HOME ECONOMICS (JS 2)

**SECOND TERM 2024/2025 SESSION**

**SCHEME OF WORK**

Lesson One: Pattern Drafting and Fashion Designing

Lesson Two: Food Purchasing

Lesson Three: Food Preparation

Lesson Four: Food Processing

**LESSON ONE**

**PATTERN DRAFTING AND FASHION DESIGNING**

The ability to make dresses depends on the acquisition of dress-making skills. These skills require a good knowledge and training in the use of equipment necessary for dress making. In order to make simple garments, you need to take body measurements. This must be accurate as possible. The body measurements are used to develop patterns on paper. The patterns are then used to cut out the fabric pieces for a garment. Wrong measurements will result in ill-fitting garments. Fashion designing is a drawing on paper which depicts how a particular dress is to be constructed. Patterns in clothing construction are shapes of garment parts, cut out of paper.

Uses of patterns in garment construction

1. Patterns are used to direct or guide the cutting of fabric
2. They prevent serious mistakes in dress making
3. They prevent waste of time in dress making
4. They prevent waste of fabric
5. They make sewing neat and easy
6. They reduce trial and error in sewing

**Types of patterns**

There are basically two types of patterns namely:

1. Commercial pattern
2. Drafted pattern

**Commercial pattern**

Commercial pattern are designs made by experts to fit standard figure types using specific body measurements. They are available in different sizes and sold in special pattern envelopes. They are available in big shops. Examples of commercial patterns are as follows:

1. Vogue
2. Newlook
3. Simplicity
4. Butte rick
5. Style
6. Advance etc

**Advantage of commercial pattern**

1. They make sewing easy and accurate to body measurements.
2. They are made in many different styles and designs.
3. They have instruction sheets which show how no lay out
4. Pattern envelope contains information on the type and quantity of fabric needed
5. It saves time and reduces mistakes in garment making

**Disadvantage of commercial pattern**

1. They are expensive
2. They are not easily or readily available
3. They often require alteration or adjustments to fit the user’s size
4. They are light and can tear pattern markings and symbols easily

**Drafted pattern**

Drafted pattern is a method of obtained patterns through the measurement of a particular person. A person’s body measurements are first taken, then the pattern is drafted to fit his/her size.

**Advantages of Drafted pattern**

1. Drafted pattern can be made to fit a person perfectly
2. It can be adapted to any type of style
3. It is cheaper than commercial pattern
4. It helps to check the fit of a design before it is made into garment
5. It does not require alteration
6. It is unique

**Disadvantages of Drafted pattern**

1. Drafted pattern can only be useful to one person i.e. the owner
2. Pattern drafting requires special skill.

**Pattern marking and symbols**

1. Straight grain of fabric: An arrow head symbol, meaning that the pattern piece should be placed on the grain I.e. parallel to the selvedge
2. Place to fold material: The pattern edge should be placed on the fold of the fabric.
3. Darts: These are shown by two broken lines for stitching to make darts. The material is folded along the centre
4. Notches: These are V-shaped symbols along the cutting line. They show matching points on the pattern
5. Stitching line: This is shown by broken lines round the pattern area.
6. Cutting line: This is the outline of a pattern
7. Seam allowance: This is the space between stitching line and the cutting line.

Tools and equipment for pattern drafting

|  |  |  |
| --- | --- | --- |
| S/N | Tools | Use |
| 1 | Tape measure | For measuring on the paper |
| 2 | A metre rule | For drawing lines |
| 3 | French curve | For shaping curved areas |
| 4 | Pencil | For drawing lines and writing on the drafting paper |
| 5 | Scissors | For cutting the drafting paper |
| 6 | Eraser | For cleaning wrong lines or drawing |
| 7 | Brown paper | For making pattern |

**Pattern Preparation**

The first skill to learn in pattern making or preparation is drafting block. Blocks are pieces of pattern cut out from paper of cloth. They are drafted to the exact size of the body. They can then be adopted or modified to any desired style.

These patterns of the blocks are cut out after measuring front bodice, back bodies, sleeve, front skirt and back skirt. When drafting is in progress, certain rules must be observed to ensure production of best patterns. They are as follows:

1. Blocks for the bodice and skirt are drafted with the centre back (c/b) on left –hand side while centre front (c/f) should be on the right-hand side.
2. Blocks of sleeves are drafted with the back at the left side of the centre line, while front should be on the right-hand side.

**Parts of the body to be measured**

The parts of the body to be measured include:

1. Bust
2. Waist
3. Hips
4. Chest width
5. Back width
6. Shoulder
7. Length of back
8. Length of skirt
9. Length of arm
10. Wrist
11. Top arm

**Drafting basic bodice patterns**

Procedures for cutting bodice block are as follows:

1. Measure the right shoulder to the left shoulder which is referred to as the back measurement
2. Measure bust circumference by taking the measuring tape round the full bust line.
3. Measure under bust i.e. bust separation which refers to the measurement between the apex of both breasts.
4. Measure the waist line (true waist), considering the measurement at the back to be shorter.
5. Measure the length of the bodice
6. Use the above methods to form a broom stick or French curve bodice block.

The above procedure can be used for back bodice but with few exceptions. They are as follows:

1. Use the measurement from high shoulder point to the back waist which is generally different from the front measurement.
2. The dart at the back goes up a little bit from the bust line measurement

Join and add the seam allowances to form the bodice pattern.

**LESSON TWO**

**FOOD PURCHASING**

Food purchasing is the process of buying foodstuffs or raw foods in small or large quantities (bulk purchasing)

**Factors to consider when purchasing food**

1. Size of the family i.e. the number of people in the family.
2. The income of the family.
3. The family needs i.e. the nutritional needs of the family members, their food preferences, likes and dislikes, should be considered.
4. Food preservation and storage facilities available
5. Quality of food: it is important to buy good-quality foodstuff.
6. Foods in season.
7. Where to bury food.
8. Buying and storing of non-perishable foods in bulk.
9. Purchase vegetables and fruits as ab=nd when needed if possible.

**Wise buying practices**

Wise shopping involves an attempt at getting the best value of your money in whatever you are buying. The following guidelines can aid you in wise shopping:

1. Make a good shopping list.
2. Keep to the shopping list whe buying.
3. Resist the temptation to buy things you do not really need.
4. Make market survey, i.e. move round and compare prices.
5. Read labels on food, containers, such as canned foods, bottled fats and oils. Check expiry dates, food contents, weights, volume, etc.
6. Buy foods that are in season.
7. Check measurement, e.g. cups and scales when buying foodstuffs.

**Importance of buying good-quality foodstuffs**

1. Good-quality foodstuffs are fresh and wholesome.
2. Their nutrients contents are high and intact.
3. They stay longer if stored.
4. They are not quickly attacked by food-spoilage organisms.
5. They are appetizing and taste good when cooked.
6. They are economical when purchased in bulk
7. They have good appearance, e.g. colour and texture when chewed.

**Bulk Purchasing or Buying**

Bulk purchasing is process of buying foodstuffs in large quantities. It pays to buy in bulk as the buyer can save some money in this way. When making bulk buying, it is better to list the items to be bought so as to prevent skipping some items and overspending on others. Storage facilities should also be considered when making bulk buying.

**Advantages of Bulk Purchasing**

1. It is cheaper than buying in small pieces.
2. It makes foodstuffs readily available in the house.
3. It allows for good menu planning.
4. It saves time and energy.
5. It helps the family to buy food in season
6. It protects the buyers from market price inflation.

**Disadvantages of Bulk Purchasing**

1. Deterioration of foodstuff is likely to occur when there are no adequate storage facilities.
2. Lack of proper management can lead to wastage.
3. It can take much of the family income and prevent the purchase of other needed commodities.
4. One kind of food purchased in bulk can be monotonous to the family.
5. Poor-quality foodstuffs purchased in bulk will spoil in storage.

**Factors to consider before buying in bulk**

1. Availability of storage facilities.
2. The nature of foodstuff, e.g. perishable or non-perishable.
3. Rate of consumption of food items by the family or institution.
4. Availability of money
5. Food in season

**LESSON THREE**

**FOOD PRESERVATION**

Food preservation is the treatment of food in such a way that it will keep it in good condition for a long period of time.

**Reasons for preserving food**

1. To prevent it from spoilage
2. To prolong its shelf life.
3. To avoid wastage especially when they are in season.
4. To make available foods off-season
5. To have a variety of food available for an emergency situation
6. To eliminate purchase of foods when they are most expensive.

**Food Preservation Methods**

There are difference methods of preserving foods. They include the following:

1. Drying
2. Smoking
3. Freezing/refrigeration
4. Canning and bottling
5. Fermentation
6. Irradiation

**DRYING**

This is the process by which the water content of food is reduced or removed. Examples of food preserved by drying are legumes, cereals, meat and fish. The different types of drying are as follows:

1. Solar drying: This is done by mere spending the foodstuff in the sun on a mat or concrete floor, e.g. cassava, yam, maize, etc to dry it out.
2. Oven drying: This process involves putting the foodstuff in pre-heated oven or enclosed chamber, e.g. melon, legumes, nuts, etc.
3. Roller drying: This is a method used for drying out liquid foodstuffs with a hot stainless steel drum or roller. The liquid or paste to be dries is uniformly applied on the hot rotation stainless steel drum or roller, e.g. potato flakes, yam flakes, cocoa-oats, etc
4. Vacuum drying: This is removal of water by creating a vacuum so that the food dries at a lower temperature. The heat supplied is by conduction or radiation method or heat transfer. An example of food that can be dried by this method is milk (powdered)
5. Tunnel drying: This is a process by which fried food is placed in conveyor belts or perforated trays passed through a warm tunnel for proper drying e.g. potatoes.
6. Spray drying: This involves forcing liquid through a small nozzle in the form of a spray into a hot chamber, the spray mixes with the warm air and the water is evaporated while a fine powder is produced e.g. milk, egg white, bournvita, cocoa, beverages etc.

The rate of drying foodstuffs can be effected by the following factors:

1. The efficiency of the drying equipment;
2. The method of arranging the foodstuff on the drying material e.g. tray, mat, concrete floor, etc
3. The physical and chemical properties of the foodstuffs.

**SMOKING**

This involves drying of foodstuffs over a fire or heated charcoal e.g. fish, meat, etc. However, the smoke produced contains some aldehydes and phenols which have dangerous effects.

**FREEZING/REFRIGERATION**

This is a method of preservation in which food is placed in a freezer/refrigerator so that it becomes frozen or chilled very quickly. Examples of foods usually frozen or refrigerated include fish, meat, milk, fruits, vegetable, yoghurt etc.

**CANNING AND BOTTLING**

This is a food preservation method that involves keeping foods in sealed cans or bottles. The food id sterilized, sealed in the vacuum or in the presence of inert gases and then put in cans or bottles e.g. fruit juices, meat, fish, milk, drugs, beverages and vegetables.

**FERMENTATION**

This is a method of preserving food by decomposition of some of the food components to produce acids. Examples of food preserved by fermentation are locust been seeds (iru), melon paste (ogiri), wine or spirit. Other are cheese, pitto, fermented fish, garri, cassava, corn paste (ogi) etc.

**IRRADIATION**

This involves the use of radioactive elements like cobalt, to destroy microorganisms and food enzymes, e.g. potato, yam tuber and onion.

**FOOD STORAGE**

Food storage involves keeping or preserved or purchased food for some time before ultimate use. There are two aspects of food storage:

1. Post-harvest storage: This is the storage of crops in storage facilities, e.g. rhombus, cribs, barns, etc immediately after harvest.
2. Storage of foodstuffs or prepaid food at home e.g. perishable and non-perishable foods.

**Factors to consider when storing foods**

1. The nature of the foodstuffs.
2. The quantity and safety of the food.
3. The facilities available in the house.
4. The length of time required for the storage, i.e. for how long you are going to store before use.
5. The ultimate use of the foodstuff.

**PERISHABLE FOODS**

Perishable foods are foods that can spoil easily almost immediately after purchase unless preserved in some ways because of their high-water content. Examples are fresh meat, fresh fish, fruits, vegetables, milk , etc,

**Hints on storage of perishable foods**

1. Fresh meat and fish can be stored in the freezer while fruits and vegetables can be stored at the lowest parts of the refrigerator.
2. Some foods can be stored in the freezer for longer periods e.g. blended pepper or bitter leaf, etc.
3. Orange, pineapple, pawpaw, etc, can be stored in a basket in an open airy space.
4. Prolonged storage of fruits and vegetables in refrigerator or freezer can cause them to lose their tastes, colours and nutritive values hence, they are to be eaten fresh.
5. Perishable foods can be processed into forms that can store for long periods e.g. fish or meat by smoking or frying, vegetables by drying, etc,

**NON-PERISHABLE FOODS**

Non-perishable foods are those foods that cannot spoil easily and can be kept for a relatively long time if properly stored, e.g. rice, maize, beans, yam, flour, sugar, dried legumes etc,

**Precautions for storing foods**

1. Store foodstuffs that are free from weevils and other insects.
2. Store food in dry and well-covered containers or air-tight plastic containers.
3. Fruits and vegetables can be dried and stored in air-tight containers e.g. fruits made into juice.

**Importance of food storage**

1. It prevents food spoilage
2. It prevents loss of nutrients
3. It makes cooking faster in case or emergency because it is available at home
4. It saves time, money and energy of going to the market every time.

**Food storage facilities**

Proper food storage requires the use of good storage facilities. The storage facilities include:

1. Plastic food container with good lid or cover

They are available in different sizes and shapes. They are suitable for storing:

1. Liquid such as palm oil, vegetable oil, etc
2. Flours e.g. yam flour, garri, wheat, soya beans etc
3. Dried grains and pulses, e.g. beans, rice, maizes, etc
4. Ground food ingredients, e.g. ogbono, dried pepper, egusi, etc;
5. Other non-perishables such as salt and sugar.
6. Cupboards, cabinets and shelves

Modern kitchens are equipped with fitted kitchen cabinets. Dry food should be put in plastic containers, tins, jars or bottles properly covered with lid before being placed in the cupboard or shelves.

1. Refrigerators and freezers

Refrigerators and freezers can also help to keep food till the time they will be needed.

1. Food store

Food store is a place for storing food. It is often part of the kitchen or a separate room near the kitchen. It should be large enough to meet the needs of the family. The doors and windows should be fitted with wire gauze and netting to prevent entry of flies and rodents.

**LESSON FOUR**

**FOOD PROCESSING**

Food processing is the set of methods and techniques used to transform raw ingredients into other forms for consumption by humans or animals either in the home by the food processing industry. Food processing typically clean, harvested crops, slaughtered or butchered animal products and uses them to produce attractive, marketable and often long-life food products. Some methods of food processing include dehusking, milling etc

**Reasons for processing food**

1. Some food crops such as fresh cassava roots cannot be stored for long because they rot within three to four days of harvest.
2. To reduce transportation expenses from rural to urban areas.
3. To remove substances which are toxic to humans and animals e.g. cyanide in cassava is a poisonous chemical that can kill if consumed.
4. To make food attractive and palatable.
5. To improve the nutritional value of the food.