# GRADE 6 HOMESCIENCE LESSON NOTES

**HEALTHY LIVING ADOLESCENCE (13-19 YEARS)**

* Pre adolescence is the stage of life between early childhood and adolescence.

**Who is adolescent?**

* Adolescent is the period between pre adolescence and adulthood.
* An adolescent is a child between the age of 13 to 19 yrs.
* An adolescent is also called a teenager

**Changes that takes place during adolescences**

* Girls and boys experience the :following changes

1. **Physical change**- are changes which can been seen.
2. **Emotional change**- are changes that cannot be seen, also called feelings
3. **Social change**

* Changes are normal and we transition into adolescent diferently. We should accept and embrace changes fully.
* Talk to people to get right information about changes that take place during adolescence.

**Physical changes in boys include**

* 1. Increase in body size
  2. Growth of hair under armpits and pubic area
  3. Developing acne and increased sweating
  4. Hair grows on their chin (beards)
  5. Voice breaks and becomes deeper.
  6. Experience wet dreams.

**Physical changes in girls include**

1. Increase in body size
2. Growth of hair under armpits and pubic area
3. Developing acne and increased sweating
4. Develop breasts
5. Hips broaden
6. Voice becomes melodious.
7. Experience menstruation cycle.

**Good grooming as a daily health habit**

* **Good grooming is** the art of taking care of yourself and your body.
* Adolescent should maintain good grooming by
  1. Taking a bath daily so as to avoid bad odour
  2. Maintaining their hair by shaving, combing , plaiting or washing properly.
  3. During menstruation girls should change their sanitary towels regularly
  4. Shaving the hair under armpits and pubic hair because they hold a lot of sweat and dirt which bring bad odour
  5. Wearing clean and descent clothes.

**Improvise items to be used for good grooming**

* **Improvising** is making something using the available resources because you do not have the actual item required.
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**Healthy eating habits for an adolescent**

* Healthy eating habits make us grow healthy.
* It is important to eat enough food with a variety of all nutrients.
* This enable healthy growth and development during adolescent stage
* We should take balanced diet for healthy growth and development
* We should drink safe clean water regularly so as to replace fluids during sweating and to avoid dehydration
* We should take healthy snacks
* Adolescent should take food rich in iron to help in muscle development. Girls should take iron rich foods to replace what is lost during menstruation.
* We should take meals and snacks eat the right time
* We should always practise proper table manners when taking meals ,

**Importance of physical exercise during adolescence**

* Regular physical exercise helps us prevent health problems such as obesity that is lifestyle disease
* Exercise also help improves our mood and make our bones and muscles strong.
* It helps maintain a healthy body weight.
* Promotes healthy development of the body.

**Safety precautions to observe in the environment as adolescents.**

* It is important to observe safety precautions in the environment in order to avoid accidents and injuries.
* We can also avoid harm from people with bad intentions by observing safety in the

environment.

* Always dress decently
* Avoid bad company.
* Do not accept gifts from strangers
* Avoid walking in dark and deserted places.
* Do not give strangers you met on social media your personal information.
* Do not exercise near dangerous places such as holes or dams.

**ACCESSORIES AND COSMETICS**

* An **accessory** is an item or article you wear or carry, other than your clothes to

enhance the efect of clothes you wear such as belts, caps, ties, shoes, scarves and handbag.

* In fashion they are chosen to complete an outfit and complement the wearers look

they also serve to express an individual identity or personality.

* **Cosmetics** also referred to as **make ups** are substances used on the body to improve on person appearance and enhance their beauty.
* There also used to hide or conceal blemishes on a person
* They are mainly used on face hands and feet.

# Classifying accessories and cosmetics used by adolescents

* Accessories are mainly classified into two:

1. Those that are carried (handbags, ceremonial swords)
2. And those that are worn – necklace, earrings belts ties)

* Cosmetics can classified according to their functions, use or physical nature
* They include lotion, eye pencil, eye shadows, lipstick, nail polish and face powder.

# Misuse of accessories by adolescent

* Misuse is the use of something in the wrong way or for wrong purpose.
* Misuse of accessories may not enhance person’s appearance as intended and may end up giving an exaggerated look.

# Misuse of cosmetics by adolescents

1. Applying too much cosmetics
2. Borrowing other peoples cosmetics
3. Bleaching the skin using cosmetics
4. Using cosmetics that have expired
5. Applying fresh cosmetics on dirty face
6. Storing cosmetics poorly such as exposing them to too much heat and sunlight

# Dangers of misusing cosmetics

* Most cosmetics are produced from chemicals hence wrong use may lead to health problems.

1. Cosmetics can cause cancer
2. Cosmetics can cause skin irritation
3. Cosmetics can cause bleaching of the skin
4. Cosmetics can cause allergic reactions.
5. Cosmetics can cause eye infections

# Non communicable diseases and disorders

* **Communicable disease** and disorders are diseases that are spread from one person to another or from an animal to person.
* Also known as **infectious disease**
* **Non communicable diseases** are disease and disorders that cannot be passed directly from one person to another
* They are as a result of lifestyle, family history or factors within the environment.

# Identifying non communicable disease and disorders

1. Epilepsy
2. Diabetes
3. Asthma
4. Hypertension
5. Heart disease
6. Obesity

# Obesity

* Is a condition where one has excess weight and body fat which may increase the risk of other disease and health problems such as diabetes, high blood pressure and certain cancer

# Sign and symptoms of obesity

1. Excessive body weight
2. Shortness of breath
3. One cannot perform simple physical exercises

# Causes of obesity

1. Lack of physical exercise
2. Excessive intake of carbohydrates and fatty foods
3. Family history.
4. Stress which may result in increased appetite hence one over eats

# Prevention and management of obesity

1. Doing physical exercise
2. Avoid taking food with excess fat
3. Taking a varied diet in their correct proportions.
4. Manage stress so as to be able to maintain healthy eating habits.

# Diabetes

* Is a condition where the body is unable to control the levels of sugar in the blood.

This may be because the body does not make enough insulin or cannot efectively use the insulin it makes.

* **Insulin** is a Hormone that controls the movement of sugar in and out of your body

cells for energy.

# Signs and symptoms of diabetes

1. Poor vision
2. Skin infections
3. Increased thirst and urination
4. Increased hunger and body weakness

# Causes of diabetes

1. High consumption of fat and sugar
2. Lack of physical exercise
3. Family history

# Prevention of diabetes

1. Eating healthy meals with reduced fays and sugar
2. Doing regular physical exercise

# Management of diabetes

1. Taking a varied diet and in correct proportions
2. Taking prescribed drugs correctly

# Hypertension

* Also known as **high blood pressure**
* Is a condition the pressure of blood in the veins and arteries is high

# Causes of hypertension

1. Excessive intake of salt
2. Lack of proper management of stress
3. Lack of physical exercise
4. Diabetes and obesity may also lead to hypertension
5. Exercise intake of alcohol and smoking cigarettes

# Signs and symptoms of hypertension

1. Shortness of breath
2. Headaches
3. Poor vision
4. Nose bleeding
5. Weakness and dizziness
6. Rapid heartbeat.

# Prevention of hypertension

1. Managing stress
2. Doing physical interest
3. Eating healthy foods
4. Maintain healthy body weight
5. Reducing intake of salt
6. Avoiding intake of alcohol and smoking

# Management of hypertension

1. Going to regular medical check ups
2. Taking prescribe medication
3. Maintain your blood pressure regularly

# Epilepsy

* Is a disorder of the brain characterised by repeated seizures.
* During a seizure a person will temporarily experiences abnormal behaviour and sensations, sometimes including loss of consciousness
* It may occur as a result of generic disorder or acquired brain injury such as trauma or

stroke

# Causes of epilepsy

1. severe head injury
2. brain infections
3. Family history
4. Drug and substance abuse
5. A growth in the brain
6. Restricted amount of oxygen circulating in the brain

# Signs of Epilepsy

1. Seizures
2. Dizziness
3. Temporary confusion
4. Loss of consciousness or awareness

# Prevention and management Signs of Epilepsy

* Treated through medication as prescribed by a doctor

# First aid for epilepsy

1. Stay with them

* Remain calm and reassure the patient.
* Stay with the patient until they have fully recovered.

1. Keep the person safe
   * Cushion the head using a soft pillow to prevent injuries
   * The person should be comfortable and lying down on their side
   * Keep the person in a well ventilated area
   * Loosen tight clothing around the person neck and any other part of the body
   * Ensure the person does not have objects in the mouth.
   * Do not give liquids or food unless the person is fully awake
2. Seek medical help if
   * The seizure continues for over 5 minutes. Always time the duration of the seizure.
   * They have never had a seizure before
   * They are not responding after the seizure has stopped or gets another attack immediately after.
   * They sustained an injury during the seizure

# Asthma

* Is a condition in which a person’s airways becomes narrow and swollen and produces extra mucus.
* This makes it difficult to breathe. In some cases, it may lead to life threatening

attacks.

# Causes of asthma

1. Family history
2. Respiratory diseases such as viruses, pneumonia and flu
3. Environmental factors
   * These are things that are found in our surrounding that may afect ones breathing,. Such things may include allergens such as pollen, dust, animal fur

or feathers, smoke, fumes and pollination.

* + Extreme weather conditions, conditions such as very high humidity or low temperature may trigger asthma.

# Signs and symptoms of asthma

1. Wheezing (whistling sounds when breathing)
2. Shortness of breath
3. Tight chest which may be painful.

**4.**

**Prevention and management of asthma**

1. Take prescribed medication
2. Give first aid for asthma
3. Identify and avoid asthma triggers
4. Manage stress

# First aid for asthma atacks

1. Let the person sit upright
2. Ensure there is adequate ventilation
3. Stay calm as you reassure the person
4. Find out if the person has an asthma inhaler assist them to administer the inhaler.
5. In the absence of an inhaler, assist the person to take long and deep breathe
6. Keep of trigger and allergies like dust or strong smells
7. Should the asthma attack continues for more than five minutes, seek medical help.

# Cancer

Is a disease in which some of the body cell grow uncontrollably and spread to other body parts of the body destroying the tissues of the body. Where these cells have settled.

# Causes of cancer

1. Smoking
2. Family history
3. Excessive consumption of alcohol
4. Use of cosmetics containing harmful chemicals
5. Eating foods that contain preservatives and harmful chemicals.

# Signs and symptoms of cancer

1. Abnormal bumps
2. Unexplained fevers
3. Night sweats or unintentional Weight loss
4. Fatigue or extreme tiredness 5.

6.

# Prevention and management of cancer

**1.** early detention of presence of cancer cells in the body is important in prevention and management of cancer disease

# 2.

**3.**

# 4.

**Heart diseases**

* Heart diseases occur due to interruption of blood supply to the heart. This may be as a result of a deformity in the heart(such as a hole) or due to blockage of arteries supplying blood in the heat

# Causes of heart diseases

1. Unhealthy lifestyle
2. Heart infections
3. Heart defects 4.

# Signs and symptoms of heart diseases

1. Chest pains
2. Shortness of breath
3. Easily tiring during an activity
4. Pain in the neck, jaw, throat, upper abdomen or back and dizziness

**5.**

**Prevention and management of heart diseases**

1. Exercising regularly
2. Reducing intake of fats
3. Avoiding drug and substances abuse
4. Maintaining healthy weight
5. Following prescribed medications and other instructions by the doctor.

# CONSUMER EDUCATION

**Budgeting**

* **Budget** is the process of how to spend money that one has for a certain period of time.
* A budget helps to balance your your expenses in relation to available income.
* A **shopping list** helps one to save by helping a person to buy only the things they need.

# Importance of budgeting

1. It enables a person to spend wisely
2. It helps a person to avoid debts by spending on items they can aford
3. It enables a person to set priorities on the most important needs
4. It reduces wastage and impulse buying because a person budgets for what is necessary.
5. It helps one to know the amount of money they require for a certain period of time.

# Factors to consider when making a budget

1. **Your** income
2. your spending habits

**3.**

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# Making a budget for personal use

* Making a budget helps to cater for the most important needs in a family.
* If the budget is followed, it helps one to have a peace when available has been spent well.
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# Creating a portfolio of budgets

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# FOODS AND NUTRITION

* **Food** is what we eat or drink for energy and growth

# FOOD NUTRIENTS

**MINERALS (IRON AND IODINE)**

* **Minerals** are those elements on the earth and in foods that our bodies need to develop and function normally.
* **Micro nutrients** are minerals required in small amounts in our bodies.
* **Minerals** needed for proper functioning of the body are also called essential minerals.
* **Minerals** help our bodies to develop and function normally
* Minerals also protect our bodies against disease

**Different minerals found in foods**

* The foods we consume have diferent minerals that our bodies need to function well.
* Some of the minerals include
  1. Iodine
  2. Calcium
  3. Iron
  4. Sodium chloride
  5. Zinc
  6. Magnesium

# Sources of iron and iodine found in foods in the locality

|  |  |  |
| --- | --- | --- |
|  | FOODS RICH IN IRON | FOOD RICH IN IODINE |
| 1 | Spinach | Iodized salt |
| 2 | Lentils | Eggs |
| 3 | Broccoli | Beef liver |
| 4 | Tofu | Chicken |
| 5 | Liver | Dairy – milk, cheese, yoghurt |
| 6 | Red meat | Fish – tuna, oysters |
| 7 | Turkey meat | Seaweed |
| 8 | Legumes – peas | Crab |
| 9 | Shellfish |  |
| 10 | Pumpkin seeds |  |

**Importance of iron and iodine in the body**

* Iodine is important mineral that our thyroid needs to produce certain hormones
* A **thyroid** is a gland found in the neck. It produces hormones that regulate growth and development
* Not getting enough iodine can cause **goitre**
* Iodine also improves our defence against infections and regulates body functions
* Iodine also helps develop the brain
* Iron forms haemoglobin, a red blood cell protein whose main purpose is to transport oxygen in the blood.
* Iron strengthens the body’s protective system against viruses, bacteria and infections.
* Intake of iron helps prevent iron deficiency anaemia. (adolescents girls are

encouraged to eat foods rich in iron to replace iron lost during menstruation to prevent anaemia).

**Planning a meal that includes minerals in the diet**

* It is important to include foods rich in minerals in the diet while planning for meals.
* This ensures all meals provide essential minerals need by the body.
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# Daily log of foods eaten rich in iron and iodine

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* When you create a daily log of foods eaten rich in iron and iodine it will help you asses whet you are eating food rich in the two essential mineral.

|  |  |
| --- | --- |
| **Day of the week** | **Iron and iodine rich foods** |
| Monday | Ugali, liver, manage and pawpaw |
| Tuesday |  |
| Wednesday |  |
| Thursday |  |
| Friday |  |
| Saturday |  |
| Sunday |  |

# Preservation and storage of meat

* **Food preservation** is the process or technique used to maintain food in good condition in order to stop or slow down spoilage.
* This will prevent food borne illness as well as maintain nutritional value and flavour

of the food

* This reduces food wastage.
* The food that is preserved is kept properly for use in the future

# Source of meat in the locality

* Meat is flesh from animals eaten as food.
* Most common sources of meat are from animals i.e. cow, sheep, chicken, fish

# Importance of preserving and storing meat

* Meat is highly perishable food that spoils within a short time therefore proper preservation and storage is essential

1. Preserving meat maintains its nutritional value.
2. Preserving meat keeps it longer for future use
3. Prevents meat from getting spoil
4. Meat preservation prevents wastage.

# Facilities used for preserving and storing meat

1. Drying rack
2. Hook
3. Refrigerator/Fridge
4. Freezer
5. Airtight food containers

# Methods and procedure of preserving and storing meat

1. Refrigeration
2. Sun drying
3. Salting
4. Smoking

# Refrigeration

* Meat is preserve through refrigeration is kept under low temperature.
* Refrigerator has cooling and freezing compartments.
* Meat kept in the cooling compartments of the refrigerator keeps fresh for a short time while the freezing compartments keeps met fresh for a longer time.

**Requirements**

Fresh meat, chopping board, clean water, refrigerator and a plastic container

**Procedure for preserving meat using a refrigerator**

* 1. Clean the meat
  2. Cut the meat into pieces
  3. Pack in a plastic container
  4. Cover the plastic container
  5. Store the meat in a refrigerator

**Advantages of refrigeration**

1. It slows down the growth of bacteria that spoils the meat.
2. Much of the meats flavour is retained

**Disadvantage of refrigeration**

1. It normally requires electricity.
2. Food persevered in a refrigerator goes bad if there is unreliable supply of electricity
3. Refrigeration is expensive

# Sun drying

* In this method of preservation the sun provides the heat to dry the meat.
* Meat for preservation can either be hung under the sun in an open area or spread on

a clean food drying rack

* Protect the meat from insects and animals using a screened cage.

**Requirements**

Fresh meat, chopping board, clean water, screened cage, drying rack, hook, muslin cloth

**Procedure for preserving meat using sun drying**

1. Use fresh and lean meat
2. Clean the meat
3. Cut the meat into strips
4. Place the meat on S hook and hung the hooks in a screened cage. A string can be used to hang meat
5. Meat can be placed on a raised food drying roack. Cover the meat with a muslin cloth or fine wire mesh.
6. Allow the meat to dry completely on both sides. This may take several days depending the heat from the sun and wind conditions.
7. Meat can then be stored in a covered airtight container and kept in a cool dry place away from direct sunlight.
8. Sun dried meat can be preserved for at least two months.

**Advantages of preserving meat using sun drying**

* 1. The method is easy
  2. Sun drying method can be preserved for at least two months

**Disadvantages of preserving meat using sun drying**

1. The slow drying process requires patience
2. Sunny and windy conditions are restricted to weather conditions.

# Salting

* This is process of applying salt to meat.
* Salt prevents the growth of bacteria by removing water content from meat.

**Requirements**

Knife, chopping board, screened cage, clean water, hooks, fresh meat, salt, plastic container

**Procedure for preserving meat by rubbing it with salt**

1. Get fresh meat
2. Clean the meat
3. Cut the meat into moderate pieces
4. Rub the salt on the meat surface
5. Use S shaped hooks to hung meat in a screened cage indoors. The equipment keeps insects away
6. Allow the meat to cure for about 4-7 days

**Curing** meat refers to preserving meat by adding salt, with the aim of drawing moisture out of the food.

1. if needed, rub some more salt on the meat and continue with the curing process.
2. Store meat correctly after preservation in a cool dry place.
3. Before cooking the salted meat, soak in cold water to dissolve salt.

**Procedure for preserving meat using brine**

1. This method is best applied for fresh and fleshy meat
2. Prepare the brine by dissolving salt in water
3. Clean the meat
4. Cut the meat into lean pieces. Place the meat in a clean container
5. Pour the brine into water. Ensure the meat is completely covered with brine
6. Leave the meat in brine for at least two days
7. Drain of brine from the meat. Dipose water appropriately.
8. Hung brined meat in a screened cage outdoors. Use S shaped hooks to hold the strips.
9. Store meat correctly after preservation in a clean covered container in cool and dry conditions.

**Advantages of preserving meat using salting**

1. Salt is cheap
2. Salted meat is tender
3. Nutrients are retained in the meat juices
4. Salt kills bacteria hence preventing the meat from spoiling

**Disadvantages of preserving meat using salting**

1. Salted meat is unsuitable for people sufering from high blood pressure
2. Salted meat contributes to weak bones
3. Salted meat increases the risk of contracting kidney stones. A kidney stone is a solid piece of material that forms in the kidney from substances in the urine.

# Smoking

**Smoking** is a method of preserving meat by exposing it to smoke and heat from open fire.

**Requirements**

Fresh meat, chopping board, hooks, fire pit, gloves, hammer, nails, dry wood, plastic container, jembe, panga, two poles

**Procedure for preserving meat using smoking**

1. Use a jembe to dig a shallow pit at a convenient site
2. With a panga, make a hole on each side of the pit
3. Erect the 1.5m poles on each hole. Join at the top with with the one 1m pole using nails and a hammer.
4. Hung several hooks on the 1m pole
5. Make a fire with the dry wood. Smoke will be created
6. Cut meat for few hours
7. Air dry the meat for a few hours
8. Hung the meat on the S hook over the smoke.
9. Ensure regular supply of smoke by adding dry wood chips.
10. Smoke the meat completely until dry
11. Store meat correctly after its preservation in a cool dry place.

**Advantages of preserving meat using smoking**

1. The smoke coats the meat and keeps of bacteria and fungi
2. Flavour of the meat is improved
3. Smoked meat has enhanced aroma and appearance

**Disadvantages of preserving meat using smoking**

1. It requires close attentiono one should add firewood from time to time to ensure that smoke is continuously emitted.
2. Too much heat will cook the meat before it is properly smoked.
3. The process requires close attention and monitoring.

# Using different methods and procedure to prevent meat at home

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# Hygiene measures while preserving and storing meat at home

* Observing hygiene when preserving meat is very important to ensure there is no spoilage of meat
* Proper hygiene also prevents contamination of food that can easily lead to food

borne disease

* Wash your hands with clean water and soap before handling meat
* Cut the meat on a clean chopping board
* Do not mix diferent types of meat in one container
* Use clean equipment to preserve and store meat.

# Preservation of fruits and vegetation

**Fruits and vegetables available in the locality**

A fruit is the sweet and fleshy product of a tree or plant that contains seeds and can be eaten as food

A vegetable is a plant or part of plants used as food , such as roots, stems or leaves

|  |  |
| --- | --- |
| Fruit | Vegetables |
| Banana | Kales |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

# Importance of preserving and storing fruits and vegetables

Fruits and vegetables are highly perishable

1. It makes them last longer
2. It saves money
3. It prevents them from going bad
4. It avoids wastage
5. It makes fruits and vegetables available thought the season

# Facilities for preserving and storing fruits vegetables

Cool and dry conditions are the most ideal for preservation and storage of fruits and vegetables

Using appropriate preservation and storage facilities help to keep the fruits and vegetables fresh for longer

Different facilities like

1. Refrigerator
2. Sacks
3. Pots and glass jars
4. Plastic containers
5. Packaging bags

# Drying fruits and vegetables

1. Sun drying method of preservation is also ideal for drying fruits and vegetables
2. Fruits and vegetables can also be dried by use of machine known as dehydrators
3. Removing water content from fruits and vegetables preserves them for longer compared to when they are fresh.
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# Hygiene practices to observe while preserving and storing fruits or vegetables

It is important to always observe hygiene and safety while handling fruits and vegetables in order to avoid contamination which may lead to food borne illness.

1. Clean fruits and vegetables using clean water
2. Use clean storing equipment
3. Tightly cover the containers used to store dried fruits and vegetables to preserve dirt from entering
4. Wash your hands using soap and clean water before handling fruits or vegetables

# Cooking equipment

Cooking equipment include

1. Charcoal jiko
2. Electric cooker
3. Gas cooker
4. Paraffin stove (kerosene) stove
5. Traditional open fire place 6.

There are different types of cooking equipment

They use different types of fuel such as electricity, gas, firewood and charcoal

# Daily cleaning of cooking equipment

Cooking equipment should always remain clean and ready for use at all times Keeping them clean helps prevent bacterial growth and keeps pests away Maintain cleanliness also saves you time and money as well as making your work comfortable when using them

# Cleaning a charcoal jiko

A jiko is a portable charcoal stove that may have a ceramic liner fitted inside a metal case (energy saving jiko)

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# Cleaning an electric cooker

This is an equipment which uses electricity fuel as a source of heat

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# Cleaning a gas cooker

This is a cooking equipment which uses gas fuel as a source of heat

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# Cleaning a paraffin stove

This is a cooking equipment that uses kerosene as a source of heat

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# Cleaning a traditional open fire place

This is an open area with three stones that help to support the cooking pot while cooking It generally use dry firewood as fuel

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# Cleaning an improved firewood stove

* This is cooking area built and plastered with cement or clay
* It has an opening which allows you fo feed small pieces of dry firewood, maize cobs or coconut husks
* The cement or clay plaster helps to retain heat and this helps to reduce the amount of wood fuel used
* An improvised firewood stove is an example of an energy efficient device
* Care should be taken when cleaning the improvised stove to avoid damaging its plastered walls.
* It can have a single or double burner

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# Improvising materials for cleaning equipments

When taking care of cooking equipments, sometimes you may need to improvise cleaning materials available

1. We can cut an empty five litre jerrycan and use it as a dustpan
2. We can use our old clothes or towels as wiping cloths
3. We can make a broom using twigs
4. We can use a cartoon box as dustbin

# Safety when cleaning cooking equipment

Failure to observe safety when cleaning cooking equipment may cause accidents and injuries

1. Wipe spilled water to avoid falls
2. Be careful when cleaning stoves to avoid spilling paraffin
3. Switch off the electric cooker and unplug it from the socket during cleaning
4. Ensure the cooking equipment has cooled before cleaning it 5.

# Planning meals for a family

* A meal is food that is eaten for breakfast, lunch or dinner
* Meal planning is the process of deciding what you will eat for each meal and getting prepared ahead of time
* It is also entails knowing how many meals to plan for and when to serve them
* A meal plan helps us to plan efficiently

# Factors to consider when planning a family meal

1. Money

The amount of money available determines the type and quality of food a person can buy.

1. Variety of diet

Meals should contain all food nutrients in the right proportions. The food should contain carbohydrates, fats, vitamins and minerals

1. Dietary needs

Different members of the family require to eat different types and amount of food because of various reasons.

These reasons include

1. AGE

Babies, children and adolescents need more bodybuilding foods, energy giving and protective foods. The elderly people need more protective foods and proteins than carbohydrates because they are not very active

1. BODY SIZE

A big body size needs more energy compared to smaller body size.

1. GENDER

Girls and women need more iron compared to boys and men. This is because they need to cater for the blood they lose during menstruation

1. STATE OF HEALTH

Sick people need more protective and body building foods in quick recovery Some illness such as diabetes and ulcers has strict diet restrictions

1. OCCUPATION

A manual worker requires more energy giving foods while a lightly worker needs less energy giving foods

1. Availability of foods

Foods which are readily available, fresh and cheaper

When planning for a meal, you should consider buying foods which ae in season because they are cheap

1. Number of people

You should consider the number of people who will take the meal.. this will help paln for enough food

1. Time

The time available for preparing and coking food will determine the type of food to be cooked

1. Fuel

The fuel that will be used influences the cost of cooking, efficiency and type of cooking method to be used

# Different types of meal for different times of the day

**Reasons for planning a family meal at home**

1. It saves time.

Planning meals in advance helps one manage time better

1. Avoid wastage of food

When planning for a meal, we consider the number of people so as to avoid a balanced diet

1. Planning meals helps us to budget for a balanced diet
2. It saves money

Planning meals helps one buy the right amount of food. This avoids wastage of food

1. Planning for meals ensures you include variety It makes one avoid eating the same food every day
2. Planning for meals helps one to provide a healthy and balanced diet

# Planning and preparing a simple meal for a family.

Planning meals which are healthy and include a variety of foods to provide your family with all nutrients needed each day

Serve a balance of family favourites and new recipes

Vary your cooking methods for example you can fry, boil, bake,grill stew or use other method.

Try not to serve the same food twice in the same day

# Cooking methods Stewing

It is a method of cooking food by slow boiling or simmering The food with served with the boiling liquid (stew)

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# Improvising cooking equipments for stewing

Improvisation of cooking equipments needs one to be resourceful and creative on use of resources available in the locality at the time of cooking.

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# Serving stewed food

* We should serve food on clean plates
* Serve food when it is hot. Hot food digest easily and tastes better
* Serve the right amount of food. Do not serve too little or too much.
* Serve food neatly. While serving, avoid spilling food on the edges of plate
* You can serve the food creatively to make it look applealing
* When the stew remains after serving, let it cool. Put it in a container, cover it and store it in a cool place.

# Safety measures to practise when stewing food

1. Hold the sufuria using a sufuria holder
2. In case of fire, use a damp towel or blanket or fire extinguisher to put it out
3. Do not leave food that is cooking unattended
4. Be careful when using knives
5. Switch off cooking equipment after use
6. Be careful when opening sufuria lids when cooking to avoid scalds
7. Cook in a well lit and ventilated room
8. Wash your hands before cooking

# Cooking methods

**Baking (rubbing in method)**

Baking is a method of cooking food that uses dry heat, normally done in an oven. Baking is appropriate for foods that have enough moisture such as potatoes and flour mixtures for cakes, bread and other food items

# Foods that can be baked

Baking as a method of cooking normally gives baked food items a characteristics flavour, aroma, texture and colour

1. Bread
2. Biscuits
3. Cakes 4.

5.

6.

# Equipments and materials used for baking

1.

2.

3.

4.

1. Rolling pin
2. Measuring jar 7.

8. Oven gloves

# Procedure of baking a simple cake using rubbing in method

Rubbing in method is a technique where fat (margarine or butter) is rubbed into the flour using fingertips

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# Safety measure to observe when baking

1. Wipe split liquids to avoid falls
2. When baking using a jiko ensure the area is well ventilated
3. Use oven gloves or pieces of dry cloth to remove baking tins from the oven
4. Do not handle an electric oven and other equipments with wet hands
5. Ensure that there are no spills in the oven
6. Ensure there is no leakage when using gas oven

# Improvising cooking equipment for baking

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# Storing baked cakes

* When properly stored, cakes maintain freshness for long
* The freshness of a cake is affected by various factors within the environment such as heat, humidity, intense light and insects among others
* It is important to store cakes properly to prevent them from spoiling.
* We can store cakes at room temperature or in refrigerator
* When storing a cake in room temperature, put it in a plastic container. Cover the container to avoid exposure to germs and insects
* When storing cake in a refrigerator, put it in a plastic container. Cover the container with a lid to prevent it from drying out.
* Always store in a cool dry place.

# CLOTHING

**Tools and equipments used for sewing**

1. Iron box
2. Ironing board
3. Sleeve board
4. Spraying can
5. Bodkin
6. Needles
7. Scissors
8. Sewing machine
9. Tape measure 10.

# Factors to consider when choosing tools and equipments used for sewing

1. Quality of sewing machine
2. Price 3.

4.

5.

# Using different sewing tools and equipments

Correct use of sewing tools and equipments will make them last long

This also help to save money spent when replacing them in case of damage during use or when they are lost

1. Scissors – a pair of scissors is used to cut out fabric and threads
2. Iron box – used for removing creases on clothes
3. Tape measure – used is to take measurements on fabrics and the body
4. Ironing board – is a narrow flat padded cloth covered surface on which clothes are ironed. It is has adjustable legs that can be folded to suit an individual height. It can be improved with flat padded cloth covered table
5. Bodkin – used to thread cards, ribbons or pipings through a narrow channel or casing in clothes such as waistband of petticoat. A safety pinmay be used when there is no bodkin.
6. Water sprinkler - used to sprinkle water on clothes during ironing. This makes it easy to remove creases on clothes

# Caring and storing tools and equipments used for sewing

We should store sewing tools and equipments properly so as to

1. Make them last longer
2. Prevent them from getting lost
3. Prevent them from rusting and getting damaged
4. Save money spent to replace lost or damaged items
5. For safety purpose

The following are ways we can store and care for sewing tools and equipment

1. Put scissors in a scissors case. The blades should be facing down
2. Neatly roll a tape measure and tie it with a rubber band. Store it in a sewing kit or container.
3. Keep threads in a box or container
4. Put needles and pins in a pin cushion
5. Put bodkins in a sewing kit
6. Put the sewing materials and equipments in a clean dry place
7. Clean the iron box regularly according to its type. Store the iron box in a cool dry place
8. Regularly oil the hinges of a charcoal box to avoid rusting.
9. Wash the cloth cover of the ironing board regularly
10. Properly wind the sewing thread after use
11. Do not use the pair of scissors for cutting fabric to cut papers

# Safety when using, caring for and storing sewing tools and equipments

1. Wear a thimble to protect your finger
2. When using scissors, cut fabrics away from your body
3. Put pins and needles in a pin cushion when not in use
4. Unplug the iron from the socket after use
5. Do not clean the iron when it is hot
6. Ensure there is enough lighting when sewing.

# Fabric construction

A fibre is a thin thread of natural or man made substances that is used to make a fabric The fibres are weaved into yarn

The yarn is then used to make fabrics

A fabric is also known as a cloth or material There are various methods used to make fabrics

1. Weaving
2. Knitting
3. Crotcheting

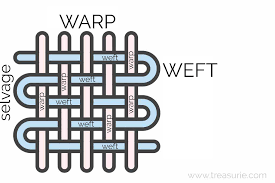
# Weaving

Weaving is achieved by interlacing or intertwining two sets of yarns or threads over and under each other at right angles

These yarns or threads either run horizontally (weft threads running across the fabric) or they run vertically warp threads running along the fabric

In plain weave, the left thread goes over and under warp threads.

In basket weave, two weft threads goes over and under two warp threads



Basket weave

Plain weave

**T**

**or wea**

1. Weaving frame – provides framework for weaving. This means it supports the

weaving hence making it easier to weave. It is threaded with warp so that you can weave through using weft thread

**ools, equipments and materials used f**

**ving**

1. Yarns – are used for weaving. Different coloured yarns can be used to make interesting patterns
2. Scissors – for cutting warp and weft yarns
3. Shed stick – it makes weaving easier by creating an opening between the warp yarns for the weft yarns to pass through
4. Tapestry beater – is a tool that has teeth design to go around the warp threads and push down your weft threads. The tapestry beater will help your weave consistent and tight
5. Shuttle – is a tool designed to neatly and compactly store a holder that carries the thread of the weft yarn. Shuttles are passed back and forth through the shed, between the warp threads in order to weave in the weft
6. Loom
7. Commercial electric weaving machine

# Improvising weaving tools, equipments and materials

When actual tools, equipments and materials are not available we can improvise by using

1. Bamboo
2. Reeds
3. Comb
4. Strong cardboard
5. Straws
6. grass

# How to improvise weaving yarns

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# How to improvise weaving frame

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# Methods of weaving used fabric construction

1. plain weave – a single weft thread gos over and under a single warp thread
2. basket weave – two warp two weft threads go over and under two warp threads

# Weaving items for use

Items made from weaving can be used at home or sold for an income

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# Care and storage of weaving tools, materials and equipments

1. wind excess yarn after use
2. store scissors in a scissors case
3. store weaving tools and equipments in a dry place
4. oil the hinges of scissors regularly 5.

# Safety precautions when weaving

1. When using a pair of scissors, cut away from your body to avoid cutting yourself
2. Report to the teacher when you get hurt
3. Store all the weaving tools and equipments safely after use
4. Work in a well it room 5.

# Knitting

Knitting is a process of fabric constructing fabric

It is achieved by applying a continuous yarn or set of yarns to form a series of interlocking loops.

The two basic types of knits ( cast on stitches) and purl (cast off stitches) Knitting may be done by hand or by machine.

# Tools and materials used for knitting

1. Scissors – used to cut yarn when finish knitting
2. Knitting needles – used in hand knitting to produce knitted fabris
3. Yarn – used for knitting.
4. Tape measure – used to measure the size of the item being made 5.

# Improvising knitting tools and materials

Improvising knitting needles Pupil’s practical activity Page 162-163

# Basic knitting stitches

The knitting process is based on two simple stitches namely

1. Knit stitch - looks like a flat V-shape and is mainly found on the right side of knitted article
2. Purl stitch – looks like a raised bump on both sides of a knitted article

# Holding knitting needles and yarns

It is important to hold knitting needles and yarn correctly in orderto successfully carry out knitting work

Pupil’s practical activity Page 164

# Knitting items for home use

Knit and purl stitches can be used to make interesting items for home use

Knit stitches

Pupil’s practical activity Page 165-168

# How do you knit using purl stitch?

Pupil’s practical activity Page 169-172

# Safety precautions to be observed when knitting

1. Work in a well lit area
2. When cutting using a pair of scissors keep your fingers away from the blades
3. Do not use your teeth to cut yarn
4. Do not sit too close to each other as you knit
5. Store scissors, all knitting materials and tools properly after use

# Care and storage of knitting tools and materials

1. Wind excess yarn after use
2. Store scissors in a scissors case
3. Store knitting tools and equipments in a dry place
4. Oil the hinges of scissors regularly
5. Avoid dropping scissors

# Crocheting

Crocheting is the process of creating fabric by interlocking loops of yarn, thread or strands of other materials using a crocheting hook

# Tools and materials used for crocheting

1. Crocheting hook
2. Yarn
3. Tape measure
4. Scissors 5.

# Improvising crocheting tools and materials

We improvise so as to reduce expenses

Improvising a crocheting hook Pupil’s practical activity

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# Basic crocheting stitches

* There are a number of crocheting stitches
* Each stitches produces a different pattern
  1. Single crochet stitch
  2. Double crochet stitch

# Holding a crocheting hook and yarn

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# Crocheting an item for use at home

A single crochet is the most basic crocheting stitch. It is also the shortest stitch

Single crochet

Pupil’s practical activity Page 180- 183

A double crochet stitch is a basic crocheting stitch. It is taller than a single crochet stitch

Double crochet

Pupil’s practical activity Page 184- 187

# Safety precautions to observe when crocheting

1. Use a suitable chair and desk or table for comfort. This will prevent back and neck pain
2. Work in a well lit room to avoid eye strain
3. When cutting using a pair of scissors, keep your fingers away from the blades
4. Ensure there is enough space around you as you crochet to avoid injuring others
5. Store scissors and crocheting hook properly after use

# Caring for and storing of crocheting tools and materials

1. Wind excess yarn after use
2. Store scissors in a scissors case
3. Store crocheting tools and equipments in a dry place
4. Oil the hinges of scissors regularly
5. Avoid dropping scissors
6. Store crocheting hooks in a crochet bag

# Advantages of crocheted items used at home

1. They keep us warm during the cold weather
2. It is cheap to make the items
3. They make us look stylish
4. They are used to decorate the home 5.

# Repair and maintenance of pockets

A pocket is an envelope like bag either fastened to or inserted in an article or clothing

# Types of pockets

* Pockets can be both useful (used to hold small items) and decorative ( when used creatively on a garment)
* Pockets are also attached to bags, backpacks apart from clothes
* Pockets are made of different sizes and shapes
* **Patch pockets** are attached onto the outside of a garment
* **In seam pockets** have pocket opening along the seam line of a garment

# Types of damage pockets

Different types of damage may occur on pockets due to their frequent use These damages include

1. loose stitches
2. a hole
3. wear among others

# Factors to consider when repairing a damaged pocket

1. Colour of thread

The colour of the thread used to repair the damaged pocket should match the intial colour of thread that was used to make the pocket

1. Size of the damage

If the damage is a tear, you can use a patch to repair the damage

1. Type of damage

One should determine whether the damage is a tear or loose stitches. This will help determine the type of repair to be done

1. Texture of the fabric

Where the patch repair is necessary, the texture of the patch should match that of the fabric used to make a pocket.

# Repairing a damaged pocket

* Timely repair of a damage on a pocket will help to save time and money
* It also prevents loss of items in the pocket

Repair loose stitches on an in seam pockets Pupil’s practical activity

Page 194-195

Repair loose stitches on a patch pocket Pupil’s practical activity

Page 195-198

# Safety while using tools and equipments when repairing a pocket

1. Ensure you sew in a room with adequate lighting
2. Always wear a thimble when using a needle
3. Do not sit too close to each other when using needles
4. Do not hold needles and pins in your mouth
5. Put needles and pins in a cushion when not in use
6. Always ensure the needles points towards you when sewing
7. Focus on your work when sewing to avoid injuries
8. Report any accident that happens when using the tools
9. When using a pair of scissors cut away from your body
10. Put the pair of scissors in a scissors case when not in use

# LAUNDRY WORK

Laundry work is the process of removing dirt and stains from clothes in order to maintain their appearance.

# Special treatment in laundry work

**Meaning of Special treatment in laundry work**

Laundry work is the process of removing dirt and stains from clothes in order to maintain their appearance.

Laundry involves

1. Sorting
2. Washing
3. Rinsing
4. Drying
5. Airing
6. Storing clothes

# Identifying types of special treatment in laundry work

Special treatment give to clothes include

1. Stain removal – involves removing stubborn discolouration from clothes. A **stain** is a dirty mark on a cloth that cannot be removed easily by washing normally
2. Disinfecting – is done to kill germs. It is mostly done on articles to prevent the spread of diseases causing germs. The method used to disinfect include boiling, use of disinfectants and sun drying
3. Bleaching – is treatment given to cotton and linen articles to make them whiter and brighter by use of chemicals bleaches or exposure to direct sun light. Bleaching is only recommended for white articles
4. Conditioning – fabric conditioning is treatment given to prevent static electricity (non cotton clothes clinging to the body). The clothes given this treatment also feel soft, smell nice and fresh and are easy to iron
5. Boiling
6. Removal of chewing gum is done by applying a cold treatment on the gum. Ice cubes are applied on the gum to harden gum, then scrapped off. Once removed the article is given normal laudry process

# Importance of special treatment in laundry work

Special treatment is important in laundry work because it helps to properly care for and maintain clothes

1. Kills germs
2. Softens clothes and makes them smell good
3. Whitens clothes
4. Removes stubborn dirt on clothes 5.

# Points to consider when carrying out special treatment

1. Remove stains when they are fresh
2. Scrap off stains using a blunt object to avoid tearing the cloth
3. Apply mild methods of stain removal before using harsh methods
4. Read the care labels on clothes. This will provide information for proper laundry treatment

# Materials used for special treatment

Use of correct laundry materials will help improves on the final outcome of the laundry process

1. Bleach eg jik
2. Fabric softener
3. Salk 4.

# Safety precautions to observe when carrying out special treatment in laundry work

1. Ensure bleach does not come into contact with your eyes
2. Disinfectants should be kept out of children’s reach
3. Be careful when handling clothes during boiling to avoid burns and scalds 4.

# Carrying out special treatment in laundry work on different clothes

The success of carrying out different types of special treatment requires use of correct materials and procedure

The special treatment carried out will also depend on the type of fabric and its colour

Removing ball point ink stain Pupil’s practical activity Page 206-207

Removing fountain pen ink stain Pupil’s practical activity

Page 208-209

Removing grass stains Pupil’s practical activity Page 209-210

Removing blood stains Pupil’s practical activity Page 210-211

Removing chewing gum stains Pupil’s practical activity

Page 211-213

**Disinfecting articles** Use of disinfectants Requirements

Disinfectants, basins, warm water, cold water, detergent, iron box, ironing surface, fast coloured shirt and pegs.

Procedure

1. Wash the shirt gently in warm soapy water using gentle friction and kneading and squeezing method
2. Rinse the shirt in warm water to remove all traces of soap
3. Add disinfectants to the final cold water and rinse the shirt
4. Dry the shirt using the correct method, finish and store

# Boiling

* Boiling involves steeping articles in boiling water
* This should be done after the articles have been washed and rinsed.
* Boiling is suitable method for disinfecting white and fast coloured cotton and linen articles.
* Articles that need this treatment include
  1. Kitchen towels
  2. Napkins
  3. Hospital gowns
  4. Bed sheets

Pupil’s practical activity Page 215-216

# Sun drying

* Sun drying is a method used to disinfect clothes as well as dry them by use of direct sunlight
* Sun drying is a suitable method for disinfecting white cottonand linen articles

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# Use of fabric conditioner

Fabric conditioner is treatment given to non cotton clothes to help reduce or prevent static electricity (garments clinging onto the body), softens fabrics and make them smell nice and fresh

Pupil’s practical activity Page 218-219

# Bleaching

Bleaching is a method used to brighten and remove stains on articles by use of chemicals. It is ideal for white clothes and linen articles

Pupil’s practical activity

Page 219-220

# Cleaning and storing equipments and materials used in special treatment

Pupil’s practical activity Page 221-223

# Laundering a woollen or acrylic article

**Reasons for care when laundering woollen or acrylic articles**

* Woollen and acrylic articles are delicate fabrics
* Read care labels on woollen and acrylic articles before laundry It prevent stretching them

It prevents shrinking them

It helps maintain their shape and size

# Resources for laundering woollen and acrylic articles

1. A flat dying rack is used for drying woollen and acrylic articles after they have been washed to prevent them from stretching
2. A tape measure is used for taking the measurements on acrylic and woollen articles before laundry. This helps reshape the articles back to their original size
3. A towel is used to squeeze out excess water from woollen and acrcylic articles after rinsing
4. An iron box to used to press woollen and acrylic articles.
5. Basins and buckets hold water that is used to wash and rinse woollen and acrylic articles

# Laundering a woollen and acrylic sweater

Pupil’s practical activity Page 226-229

1. Woollen or acrylic articles should not be soaked. This because they lose shape easily especially when wet
2. Woollen or acrylic articles should be washed by kneading and squeezing method to avoid stretching them out of shape
3. Woollen or acrylic articles should not be wrung to avoid stretching them out of shape
4. Woollen or acrylic articles should be dried on a clean flat surface under a shade to avoid stretching.

# Cleaning and storing laundry equipment

Pupil’s practical activity Page 230-231

# Laundering loose coloured clothes

**Reasons for care during laundering loose coloured clothes**

Clothes which can easily loose their colour during laundry should be handle with care in order to keep them colourful for longer

If proper care is not taken during laundry, the loose dye may discolour other clothes therefore damaging them

# Materials used for laundering loose coloured clothes

We use different materials for laundering loose coloured articles

1. Vinegar
2. Salt
3. Lemon 4.

5.

6.

# Procedure of laundering loose coloured clothes

Pupil’s practical activity Page 233-235

NB

1. Loose coloured clothes should not be soaked to prevent loss of colour.
2. Loose coloured clothes should be washed using mild detergent to minimise loss of colour
3. Loose coloured clothes should be washed using kneading and squeezing method to prevent loss of colour
4. Loose coloured clothes should not be wrung to prevent loss of colour
5. Salt is added to the final rinsing water to fix colour. Vinegar and lemon can also be added to the final rinsing water to brighten colour
6. Loose coloured clothes should be hanged inside out under the shade to prevent the colour from fading.
7. Loose coloured clothes should not be hanged close to or overlapping each other to prevent transfer of colour.

# Cleaning and storing equipments and materials used in laundry of loose coloured articles

Pupil’s practical activity Page 236-237