9. Large Abdomen -Wear a good foundation

garment which gives good support. Take abdominal exercise. Provided every other part is in proportion, this figure can wear anything.

9. Small bust -wear a padded foundation garment and set-in midriff styles with gathers under the bust to add fullness; cowl necks can be very flattering. Over blouses are, becoming if the hips are narrow.

10. Short Waisted -Wear low-waisted garments, hip-length jackets and overblouses. Avoid very full skirts and contrasting midriffs or belts. Wear one-colour fabrics.

11. Long Waisted -Wear set-in midriffs and belts of contrasting colour to lift up the waistline. Avoid wearing very short skirts as this has the tendency to make the figure look heavy at the top.

12. Short Neck -Wear U and V necklines and collars which stand away from the neck. Avoid peter pan collars.

13. Long Neck -Shorten the neck with collars, such as peter pan and mandarin. Wear high chokers and avoid roll collars.

14. Protruding and prominent derriere -Most people with this figure usually have a hollow at the back. Wear hip-length boxy jackets and box pleated skirts. Avoid wearing slacks. Wear flared skirts and fill up the hollow with a sash or drape.

3.5 Drafting Simple Patterns

A drafted pattern is one that is made to fit a particular person. His or her body measurements are taken and used in the pattern making.

A well drafted pattern fits the figure perfectly well and could easily be altered to make various styles. However, one of its disadvantages is that it can only be used for persons whose measurements were taken.

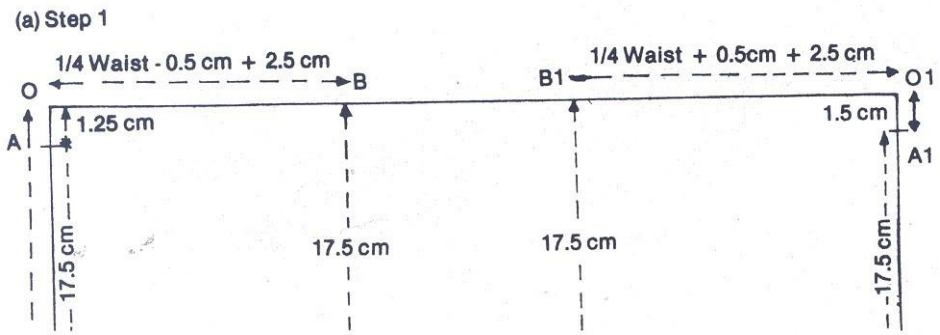
The items needed for pattern drafting include:

- A good quality tape measure
- A pencil
- A drafting ruler
- A piece of brown paper
- A coloured pencil or fine felt pen

Drafting a Basic Skirt Block

The essential measurements for a skirt block are:

The waist, hips, hip length and length of the skirt. From the essential measurements taken, a basic block pattern can be drawn. You should be able to draft your own basic blocks for skirt and bodice and keep them for use when needed. From these basic blocks, you can adapt to various patterns. The basic skirt block will have separate drafts for the front skirt and the back skirt.





Step I

1. Draw line Ox and xx1. Complete the rectangle Oxx1 01.
2. mark points A,B,C and 0 on the back skirt
3. mark points A 1, B1, C1 and 01 on the front skirt
4. draw lines 0 C and 01 C1.

Step II

1. mark points E and E, on the hip-lines of Back skirt and Front skirt respectively;
2. join AB and A 1 B1 on the waistlines of Back skirt and Front skirt respectively;
3. mark points G and G1 on both waistlines and extend down to

Hand H1 respectively;

4. mark points F and F1 on the hemlines of both Back and Front skirts;
5. join points B, E and F of the Back skirt and B1, E1, and F1 of the Front skirt.

Step III

1. complete measurement for darts at G and G1;
2. draw pattern markings for straight grain;
3. label centre Back and centre Front

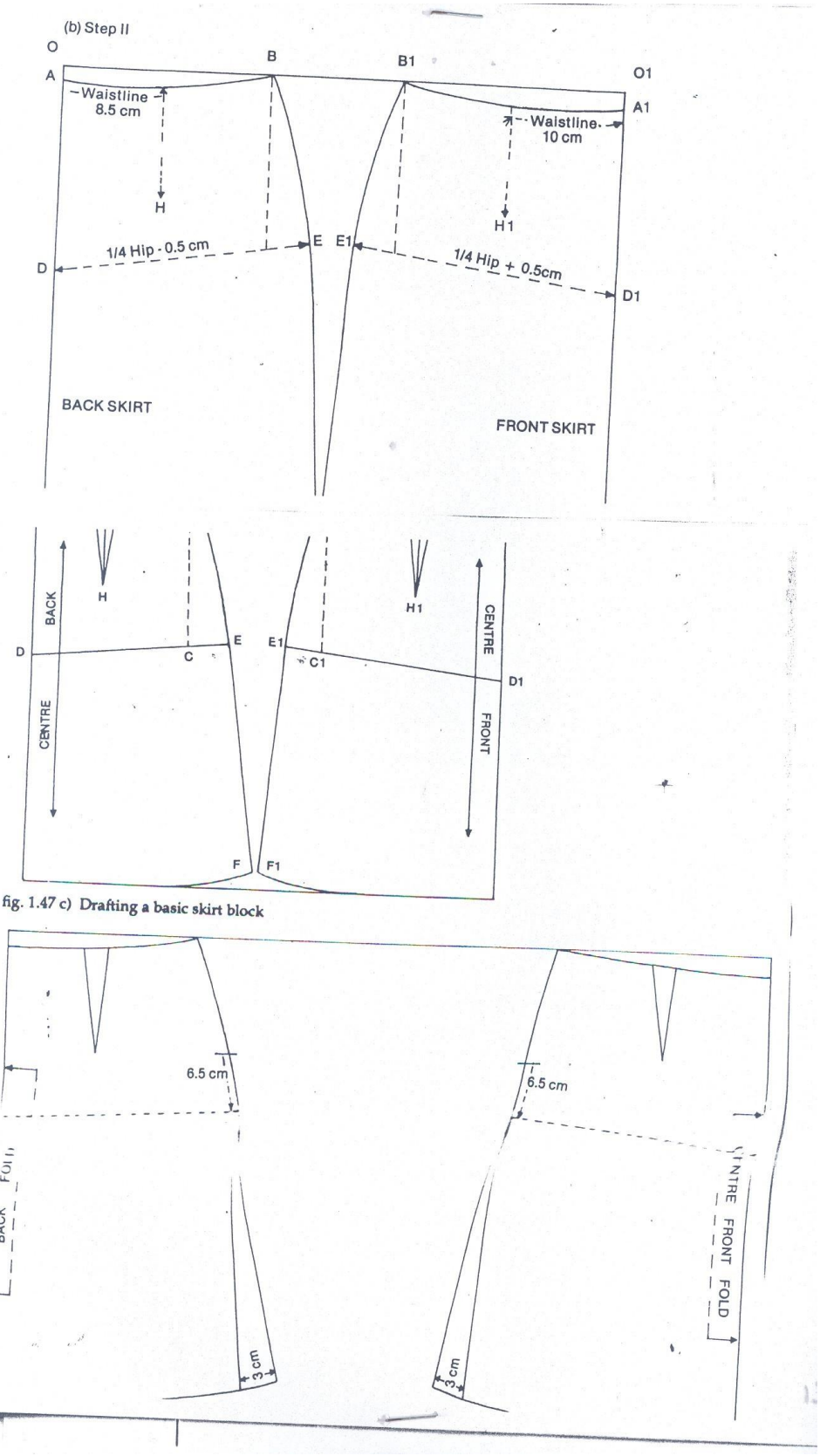


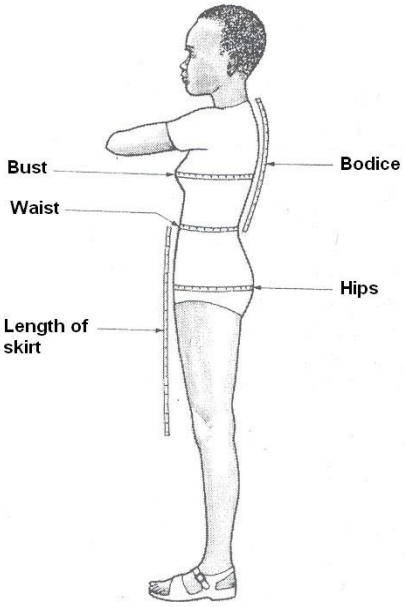
fig. 1.47 c) Drafting a basic skirt block

3.6 Measurement Taking for Simple Garment Construction

Accurate measurements are essential for any garment construction. The following are necessary measurements which you can ask someone to take for you as you may be unable to take your own measurements accurately.

Girls	**Boys**
Bust	**Chest**
Waist	**Waist**
Hips	Hips
Bodice (nape to waist)	Neck
Chest	Length of sleeve
Across back	Inside leg

All measurements should be taken over close fitting under wear and not over an outer garment. You must be honest about the measurement and avoid adding or taking from the actual measurement. Allowances for movement are made later.



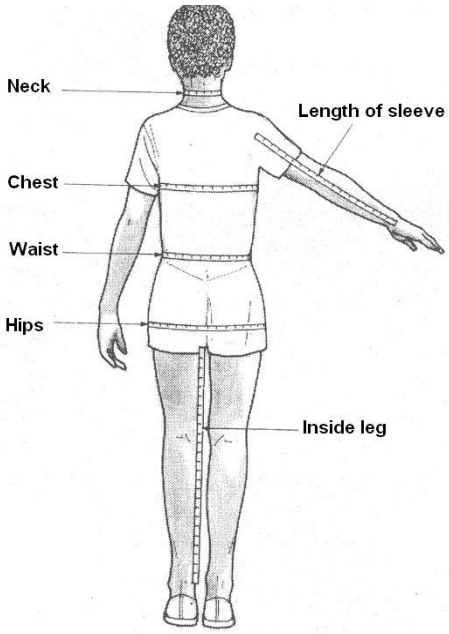


Figure 4.2: Measurements needed. Figure 4.3: Measurements needed when making garments for a girl when making garments for a boy

Girls Measurements

1. Bust -stand in front of the person being measured. Place the tape measure round the fullest part of the bust and measure closely with two fingers inside (to allow for ease) raising the tape slightly at the back;

2. Waist -Tie a piece of cloth or tape around the waist to find the exact waist line. Place the tape measure around the waist line and measure closely but not tightly;
3. Hips -Place the tape measure along the widest part of the hips. Insert a finger to ensure that the measurement is not tight;
4. Bodice -(nape to waist) place the end of the tape on the most prominent bone at the base of the neck. Measure straight down to the waist line.

Boys' Measurements

1. Shirts -measure round the neck and then add about 1.5cm to allow for the neck band;
2. Shirt Sleeve -measure from the shoulder to the wrist;
3. Trousers

(a) measure around the natural waist line over a shirt'
(b) measure the hips around the fullest part
(c) measure the inside leg from the top of the leg to the ankle.

4.0 CONCLUSION

In this unit, you have been exposed to the various hints by which you can identify your figure type as your figure type basically determines the measurement with which you can draft your patterns for garment construction. You are also encouraged to ask someone to take your measurements so as to enable you to be ready to draft your own block pattern b1oGk which you can always adapt.

It is hoped that the briefs given under this unit will assist you to be able to choose colours of fabrics that will flatter your skin colour and not rather mock your figure.

You should also be able to give wise counsel to someone on what to choose to wear for specific occasions.

5.0 SUMMARY

In this unit, we have discussed the importance and use of sewing accessories. The way you can identify your figure types and relate your dressing to your figure was also highlighted. A lot of emphasis was put on how to draft simple patterns for skirt, trousers and adapting them to other styles that fit the body measurement.

6.0 TUTOR-MARKED ASSIGNMENT

1) Get a friend to take your body measurements and take your friends also.
   Record the measurements in your exercise book;
2) From your recorded measurements, say what styles would suit your figure best;
3) Describe the effect of fabric texture on patterns and figures.

7.0 REFERENCES/FURTHER READINGS

CESAC (1980). *Clothing and Textiles-Pupils Text*. Lagos: Macmillan Nig. Ltd.

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UNIT 2 RENOVATION AND CLOTHING MAINTENANCE

CONTENTS

1.0 Introduction
2.0 Objectives
3.0 Main Content
    3.1 Simple Household Repairs
    3.2 The Processes of Renovation
    3.3 Use and Care of Personal Clothing and Household Cloths
    3.4 Ironing
4.0 Conclusion
5.0 Summary
6.0 Tutor-Marked Assignment
7.0 References/Further Readings

Renovation and clothing maintenance involves among others, the making of new clothes out of old ones, keeping all the clothes in the wardrobe fresh, neat, well ironed and in good repair. Renovation also includes refreshing faded colours or changing the colour of an old garment completely. This could also be applied to household soft furnishings. The colour of an old faded dress or curtain could be renewed by dyeing. Time spent on renovating and repairing clothes is well spent as the clothes turn out to look fresher, tend to last longer and keep the clothes in their original, smartness. Maintenance of our clothes enhances our grooming culture.

Some of the repair work that could be done on clothes include:

- Darning
- Patching
- Making fastenings secure
- Strengthening openings
- Neatening raw edges
- Re-inforcing thin places
- Sewing hanging loops

Part of clothing maintenance includes good storage in order to maintain fresh look all the time. Clothes not in use should be stored in boxes or drawers and when in use should be hung in wardrobe. Airing of the wardrobe should be done regularly.

2.0 OBJECTIVES

At the end of this unit, you should be able to:

- identify the type of renovation necessary for your old garments and household linen
- sort out your household clothes for repair and or renovation
- carry out effective repairs on clothes
- visit any dye shop in your locality and observe how dyeing of clothes is done.

3.0 MAIN CONTENT

3.1 Simple Household Repairs

As long as clothes are worn by people, there are indications of wear and tear on them. Clothes should be checked regularly for loose buttons, broken zips, loose straps or elastic and or loose, pockets. Those parts of the garments which are subjected to friction in use can be re-enforced as soon as they show signs of wear. Such parts include the elbows of sleeves, the heels and toes of socks and stockings, the collars of shirts and blouses.

Any accidental tear or cut on a clothing item should be mended immediately as "a stitch in time saves nine".

If there are some thin places on your garment, you may wish to darn or where suitable-place a reinforcement of similar fabric to the wrong side of the garment. Loop or herring-bone stitches could be used for the reinforcement or patching. A patch is a piece of fabric which is sewn on to a garment to cover up the hole or worn area. This is done when darning cannot possibly cover the area. The patch should match the fabric of the garment as closely as possible.

Points to remember when patching include:

a) A pocket, hem, belt or in the case of a shirt, the tail could be used for patching;
b) Patching material should match that of the garment in texture, colour, weave and design;
c) A patch should be cut so that the warp and weft threads match those of the garment, to prevent one side pulling against the other;
d) A patch should be neat, inconspicuous and firmly stitched on.

3.2 The Processes of Renovation

Renovation is not only concerned with making new garments out of old ones. It also includes refreshing faded colours or changing the colour of the old garment completely and those of household soft furnishings. The colour of a faded garment or an old curtain could be renewed by dyeing. In the process of renovation, there are usually three R involved and these mean-repairs, reconstruction or remodeling and renovation.

Remodeling is done when an out of fashion garment is taken apart and remade into a garment in current style in line with the fashion.

Renovation is making new things out of old garments. For example, making a blouse out of an old gathered skirt or a boy's pair of shorts out of a mother's woolen skirt or dad's pair of trousers.

Reconstruction is normally done on ready-made clothes which do not fit the individual. It could be that either the bodice is too long or the hip is too tight or the sleeves need to be re-shaped.

Points to be considered:

(a) Before embarking on any form of renovation, it is important to ensure that the article to be renovated is not too old, otherwise the new articles or garment made out of it will get torn in no time and it would have been a waisted effort. Rip off the seams, collars sleeves, and hems before you can begin to make the new article from the old article.

Darning -This is used on stockings, socks, knitted wear, table linen, towels and woolen fabrics.

Points to remember when darning:

(a) choose thread which matches the fabric in texture, colour and thickness;
(b) use small running stitches with the spaces equal to the length of the stitch.

Stitches are made loosely to prevent worn area tearing off:

(c) darn on the wrong side of the garment, up and down the warp threads first;
(d) leave loops at the ends of each row to allow for shrinkage of the new thread;

(e) the outline of the darn is always irregular to distribute the strain of the insertion of new thread evenly;
(f) sew round the outline with tacking thread and keep within this as a guide.

3.3 Use and Care of Personal Clothing and Household Cloths

Clothes are worn for protection against heat or cold, for decency and identification. Our clothes express our identity, individuality and improve our appearance. Particular care must be ~ at clothes so that they wear better and last longer.

Clothes should be aired as soon as they are taken off and should not be left on the bed or chair or hanging behind the door. They should be neatly folded and put into a drawer and if wardrobe is available, it is better still, to hang them up using hangers.

Sweat glands in a normal healthy person secrete perspiration and oil through the skin. If these are allowed to remain on clothes, the fabric quickly deteriorates especially if made of synthetic fabrics, they discolour, and therefore clothes should be laundered regularly. If it is not possible to wash a whole dress for fear that the colour may run, collect the two arm holes together and wash to remove perspiration. Iron the dress in the normal way and air.

Curtains and cushion covers do not require frequent washing as dresses. Avoid naked light near curtains and clothing items. Table clothes and bed linen should be washed regularly.

To be well groomed is an expression of good living which should be developed early in life. There are certain specific routines.

(b) Go through your family wardrobe or suitcase and decide on the garments or articles to be renovated and what can be made out of them. For example:

- A bed sheet could be made into cot sheets or draw sheets, inner pillow slips and damping rags;
- An old table cloth could be cut up and made into table napkins
- and casserole holders;
- An old bath towel could be made into face flannels, a hand towel or a dogs/cat's towel;
- A mother's floral skirt could be made into a girl's sun frock, a dress or romper or even a nightdress.

(c) The old garment should be taken apart, laundered and aired. The fabric obtained should be sufficient to make the new garment avoiding the very faded or weaker areas of the old garment;
(d) The grain of the old garment fabric should be studied to make laying out of pattern pieces for the new garment easy;
(e) New garments should go through all the processes e.g. attachment of sleeves, setting on of collar, openings and fastenings, arrangement of fullness;
(f) The new garment can be made attractive by the use of sewing accessories such as lace, braid or ric-rac. Care must be taken not to over-decorate the garment;
(g) The garment or article should be suitable for the purpose for which it is intended.

3.4 Ironing

Ironing is an important process in dress-making. It makes the work neat and improves the general finish of the garment being made.

There are different types of iron which include charcoal iron, steam iron, hand iron and electric iron. The best is the electric iron because it heats quickly. It is clean and easily controlled. The electric iron that thermostat control is good for ironing different types of fabric.

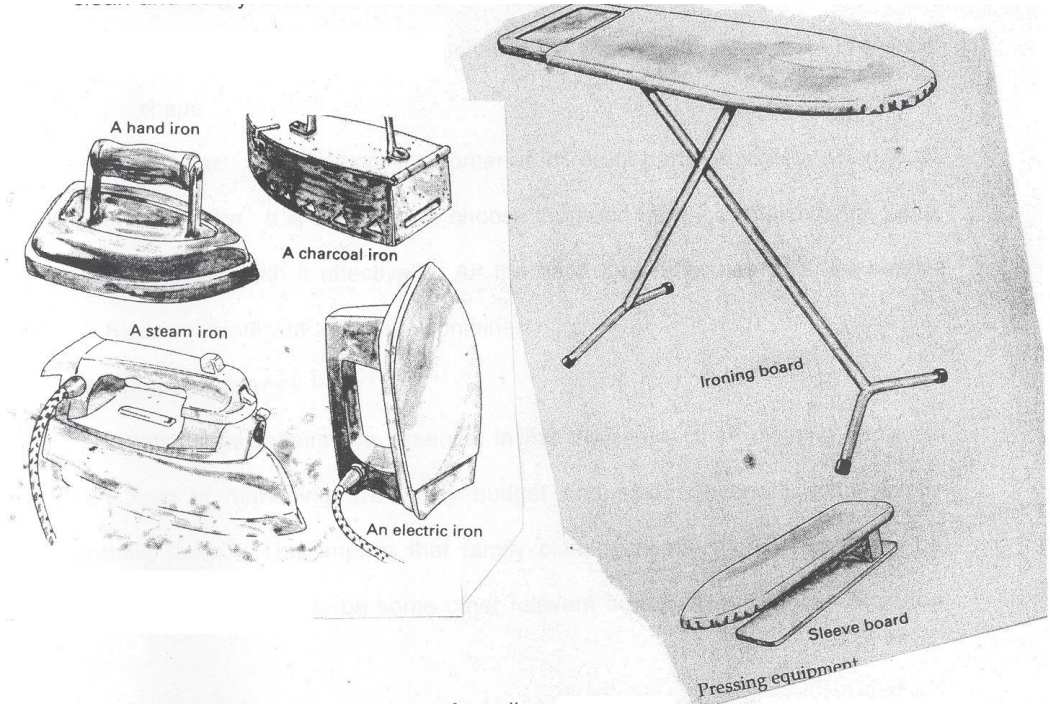

Figure 5.11: Different types of iron

Ironing Board -A well-padded ironing board is useful when ironing shaped garments. The folding type of ironing board is good as its height can be adjusted and it can be easily stored away when not in use.

A flat surfaced wooden table, padded with blankets, can also be used but it is more suitable for ironing flat articles such as bed sheets or table-cloths. Points which enhance good grooming include:

- Putting out your pair of shoes for airing regularly;
- Tidying your handbags and throwing away any useless things'
- Brushing out your hats especially the felt ones with a soft brush and storing in a hat case, or on a shelf in the wardrobe to keep them in a good shape'

Head Gear: is often worn by women in different parts of Nigeria when local attire is worn. It is important to choose the head gear that matches the attire or contrasts with it effectively. Air the head gear after use and fold neatly. Store separately in a suitable container.

4.0 CONCLUSION

Renovation and repairs are essential in the maintenance of clothing items as they help in managing the family budget and also rejuvenate some family clothing items. This implies that family clothing items should not easily be discarded as there may be some other relevant articles they may be converted into.

It is necessary to be familiar with some of the renovation and repair techniques so as to ensure that the renovation or repair or remodeling work done is thorough, neat and worth the time and energy spent.

Individuals and families should keep scrap-boxes as these should contain materials that should be relevant for renovation. Clothing maintenance is a way of conserving individual and family resources and be able to meet other needs.

5.0 SUMMARY

In this unit, you have gone through the concepts of renovation, repair, remodeling all in the processes of clothing maintenance. If renovation techniques are adequately applied, one may not need to buy every article of clothing required in the home. Some of them could be easily produced from clothes that have been renovated or repaired.. A lot of care needs to be taken in the maintenance of personal and household cloths. Where this culture is maintained, a lot of unnecessary expenditure will be minimized by individuals and families.

6.0 TUTOR-MARKED ASSIGNMENT

1) Going through your wardrobe, you should be able to identify the clothing items that need to be renovated;
2) Make a presentation of some of your products of renovation;
3) Personal scrap box for use in renovation/repair/reconstruction work.

7.0 REFERENCES/FURTHER READINGS

CESAC (1980). *Clothing and Textiles Pupil's Text Home Economics for Secondary Schools*. Lagos: Macmillan-Nig:

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