P.3 LITERACY ONE REVISED LESSON NOTES TERM 1 2023

THEME I: OUR HOME AND COMMUNITY

Homes

A home is a place where people or animals stay.

Different family members which live at home Family:

This is a group of people related by blood, marriage or adoption.

Types of families

- ✓ Nuclear family.
- ✓ Extended family.

- ✓ Foster family
- ✓ Institutional family

Nuclear family:

This is the type of family with parents and their own children.

Members of a nuclear family

- 1. Father
- 2. Mother
- 3. Brothers
- 4. Sisters

Activity

Duties of the members of the nuclear family

Duties of a father

- 1. He provides security
- 2. He provides basic needs.
- 3. He disciplines children
- 4. He name new born children.

Duties of a mother.

- 1. She produces children
- 2. She takes care of young ones.
- 3. She looks after a home.
- 4. She imparts good morals.

Duties of children

- 1. Slashing the grass
- 2. Washing the utensils
- 3. Cleaning the house
- 4. Fetching water
- 5. Carrying the baby

Advantages of a nuclear family.

- 1. It is easy to manage
- 2. There is few misunderstanding
- 3. There is little level of disunity
- 4. It is easy to provide basic needs.
- 5. Children get enough parental love.

Disadvantages of nuclear family.

- 1. Children may fail to know their relatives.
- 2. It promotes selfishness among children
- 3. There is inadequate labour
- 4. There is inadequate security
- 5. Incase parents die, the children suffer a lot.

Ac	ti	vi	ty

1. Mention any two types of family.
i)
ii)
3. State any two duties of a 4. Father i)
ii)
ii)5. mother. i)
ii)
6. State any two ways in which members of the family are related. i)
ii)
Mention any two advantages of a nuclear family.
i)
ii)
An extended family

An extended family is the type of family where we find parents, children and other relations.

Advantages of an extended family.

- 1. There is enough labour
- 2. There is enough security.
- 3. Children are brought up by many people.

Disadvantages of an extended family.

- 1. It is expensive to manage.
- 2. Families with big numbers are associated with disunity.

Duties of mother and a father.

This is termed as shared responsibility.

- 1. Providing basic needs.
- 2. Taking care of children
- 3. Protecting children.
- 4. Cooking food.

Activities done by boys

1. Hunting

3. Grazing animals

5. Chopping firewood

2. Fishing

4. Slashing

6. Building houses.

Activities done by girls

- 1. Carrying babies.
- 2. Taking care of the elderly.
- 3. Cooking food.
- 4. Helping their mothers.

Reasons for such duties.

- 1. Girls were described as weak sexes compared to boys.
- 2. Girls were more delicate than boys.
- 3. Girls were trained to be mothers.

Activities done by both girls and boys

1. Fetching water

4. Mopping houses

2. Collecting firewood

5. Washing utensils

3. Digging in the garden

Foster family

This is the type of family where children are raised up in a foster home.

Institutional family

This is the type of family where are related to one another by an institution uniting them

Examples of these institutions

- ✓ Schools
- ✓ Mosque
- ✓ Churches
- ✓ Hospitals

Activity
 What is an extended family? State any two advantages of an extended family. i)
3. Mention any two disadvantages of an extended family. i) ii)
4. Give any two domestic activities done by both girls and boys.

Gender equity

This means treating both males and females as equal.

These include;

- 1. Fair distribution of work.
- 2. Fair distribution of money.
- 3. Fair justice

Examples of showing gender equity

- 1. Educating both a boy and a girl child
- 2. Give equal shares to both gender in a family
- 3. Equal distribution of work
- 4. Recognition of children with special needs
- 5. Fair distribution of basic needs
- 6. By giving fair punishments to both boys and girls.
- 7. By giving equal opportunities to both boys and girls.
- 8. By Allowing both boys and girls to express their feelings freely

OUR COMMUNITY

Location of our village People in our village Important places Important activities

THEME II: OUR SUB COUNTY/ DIVISION

SUB-THEME: NAME AND LOCATION OF OUR SUB-COUNTRY/DIVISION.

Maps and pictures.

A map is a drawing of an object as seen from above. A picture is a drawing of an object as seen from aside.

Examples of maps and pictures.

Object Map Pictures.

Tree

House

Pot

Table

Importance of maps and pictures.

- 1. They help us to locate places.
- 2. They show information of a given area.
- 3. They represent a large area on a small piece of paper.
- 4. They locate boundaries of places.

Differences between maps and pictures.

- 1. Maps show only the top view of an object unlike pictures.
- 2. A map is drawn as seen from above while a picture is drawn as seen from a side.
- 3. Pictures are easier to understand than maps.

Similarities between maps and pictures.

- 1. Both are drawings.
- 2. Both represent real objects.

Elements of a good map.

These are things which help someone to read easily.

They include the following;

- 1. Title/heading
- 2. Key

- 3. Map symbols
- 4. compass rose
- 5. scale

Importance of elements of a map.

- 1. The title tells a map reader what a map is all about.
- 2. The key explains / interprets the symbols used on a map.
- 3. The scale measures the actual distance between places on a map.
- 4. The compass rose shows direction.

Symbols used on a map.

Symbols used on the map. meaning **Symbol** Bridge **Forest** River IIIIIIIII Railway Church Mountain Swamp Air port

A bridge is used in crossing water bodies.

A quarry is a stoning area.

Why symbols are used on a map

- 1. To prevent overcrowding on a map.
- 2. They represent real objects on a map.
- 3. They make map reading easy.
- 4. They make the map look neat.

Activity

- 1. What is a map?
- 2. What is a picture?
- 3. Give two similarities between maps and pictures.
- 4. What is the difference between maps and pictures?
- 5. Draw the following maps symbols.
 - (a) Tree
- (b) table.
- 6. Give one importance of maps and pictures.
- 7. Identify any three elements of a good map.
- 8. Which element helps to measure distance between places on a map?
- 9. Why are map symbols used on a map?
- 10. How useful is a key on a map?
- 11. Draw the following symbols used on a map.
 - (a) quarry
 - (b) Swamp
 - (c) canal

Compass:

A compass is an instrument used to find directions of places.

Directions:

These are ways of telling us where things and places are found.

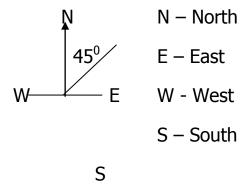
Cardinal points of a compass.

Cardinal points are the four major points of a compass.

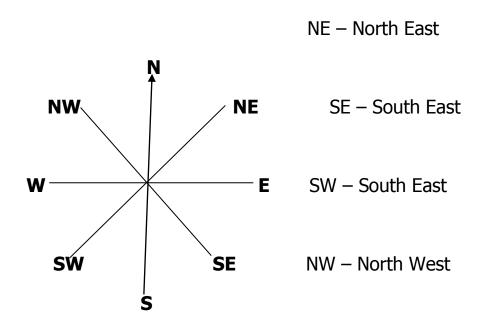
Directions are measured in degrees.

Between two cardinal 90°

Between cardinal and semi cardinal 45⁰



In between cardinal points we have second points.



Groups of people who use compass direction.

- 1. Pilots
- 2. Sailors
- 3. Mountain climbers
- 4. Tourists
- 5. Rally drivers
- 6. Soldiers
- 7. Scouts/guides
- 8. Captains of ships

Ways of locating places without using a map.

- Use of shadows.
- Using position of the sun.
- Using landmarks like hills, valleys, etc.

Note: A compass always points to the north while at rest.

Activity:

- 1. What is a compass? (Define)
- 2. What name is given to the four major points of a compass?
- 3. Write S.E in full.
- 4. Mention one example of a secondary points of a compass.
- 5. Name two groups of people who use a compass in their daily work.
- 6. Why does a pilot need a compass?
- 7. Write down one cardinal point of a compass.
- 8. A part from using a compass rose, name any other three ways of telling direction.
- 9. To which direction does the compass point while at rest?
- 10. Peter is a pilot. What does he do?

LOCATION OF OUR SUB-COUNTY:

(a) NANGABO SUB-COUNTY

Nangabo sub-county is found in Wakiso district.

A sub-county comprises of a number of parishes.

A parish is a group of villages.

In Nangabo we have nine parishes.

These are;

- 1. Masooli
- 2. Nangabo
- 3. Katadde
- 4. Kabubbu
- 5. Gayaza
- 6. Kiteezi
- 7. Wattuba
- 8. Wampeewo
- 9. Bulamu

Neighbouring sub-counties to Nangabo.

- Busukuma in the North
- Kira in the East
- Kawempe in the South
- Nabweru in the West
- Gombe in the North East.

A sketch map of our sub-county and its neighbours.

Activity:

- 1. Who heads a sub-county?
- 2. Which sub-county neighbours Nangobo in the;
 - (a) North West
 - (b) East
 - (c) North
- 3. What is a parish?
- 4. Identify and name any four parishes in Nangabo sub-county.
- **(b)** Location of our sub- county:

Kampala district:

- A sub-county is a composition of many parishes.
- Our subcounty is found in Kampala district.
- Its neigbouring sub-counties are;
- (a) Kawempe division /municipality
- (b) Nakawa division
- (c) Makindye division

(d) Rubaga division

- It is found in Kampala district. Kampala district is made up of five municipalities.
- Our school is found in the central urban municipality.

Important features found in each division of Kampala city.

(a) Kawempe division.

- Makerere university
- Kalerwe market
- Mulago hospital
- Factories.

(b) Rubaga division.

- Kabaka's lake
- Rubaga hospital
- Kasubi tombs.
- Rubaga cathedral
- Mengo hospital
- Mengo palace.

(c) Nakawa division

- Kyambogo University
- Luzira prison
- Spear motors
- Port bell.

(d) Central division

- Bank of Uganda.
- State house
- Main post office
- Parliament
- UBC TV, Radio
- St. Balikuddembe Market

(e) Makindye division

- Muyenga waterfalls.
- Kibuli mosque
- Kampala international hospital
- Nsambya barracks
- Kibuli hospital

Kampala is the capital city of Uganda.

The head of a city council is called **a Mayor**

A municipality is also headed by a Mayor

A municipality is a city headed by local authorities.

Kampala city is headed by a body called KCCA. It is headed by the Executive director.

The Executive director of KCCA is Jennifer Musisi

Reasons why Kampala is having many people.

- 1. Better communication facilities.
- 2. Commercial centre of Uganda.
- 3. Better transport facilities.
- 4. It is the capital city of Uganda.
- 5. Enough market.
- 6. Better security ad cheap labour force.

Problems faced by people living in Kampala city.

- 1. Shortage of food.
- 2. Poor sanitation.
- 3. High crime rate.
- 4. Un employment.
- 5. High levels of immorality.

Duties of the K.C.C.A

- ❖ To plan for the city.
- They clean up the city.
- They collect taxes in the city.

Activity:

- 1. Name the following places where our school is located.
- (a) Sub-county
- (b) District
- (c) County
- 2. How many municipalities make up Kampala city?
- 3. Name the municipalities/divisions that make up Kampala city.
- 4. Identify three important features found in our sub-county.
- 5. Name the biggest municipality in Kampala district.
- 6. Name the biggest market in central division.
- 7. Write K.C.C.A in full.
- 8. Who heads the K.C.C.A?
- 9. Give three reasons why Kampala has many people.

- 10. Identify problems faced by people living in Kampala.
- 11. Identify any two duties of the K.C.C.A.
- 12. What is a Municipality?
- 13. Who heads a city?

PHYSICAL FEATURES IN OUR SUB COUNTY

Physical features are natural land forms in an area. **Land forms** means the shape of land in an area.

Examples of physical features in our sub-county.

- 1. Hills
- 2. Lakes
- 3. Rivers
- 4. Plateau
- 5. Plains
- 6. Swamps
- 7. Valleys
- 8. Streams

(a) Hills:

A hill is a raised piece of land in an area.

Examples of hills in Kampala and features found on them.

- Mulago hill Mulago hospital (biggest in Uganda.
- 2. Makerere hill Makerere University
- 3. Nakasero hill Bank of Uganda, State house, Parliament building, Nakesero market.
- 4. Kololo hill Kololo airstrip
- 5. Namirembe hill Namirembe cathedral, Sanyu babies' home.
- 6. Kasubi hill Royal tombs.
- 7. Kibuli Oldest mosque in Kampala, Hospital
- 8. Muyenga hill Water tanks.
- 9. Old Kampala hill Gadhafi / Kampala mosque
- 10. Kikaya hill Bahai temple.

Importance of hills.

- They provide good sites for settlement.
- ❖ Some hills have cultural sites e.g. Kasubi hill.
- Some hills form sources of rivers.
- Some hills are mining areas.

Dangers of hills.

- They encourage soil erosion.
- They affect road construction.
- Big rocks can slide and cause accidents.
- They are hiding places for wild animals.

(b) Valleys:

A valley is a lowland between two or more close hills

Examples of valleys in our sub-county.

- 1. Bat valley,
- 2. Green valley,
- 3. Kitante valley
- 4. Nakivubo valley
- Lugogo valley.

Importance of valleys

- 1. We get clay for pottery.
- 2. Brick making is done in valleys
- 3. Fishing in springs, streams, rivers is done in valleys.
- 4. Papyrus for crafts and building are got from valleys.
- 5. Forests in valleys are homes of some wild animals.
- 6. Hunting is done in valleys.
- 7. Valleys are sources of some rivers and streams.
- 8. Farming is carried out in valleys.

Dangers of valleys.

- 1. They are floody during rainy season.
- 2. They are breeding places for mosquitoes.
- 3. They make transport difficult.

Lakes in our district.

A lake is a large area of water surrounded by land.

Examples of lakes in our district

- 1. L.Victoria (Nalubaale)
- 2. Kabaka's lake
- 3. L. Katwe Salt mining.
- 4. L. Victoria biggest / largest lake.
- 5. L. Albert Oil mining
- 6. L. George
- 7. Lake Wamala
- 8. Lake Mburo
- 9. L. Edward,
- 10. L. Kyoga

A river.

A river is a mass of flowing water

Examples of rivers in our district

- 1. R. Nile longest river,
- 2. R. Kafu,
- 3. R. Katonga,
- 4. R. Kagera

Importance of lakes and rivers.

- 1. They are fishing grounds.
- 2. They help in rain formation.
- 3. Lakes are used for transport.
- 4. They are sources of water.
- 5. They are sources of minerals
- 6. Swimming is done in lakes and rivers
- 7. We generate electricity in rivers e.g. Nile
- 8. They attract tourists.
- 9. Lakes provide sand.

Activities carried on and around lakes and rivers

- 1. Fishing
- 2. Crop farming.
- 3. Mining
- 4. Tourist attraction
- 5. Trading
- 6. transport

Dangers of lakes and rivers.

- 1. They are breeding places for vectors like mosquitoes.
- 2. They keep dangerous wild animals like crocodiles.
- 3. Lakes with water weed make transport difficult.
- 4. Lakes and rivers occupies large land for farming
- 5. They kill people by drowning.
- 6. Lakes and rivers flood

Problems faced by people living near lakes and rivers

- 1. Dangerous water animals kill people e.g. snakes, crocodile and hippopotamus.
- 2. Floods destroy lives, homes, crops, animals and other property.
- 3. Strong wind (storms) on lakes and rivers make travelling and fishing difficult.
- 4. People often drown in rivers and lakes.
- 5. The water hyacinth (water weed) makes fishing and transport difficult.

- 6. Dirty water from lakes and rivers causes typhoid, cholera and bilharzia.
- 7. Mosquitoes spread diseases (female anopheles mosquito).

Mountains:

A mountain is a block of land rising high above the surroundings.

A mountain is a very high area of land with steep sides.

A peak is a highest point of a mountain.

Peak
Margherita
Wagagai
Moroto Summit

Mt. Mufumbiro Muhavura

Mountain ranges

A mountain range is series of mountains connected together.

Examples of mountain ranges

- 1. Mt. Mufumbiro ranges
- 2. Mt. Elgin ranges

Importance of mountains

- 1. Good for faming because they have fertile soils.
- 2. Cool environment good for settlement
- 3. They attract tourists who bring money to the government.
- 4. We get minerals from some mountains
- 5. Mountains are habitats of some wild animals.
- 6. Mountains help in the formation of rainfall.
- 7. Mountains are sources of some rivers.

Dangers of mountains /hills.

- 1. They make transport difficult.
- 2. They encourage soil erosion.
- 3. Some can erupt and cause accidents
- 4. landslides.

Evaluation exercise

- 1. What are physical features?
- 2. What do you understand by the term landforms?
- 3. Identify three physical features found in our sub-county.
- 4. Which landform provides man with water?
- 5. On which hill was Mulago hospital built?

- 6. Identify any four hills in Kampala.
- 7. Identify one important feature found on these hills.
 - (a) Kololo hill,
 - (b) Makerere hill
 - (c) Nakasero hill
- 8. Give two importance of hills.
- 9. State two dangers of hills.
- 10. How are hills important to telecommunication companies?
- 11. What is a valley?
- 12. Name parts marked X and Y
- 13. Why are people not advised to build houses in valleys?
- 14. State two uses of valleys.
- 15. Name the biggest lake in Uganda.
- 16. Name the manmade lake in Kampala district.
- 17. Write the local name for L. Victoria.
- 18. Mention any three uses of lakes and rivers.
- 19. State one danger of lakes and rivers to man.
- 20. Identify any two activities carried out around lakes and rivers.
- 21. What do you understand by following terms?
 - i) Mountain Peak
 - ii) Mountain range
- 22. Identify any two uses of mountains to man.
- 23. Give two dangers of mountains to man.
- 24. Identify any two mountain peaks in Uganda.
- 25. What type of rainfall is received around mountains?

(c) Swamps

A swamp is also called wetland or water logged area

A swamp is a vegetated water-logged area.

Examples of swamps.

- i) Nakivubo swamp
- ii) Kansanga swamp
- iii) Lubiri swamp

Crops grown in swamps.

- i) Rice
- ii) Cocoyam
- iii) Sugarcane
- iv) Cabbages

Activities carried out in swamps.

Crop farming.

- Brick making
- > fishing

Uses of swamps

- i) They are fishing grounds.
- ii) They support crop farming.
- iii) They are sources of raw materials.
- iv) They are sources of water.
- v) They help in rain formation.
- vi) Swamps are homes of wild animals

Problems faced by people living in swampy areas

- 1. Easy spread of diseases.
- 2. The area can easily flood.
- 3. People experience coldness especially at night.
- 4. People can easily be attacked by wild animals.
- 5. Water in swamps weakens buildings.

Why people clear swamps.

- > To get land for settlement
- > For road construction
- To get land for crop farming.
- > To set up industries.

Activity: 1

- 1. What is a swamp?
- 2. Give another word for swamps.
- 3. Identify any three crops grown in swamps.
- 4. Write three activities carried out in swamps.
- 5. Mention any three uses for swamps.
- 6. How are swamps dangerous to man?
- 7. Why do people clear swamps?
- 8. Mention the type of fish caught in swamps.

PEOPLE IN OUR SUB-COUNTY

Ethnic groups:

An ethnic group is a group of people who have the same origin and speak related languages.

A tribe:

A tribe is a group of people who share origin and speak the same language.

A language

A language is a medium of communication

A clan

A clan is a group of people with the same fore father

Examples of ethnic groups.

- > Bantu
- Nilo Hamites
- Nilotics
- > Hamites

Ethnic groups and tribes.

Ethnic group	Tribe	Language
Bantu	Baganda	Luganda
	Bakiga	Rukiga
	Banyankole	Runyankole
	Bagishu	Lugishu/Lumasaaba
	Bagwere	Lugwere
	Batoro	Rutooro
	Basoga	Lusoga
	Banyoro	Runyoro
	Basamia	Lusamya
Nilotics	Acholi	Acholi
	Langi	Langi
	Alur	Alur
	Jopadhola	Adhola/ Ludaama
Nilo-Hamites	Karamojong	Akarimojong
	Iteso	Ateso
	Kumam	Kumam
	Sebei	Sabinyii
Hamites	Bahima	Runanore
	Batusi	Kinyarwanda

Activity: 1

- 1. Define an ethnic group.
- 2. Identify any four tribes in our sub-county
- 3. Name any local languages spoken in your sub-county
- 4. What is a tribe?
- 5. To which ethnic group do the Bahima belong?
- 6. Name the smallest ethnic group.
- 7. Identify the biggest ethnic group in Uganda.
- 8. is the official language spoken in Uganda.
- 9. Write down four ethnic groups found in your sub-county.

Legends:

Legends are stories of long ago.

Examples of legends

- 1. The story of Kintu and Nambi
- 2. The story of Olum and the sons
- 3. The story of Mundu and Sera

Clans:

A clan is a group of people under one great fore father. A clan is headed by a clan head and started by a fore father.

In Buganda, the clan head is called Omukulu w'ekika.

Duties of a clan head / leader.

- ✓ He registers clan members.
- ✓ He keeps clan documents.
- ✓ He solves problems among can members.
- ✓ He keeps clan property.
- ✓ He presides over clan functions.

Symbols of a clan.

- ✓ Clan name
- ✓ Drum sound
- ✓ Totem
- ✓ Taboo
- ✓ Clan head

Forms of clans in Buganda.

- ✓ Bird form
- ✓ Animal form
- ✓ Fish form
- ✓ Insect form
- ✓ Plant form
- ✓ odd form

Examples of clans in each form.

(a) Bird form

- ✓ Enyange clan
- ✓ Akasanke clan
- √ Ngaali clan (crested crane)

(b) Animal form

- Lion
- Elephant
- Monkey
- Omusu
- Hippopotaro

(c) Fish Form

- ✓ Lung fish (emamba)
- ✓ Mud fish (emale)

(d) Odd form

- Mutima clan
- Akatinyuma

✓ Enkejje

- Amazzi g'ekisasi
 - Enkebuka

(e) Insect form

- ✓ Ensenene
- ✓ Ekinyomo

(f) Plant form

- Empindi clan
- Ekkobe clan
- Obutiko (mushroom)

CULTURE

Culture is the acceptable behaviour in a society.

Examples of people's culture

- Birth of a single child
- Circumcision
- Birth of twins
- Entertainment
- Marriage custom
- Dressing
- Burial ceremony

ADMINISTRATIVE SET UP AND LEADERS IN OUR SUB COUNTY

Leaders: A leader is a person who heads an area.

Leaders are either appointed by government or elected by local people.

Types of leaders.

- 1. Religious leaders.
- 2. Political leaders.
- 3. Cultural leaders.
- 4. Institutional leaders.
- 5. Civic leaders.

Religious leaders

Religious leaders are leaders who are ordinated to lead the God's servants.

One can becomes a religious leader through ordination

Examples of Religious leaders.

- 1. Priests
- 2. Reverends
- 3. Sheikhs
- 4. Pastors
- 5. Imams
- 6. Bishops
- 7. Cardinals.

Institutional leaders

Institutional leaders are the people who lead us in different institutions.

Examples of institutional leaders.

- 1. Chancellors (heads of universities)
- 2. Headteacher
- 3. Governor (heads the bank of Uganda)
- 4. Lectures
- 5. Principals

Leaders at school.

- Headteacher
- Deputy headteacher
- Teachers
- Head prefect
- Senior woman

Cultural leaders

Cultural leaders are the people who lead different cultural institutions. They become leaders through **inheritance**.

Examples of cultural leaders.

- 1. Kabaka
- 2. Katikiiro
- 3. Rwot
- 4. Emorimori
- 5. Kyabazinga
- 6. Omukama
- 7. Omugabe

Titles given to cultural leaders:

Kingdoms	Titles	Kings
Buganda	Kabaka	Kabaka Ronald Muwenda Mutebi
Busoga	Kyabazinga	William Wilberforce Gabula Nadiope
Ankole	Omugabe	
Bunyoro	Omukama	Solomon Kabamba Iguru
Rwenzururu	Omusinga	Mumbere Wiziri Iremangoma
Toro	Omukama	Oyo Nyimba Kabamba Irugu

Qualities of a good leader.

A good leader should be;

- God Fearing
- Exemplary
- Honest
- Patient
- Good Listener

- Humble
- Respectful
- Trustworthy
- Faithful.

Roles of leaders

- 1. Encourage people to work hard.
- 2. They want to see everybody develop.
- 3. Leaders teach people responsibility.
- 4. Leaders settle disputes.
- 5. Leaders want people to live and work in a peaceful place.
- 6. Leaders make sure security is maintained.
- 7. Leaders comfort people

Laws made by leaders.

- 1. Don't fight
- 2. Observe sanitation.
- 3. Keep peace and order.
- 4. Don't mistreat others.
- 5. Don't drink and drive
- 6. Don't steal
- 7. Report law breakers.

Acts of laws breaking

- 1. Raping
- 2. Murdering
- 3. Trespass
- 4. Defilement
- 5. Drug abuse
- 6. Assault
- 7. Theft

Punishments given to law breakers

- 1. Paying a fine
- 2. Beating
- 3. Imprisonment
- 4. Death sentence

People who enforce law and order

- 1. Police officers
- 2. Local council leaders
- 3. Magistrates
- 4. Judges
- 5. Prison officers

The legend of the spear and the

Administrative set up.

❖ Local council 1 - Sub parish

❖ Local council II - Parish

❖ Local council III - Division / sub-county

❖ Local council V - District level.

Members of the L.C.I and II executive committee

It is made up of ten members.

The L.C.I committee is headed by a chairman / chairperson.

	Committee	Duties
1.	Chairperson	✓ Heads the local council
		✓ Chairs all council meetings
2.	Vic chairperson	✓ Assists the chairperson in all duties.
		✓ Is in charge of children welfares.
3.	General secretary	✓ Records all the minutes of the meeting.
		✓ Keeps official documents and files.
4.	Secretary for women and	✓ She is in charge of women affairs.
	public health	
5.	Secretary for finance	✓ He /she is the treasurer of the council.
6.	Secretary for defence	✓ Maintains peace and security in the area.
7.	Secretary for youth	✓ Mobilizes the youth to participate in
	affairs	development.
8.	Secretary for the disabled	✓ Mobilizes people with disabilities for
		development.
9.	Secretary for information,	✓ Spreads any information required to
	Education and	people.
	mobilization	
10.	Secretary for	✓ Encourages the protection of our
	environmental protection	environment.

People represented on the LCI committee

❖ Youth
❖ Children

❖ Women
❖ Disabled

Examples of current leaders.

- President
- Vice president
- Prime minister
- Chief justice
- The speaker of parliament
- Inspector General of Police
- Executive director

- Lord mayor
- Mayor

THEME III: LIVELIHOOD IN OUR SUB COUNTY

Economic activities are activities done by people to get money.

Types of economic activities

- a) Formal economic activities
- b) Informal economic activities

Formal economic activities

Formal economic activities are activities done by educated people in order to get money

Examples of formal economic activities.

- 1. Trading
- 2. Building
- 3. Mining
- 4. Modern farming
- 5. Teaching
- 6. Transport
- 7. Medicating people

Informal economic activities

Formal economic activities are activities done by uneducated people in order to get money

Examples of informal economic activities.

- 1. Traditional farming
- 2. Carpentry
- 3. Fishing
- 4. Welding
- 5. Pottery
- 6. Brick making
- 7. Stone mining

Farming:

Farming is the growing of crops and keeping of animals.

Types of farming.

- 1. Mixed farming
- 2. Fish farming
- 3. Subsistence farming
- 4. Dairy farming

- 5. Horticulture
- 6. Floriculture
- 7. Plantation farming
- 8. Poultry farming

Mixed farming:

This is the growing of crops and rearing of animals on the same piece of land.

Dairy farming:

This is the rearing of cows for milk production. Milk products include; 5. Yoghurt 1. Ghee 3. Cheese 4. Ice Cream 2. Butter Subsistence farming. This is the growing of crops and rearing of animals for home consumption/use. Floriculture: This is the growing of flowers. A florist is a person who sells flowers. **Horticulture:** This is the growing of vegetables and fruits. **Fish farming**: is the keeping of fish. **Poultry farming:** This is the keeping of domestic animals. Poultry are domestic animals e.g. ducks, hens, turkey. Poultry products: eggs, meat, feathers. **Problems faced by farmers.** Pests and diseases 1. 4. Expensive farm tools. 2. 5. Infertile soil. Drought 3. Floods Low pieces of crops

1. How is a poultry farmer important to in our community?
i)
ii)
2are activities done by people to get money.
3. State any two examples of economic activities.
i)
<u></u>
—ii)
,
4. Suggest two reasons for growing of crops and keeping of animals.
i)

. State any two types of farming carried out in Uganda.
i)
ii)
. State any two of the milk products .
i)
ii)
. What do you understand by the word floriculture?
i)
ii)
is the growing of vegetables and fruits.

Trade

Trade is the buying, selling or exchanging of goods or services.

Items of trade

1. Shoes

3. Radios

5. Clothes

2. Phones

4. Television

Types of trade

- ✓ Barter trade: is the exchange of goods for goods or services.
- ✓ Slave trade: Is the buying and selling of human beings.
- ✓ Legitimate trade: Is the buying and selling of accepted goods and services.
- ✓ Monetary trade: Is the buying and selling of goods using money.

Fishing:

This is the catching of fish from water bodies.

A fisherman is a person who catches fish from a water body.

A fish monger is a person who sells fish.

Types of fish.

- 1. Tilapia
- 2. Mudfish (caught in swamps, commonly in Uganda)
- 3. lungfish
- 4. Nile perch (biggest)

Method of fishing.

1. Use of fishing nets

2. Use of fishing baskets

- 3. Use of fishing spears
- 4. Use of fishing hooks.

Fish preservation

These are the ways in which fish caught can be kept for a long time without getting bad.

Local ways of preserving fish.

- 1. By smoking
- 2. By sun drying
- 3. By salting

Modern ways of preserving fish.

- ✓ By tinning/canning
- ✓ By refrigeration

Problems facing fishing.

- 1. Bad weather
- 2. Fish poisoning

- 3. Dangerous aquatic animals.
- 4. Poor transport

Importance of fish.

- 1. Fish is a source of food.
- 2. Catching fish provide employment
- 3. They are trading items
- 4. Fish is a source of income.

Importance of fishing.

- 1. Fishing is a source of food.
- 2. Fish is a source of income
- 3. Fishing is a source of revenue
- 4. Fishing is the source of employment

Activity
1. What is the meaning of the term trade?
2. State any two items of trade. i)
ii)
3. How is a fisherman different from the fish monger?
4. State any two types of fish caught in Uganda. i)

ii)	
5. Mention any two methods of fishing. i)	
6. State any two reasons for fish preservation. i)	
7. Mention any two problems facing fishing industry.	

Carpentry

ii)

Carpentry is the work of making things out of wood.

Things made out of wood are called **furniture** e.g. chairs, tables, bed

A carpenter is a person who makes furniture.

A carpenter works in a workshop.

Pottery

Pottery is the making of different items from the clay soil.

A potter is a person who makes things out of clay.

Ceramics are things made out of clay

Examples of ceramics

- 1. Pots,
- 2. Charcoal stoves

- 3. Flower vase
- 4. Cups and plates

Uses of ceramics

- 1. To keep drinking water
- 2. For cooking food
- 3. For fetching water
- 4. For decoration
- 5. For sale (sold to get money)

1. The work of making things out of wood is called?
2. Mention any two examples of furniture. i)
Define the word pottery.
3. Name the material for making most of the ceramics. i)
ii)
4. State any two examples of ceramics.
ii)
5. Suggest two uses of ceramics i)
Handcrafts

These are things made from local materials using hands

Examples of art and crafts

- ❖ Baskets
- Mats
- Ropes
- Door mats
- Tables clothes
- ❖ Bags
- Stools

N.B Most handicrafts are made by **weaving**

- 1. Some local materials used in weaving are raffia, papyrus, banana fibres, palm leaves, cained reeds
- 2. Making of baskets is called basketry
- 3. The making of things out of iron is called smithing.
- 4. A black smith makes things out of iron.

Things made out of iron

Knives, pangas, hoes, axes, beds, arrow heads, padlocks and nails

Reasons why people carryout economic activities.

- To look for food.
- They are a source of income.
- They lead to provision of services
- They improve the standard of people's living
- They develop tourism
- They lead to development.
- They create employment opportunities

People and their work

Economic activity	Person	Place
Sewing	Tailor	Verandas
Teaching	Teacher	School
Nursing	Nurse	Hospital/ clinic / dispensary
Fishing	Fisherman	River/ lake / fish pond
Carpentry	Carpenter	Workshop
Pottery	Potter	Pottery centre
Farmer	Farming	Farm

Activity	
1. Define the term handcrafts.	
2. State any two examples of art and crafts. i)	
Most handicrafts are made by	

SOCIAL SERVICES AND THEIR IMPORTANCE.

Social studies are services provided by the government to make people's lives better.

Examples of social services.

- Education service
- Health service
- Water services
- Security service
- Communication service
- Transport service
- Banking service
- Insurance service

Social service centres

Social service centres are places where we get services which makes people's lives better.

Examples of social services centres

✓ Schools

- ✓ Airports
- ✓ Airports
- ✓ Hospitals
- ✓ Post offices
- ✓ Police stations
- ✓ Banks

Education services.

Education is the way of acquiring knowledge and skills. People get education from schools.

Types of schools

- Nursery schools
- Primary schools
- Secondary schools
- Universities
- Colleges
- Technical schools

Places which provide education.

- ✓ Schools
- ✓ University
- ✓ Colleges

People who provide education.

- ✓ Teachers
- ✓ Lectures
- ✓ Tutors
- ✓ Professors

Levels of education.

- ✓ Nursery
- ✓ Primary
- √ Secondary
- ✓ University

A University

A university is the highest institution of learning.

Examples of universities.

- Kyambogo University
- Makerere University
- Mbale Islamic university
- Bugema University
- Uganda Christian university Mukono
- Islamic university in Uganda
- Busoga University

- Ndejje university
- Nkozi university
- Kampala University
- Kampala International University
- Lira University
- Gulu University
- Mbarara University etc.

Schools are under the ministry of education and sports.

The current minister of education and sports is Hon Janet Museveni Kataha N.B: UPE is Universal Primary Education.

Ways how community benefit from the schools

- 1. Schools employ people like teachers, cooks, watchmen
- 2. Schools provide education services to the people
- 3. Schools provide market to people
- 4. Schools provides recreation to the community
- 5. Schools train people with survival skills

How schools benefit from the community

- Schools get labour from the community
- Schools get security from the community
- Schools get firewood from the community
- 4. Schools get children from the community

Importance of education

- We get knowledge from education.
- We get skills from education.
- ❖ We get jobs/ employment from education.

Challenges associated with education

- Some schools lack trained teachers.
- Some schools do not have enough classrooms.
- Some schools do not have enough furniture.
- Some schools do not have enough scholastic materials e.g. textbooks, chalk, pencils and pens.
- Some schools do not have enough security against arsonists.

Health services

These are services provided by giving medical care.

Places which provide medical care/ health services.

- ✓ Hospitals
- ✓ Pharmacies
- ✓ Dispensaries
- ✓ Clinics
- ✓ Drug shops

People who provide medical care are;

Doctors treat sick people

Oculists treat eyes

Opticians sell eye glasses

Dentists treat teeth

Surgeons operate on people

Nurses assist doctors when treating patients

Midwives care for pregnant women

Health inspectors teach people how to live in a clean environment and how to stay healthy.

People who work in hospitals.

✓ Surgeon - Operates sick people

✓ Oculist - Treats sick eyes✓ Dentist - Treats our teeth

✓ Midwives - Helps pregnant women to give birth.

✓ Nurse- Cares for sick people.

N.B:

A veterinary doctor treats sick animals.

- Mulago hospital is the biggest hospital in Uganda.
- An ambulance is a vehicle which carries sick people to the hospital.
- An hearse is a special vehicle for transporting dead people.

Security services:

Security is the way of protecting people and their property against danger. Security services are rendered to people to protect them with their property.

People who provide security

- ✓ Police
- √ Soldiers (army)
- ✓ Private security organs
- ✓ Prison officers
- ✓ L.DUs
- The police keep law and order.
- The army protect the lives of people in a country.
- Prison officers keep law and breakers in safe custody.
- The L.D.U's protect the lives of people in an area.
- ❖ A police station is headed by OC- Officer in-charge.
- The biggest police station in Uganda is Central Police station (C.P.S)
- ❖ The head of the police in Uganda is Martin Okoth Ochola.
- The title given to the head of the police is the Inspector General of police (I.G.P)
- Security officers use weapons to provide security.

Weapons

- ❖ A weapon is a material which is used to defend ourselves from enemies.
- Weapons used to provide security services include;
- Guns, batons, sticks, bow and arrow, land mines, tear gas, bombs

Roles of the police

- It keeps law and order.
- Investigates cases and crimes
- Controls traffic flow
- Enforces law
- Puts out fire

How the police keep law and order.

- 1. By arresting suspects.
- 2. By controlling traffic jam.
- 3. By controlling riots.
- 4. By putting out big fires.
- 5. By investigating cases.
- 6. By controlling crowds.

Section of departments of Uganda police force

- Dog section
- Anti-riot police
- Military police
- Traffic police
- Mobile patrol unit
- Criminal investigation department (CID)
- Anti-smuggling unit
- Passport section
- Fire brigade

The title given to the head of the Uganda police is the <u>Inspector General</u>. The current Inspector General of police in Uganda is <u>Martin Okoth Ochola</u>. *NB: The police is under the ministry of internal affairs*.

The army

The army protects the lives of people and their property in the country. The title given to the head of the army in Uganda is a Commander-in-Chief.

The current commander in chief of the Uganda Army is H.E. Yoweri Kaguta Museveni.

Another name for the Uganda army is <u>Uganda People's Defence Forces (UPDF)</u>.

- Protects the lives of people and their property in the country.
- The army protects the country.

The title of the head of the army in Uganda is Commander in chief The current commander chief of the Ugandan army is H.E. Kaguta Museveni The name of the Ugandan army is the Uganda People's Defence force (UPDF)

Roles of the army

- Protects the lives of people and their property.
- The army protects the country

- Fights against invaders
- Entertains people (army band)

The people who work in the army are army men / army women

They can also be known as soldiers

They live in a barracks in house called unipots.

The prison

A prison is a place where law breakers are kept in safe custody.

Roles of the prison

- 1. It keeps law breakers in safe custody.
- 2. It changes laws breakers into law abiding citizens.
- 3. It punishes law breakers.

Skills learnt in prison

carpentry, music, sports, craft making, sports, digging

Prisoners are taken to courts of law for judgment.

Children below 18 years are taken to special places like Kampiringisa prisons, Naguru remand home, Bugungu reformatory school

Private security guard

These are privately owned security groups.

They also help the police to keep law and order.

Examples include;

- Uganda securico
- Saracen
- Group 4
- KK security
- Delta force
- Hash
- Securex

Transport services

Transport is the movement of people and goods from one place to another.

Types of transport.

- 1. Road transport
- 2. Air transport
- 3. Railway transport
- 4. Water transport

Road transport

Road transport is the type of transport where people and goods are transported on roads

It is the commonest type of transport.

Means of transport

- Cars
- Lorries
- Bicycles
- Buses
- Motorcycles
- Pedestrians

Road users:

- Drivers
- Cyclists
- Pedestrians
- Riders

Road signs.



Common road signs

Types of roads.

- Murram roads
- Tarmac roads
- Feeder roads

Road accidents

Road accident is sudden happening that can cause injury or loss of lives on the road

Causes of road accidents.

- Bad roads
- Over loading
- Playing on the road
- Finding no road signs
- Driving when you are drunk
- Not following road signs.

Ways of controlling road accidents.

- Avoid overloading
- Following the road signs
- Cross at a Zebra crossing
- Put road signs on the road
- Avoid playing on the road.

Advantages of road transport.

- It is common
- It has no timetable.
- It is cheap.
- It reaches door to door.

Disadvantages of road transport.

- It is affected by traffic jam.
- There are many risks of accidents
- Murram roads are slippery during rainy season.

Water transport

Water transport is the mean of transport where goods and people are transported over water

Means of water of transport.

- 1. Ships
- 2. Boats
- 3. Ferries
- Canoes

Advantages of water transport.

- 1. It carries bulky goods
- 2. It is not affected by traffic jam.

- 3. It is the cheapest.
- 4. It not affected by traffic jam

Disadvantages of water transport.

- 1. It is slow.
- 2. It is not flexible.
- 3. It is affected by bad weather.

Air transport.

Air transport is the mean of transport where goods are transported on air It is the quickest means of transport

Air transport is the most expensive type of transport.

Means of air transport

- 1. Aeroplanes
- 2. Helicopters,
- 3. Parachutes
- 4. Jets
- Rockets
- Aeroplanes land at airports.
- Small aircrafts land at airstrips and airfields.
- A runway is the road for the aeroplane.
- Aeroplanes' Park is a <u>prone</u>.
- A pilot flies a plane.
- Uganda's international airport is found at Entebbe.

Examples of airstrips in Uganda

Soroti airstrip, Gulu airstrip, Mbarara airstrip, Arua airstrip, Kimaka airstrip Kajjansi air strip, Kololo airstrip

Advantages of air transport

- 1. It is fast.
- 2. It is comfortable.
- 3. There is less risks of accidents
- 4. It carries perishable goods over long distance

Disadvantages of air transport.

- 1. It is expensive.
- 2. It is timetabled.
- 3. It is not common
- 4. It is affected by bad weather.

Railway transport.

Railway transport is the movement of people and goods from one place to another on rails.

Means - train.

Kinds of trains

- 1. Passenger trains is for carrying people
- 2. Cargo train is for carrying cargo or luggage

Advantages of railway transport

- ✓ It carries bulky goods.
- ✓ It is not affected by traffic jam.
- ✓ It is cheap.

Disadvantages of a railway transport.

- ✓ It is timetabled.
- ✓ It is slow
- ✓ It is affected by bad weather.
- ✓ It is not flexible.

Animals used for transport

- ✓ Donkey
- ✓ Camel
- ✓ Horse

Types of goods;

1. Perishable goods

These are goods that go bad easily.

Examples of perishable goods

- a) Fruits
- b) Vegetables
- c) Flowers
- d) Fish
- e) Meat
- 2. **Bulky goods**: are heavy goods.

Examples of bulky goods

- ✓ Cars
- ✓ Motor cycles
- ✓ Machines

3. Fragile goods:

These are goods that break easily.

Examples of fragile goods

- Eggs
- Glasses
- Pots
- Clay cups
- Clay plates

Activity 1

- 1. Give the meaning of the work transport.
- 2. Mention the four types of transport.
- 3. Draw and name two road signs.

- 4. Who is a pedestrian?
- 5. Give any three causes of road accidents.
- 6. What is the use of a zebra crossing to a road user?
- 7. Write two advantages of each type of transport.
 - (a) Road
 - (b) Air
 - (c)Water
- 8. Where do we find Uganda's international airport?
- 9. What is the work of a pilot?
- 10. Which type of transport carries perishable goods?
- 11. Give two examples of perishable goods.
- 12. How is a donkey useful to the people in hilly areas?
- 13. Mention the two types of roads.
- 14. What are feeder roads?

Communication services:

Communication is the sending and receiving of messages.

Types of communication i.e.

- Local communication
- Modern communication

Forms of communication.

- 1. Verbal; Telephones, Television, Radios, Mouth to mouth
- 2. Non-verbal: Gestures, Smoke, Drumming, Whistling.
- 3. Written; Emails, Magazines, Newspapers, letters.

Local means of communication.

- ✓ Drumming Blowing Horns
- ✓ Making smoke Whistling
- ✓ Ringing the bell Clapping
- √ Gestures
- √ Smokes signals

Advantages of local communication

- It is cheap
- It is easy to use

Disadvantages of local communication

- It wastes time.
- It might not reach many people at the same time.
- ❖ The message may change as it moves from one messenger to another.

NB: Gestures are signs used in communication without talking.

Modern means of communication

It is a type of communication which uses modern means to send and receive communication.

Examples of modern means of communication

- Radio
- Telephone
- Newspaper
- Television
- Telegram
- ❖ Telefax

Advantages of modern communication

- It is time saving.
- The message does not change.
- The message can reach intended recipients are the same time.

Disadvantages of modern communication

- It is very expensive.
- It requires people who have gone to school.
- Some of it requires electricity

Examples of newspaper printed.

- ✓ New vision
- ✓ Bukedde
- ✓ Etop
- ✓ Monitor
- ✓ Red paper
- ✓ The sun
- ✓ Observer
- ✓ Orumuri
- ✓ Rupiny

N.B: Group owned newspaper include; New vision, Etop, Orumuri and Bukedde.

Why most people do not read newspapers.

- ✓ They are expensive to buy daily.
- ✓ Some people do not know how to read.

Radio stations:

✓ Beat FM - Kaboozi FM✓ Top FM - Simba FM

✓ Star FM - C.B.S Central Broadcasting service

✓ Impact FM✓ Kingdom FM– Capital FM– Unity FM

Radio stations owned by the government include: UBC, Bukedde, Radio star.

Uses of radios.

- ✓ For communication
- ✓ For entertainment
- ✓ They educate people
- ✓ They advertise our things.

Television stations.

- ✓ Star television
- ✓ Urban
- ✓ Bukedde
- ✓ U.B.C Uganda Broadcasting Corporation
- ✓ NBS
- ✓ WBS

Government owned Tv stations include UBC, Urban, Bukedde and star TV.

Uses of televisions:

- ✓ For communication.
- ✓ For advertisement
- ✓ They educate us
- ✓ For entertainment

Disadvantages of television.

- ✓ They are expensive to buy.
- ✓ They only use electricity.
- ✓ They are no television signals in some parts.

Examples of telecommunication companies.

- ✓ Airtel
- ✓ MTN
- ✓ U.T.L
- ✓ Africell
- √ K2 telecom
- ✓ Vodafone

Importance of social services in our sub-county

- ✓ They create jobs.
- ✓ They make people's lives better.

Problems in providing social services.

- ✓ Some schools do not have enough teachers and materials.
- ✓ Some parents do not want to take their children to school.
- ✓ Over loaded vehicles cause accidents.
- ✓ Hospitals do not have enough health workers.
- ✓ Corrupt leaders.

Solutions to the problems.

- ✓ The government should employ more teachers.
- ✓ The government should employ more health workers.
- ✓ Better roads should be constructed.
- ✓ Corrupt leaders should be sacked.
- ✓ More hospitals / health centres should be built.

Activity: 1

- 1. Define the term communication.
- 2. Give two examples of each;
 - ✓ Local means.
 - ✓ Modern means
- 3. How was a drum useful to the people of long ago?
- 4. How are social services important to people?
- 5. Give one reason why most people do not use newspapers.
- 6. Write the following in full;

C.B.S

U.B.S

- 7. Give two uses of radio's
- 8. Name two television stations in Kampala.
- 9. Write one newspaper sold in your area.

Important places in our sub-county

These are places which provide special services.

✓ Schools✓ Hospitals– Markets– Banks

✓ Clinics - radio stations

✓ Museums - Salons

✓ Hotels - Petrol stations

✓ Police station - Shops✓ Theatres - Tourists

✓ Sports ground - Supermarket.

✓ Courts of law

Banks:

A bank is a place where people keep their money safely.

Why people keep money in banks.

- ✓ For future use
- ✓ For safety
- ✓ To get interest

Types of banks

- 1. Central bank / Bank of Uganda
- 2. Commercial banks

Central bank

Central Bank is a bank that controls the operation of all commercial banks

✓ It is headed by the governors.

- ✓ It controls all other banks.
- ✓ It makes / prints new money / currency.

Commercial banks.

These are banks that provide financial assistance to the clients

Examples of commercial banks

✓ Stanbic bank Gold trust bank ✓ Centenary bank Postbank ✓ Crane bank Bank of Baroda

✓ Eco bank Bank of Africa

Importance of commercial banks.

- 1. They keep money safety.
- 2. They give loans.
- 3. They keep important documents like land titles, certificates.
- 4. They employ people.

Museum

This is a place where things of long ago are kept.

Things kept in a museum;

- 1. Bones
- 2. Old coins
- 3. Spears
- 4. Skulls
- 5. Drums
- 6. Knives
- 7. Bow and arrow

Importance of a museum:

- 1. It attracts tourists.
- 2. Children go and study the things of long ago.
- 3. It is a source of foreign exchange.

Markets:

A market is a place where we buy and sell things.

Examples of markets.

- ✓ Nakasero market.
- ✓ St. Balikuddembe, (Owino) biggest market Wandegeya

Important of markets.

- ✓ We buy things from the market.
- ✓ We sell things in the market.
- ✓ Government gets taxes from the market.

Post office:

It is where people send and receive letters.

P.O. Box – Post Office Box

Importance of a post office.

- ✓ To sell stamps.
- ✓ To send letters and parcels.
- ✓ To keep money in the post bank.

Tourist sites.

A tourist is a person who visits places of his/her own interest.

Tourist sites are places where people go to see things of their interests.

Examples of tourist sites.

- 1. Museums
- 2. Game parks
- 3. Waterfalls
- 4. Lakes and rivers
- 5. Kasubi tombs

Police station.

It is where suspects are arrested.

Schools

It is a place where children go to learn.

Why the government introduced U.P.E

- ✓ To fight illiteracy among children.
- ✓ To help poor parents take children to school.

Theatre

It is a place where people go for entertainment. A place where dances, singing, plays and drama.

Fuel station

It is where fuel is sold like diesel, petrol Examples are, shell, Kobil Gapco, total etc.

Hospital

It is a place where people go for treatment.

Common abbreviations.

UBC: - Uganda Broadcasting Corporation

B.O.U - Bank of Uganda.

I.G.P - Inspector General of Police.

L.C - Local Council

K.C.C.A - Kampala Capital City Authority
 R.D.C - Resident District Commissioner
 U.P.E - Universal Primary Education.
 P.L.E - Primary Leaving Examination.

U.N.E.B - Uganda National Examinations Board.

NEMA - National Environment Management Authority

UWEC - Uganda Wildlife Education Centre.
U.P.D.F - Uganda people's Defence Force
C.R.E - Christian Religious Education.
I.R.E - Islamic Religious Education

S.S.T - Social Studies.

C.B.S - Central Broad Casting ServicesC.P.S - Central Broad casting station

O.C - Officer in charge

D.E.O - District Education Officer

MOES - Ministry of Education and Sports
DDE - District Director of Education

DDE - District Director of Education C.D.F - Chief of defence Forces

UJCC - Uganda Joint Christian Council

UMEA - Uganda Muslim Education Association

TASO - The Aids Support Organisation UMSC - Uganda Muslim Supreme Council

THEME IV: ENVIRONMENT IN OUR SUB COUNTY

TOPIC ONE: SOIL

WEEK TWO: LESSON ONE

Vocabulary:

Component Organism
Environment Weathering
Humus Decomposition

SOIL

Soil is the top layer that covers the earth's surface.

How soil is formed

By weathering: the breakdown of rocks to form soil

By decomposition: the rotting of plants and animals to form soil.

Components of soil

Components of soil are things that make up soil.

They include:

Humus Water

Air Living organisms

Rock particles Dissolved mineral salts

EXERCISE

- 1) What do we call the top layer that covers the earth's surface?
- 2) What is weathering?
- 3) Name three components of soil.
- 4) Name two processes by which soil is formed.

Activity

Observing components of soil

LESSON TWO

Vocabulary:

Lump Vapour Metallic Escape

Droplets

Experiment to show that soil contains water Materials to use

- Source of heat
- Soil sample
- Saucepan with metallic lid

Steps to follow

- Put soil in a saucepan
- Cover it with a lid and put on fire

Diagram of the experiment

Observation: Water droplets are seen on the inner surface of the lid

Conclusion

Soil contains water.

EXERCISE

- 1) What is does the experiment above show?
- 2) How is heat useful in above experiment?

Activity

- 1) Carrying out the experiment and observing results.
- 2) Recording results.

LESSON THREE

Vocabulary

Bubbles Breathe Gently Germinate

Experiment to show that soil contains air Materials needed

Transparent glass jar

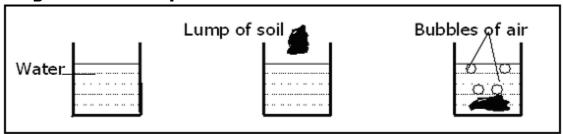
Water

Lump of soil

Steps to follow

Half fill a glass jar with water Lower a lump of soil into the water

Diagram of the experiment



Observation

Bubbles of air are seen coming out of the soil.

Conclusion

The bubbles show that soil has air.

Uses of air in the soil

Air is used by living things in the soil to breathe.

Air is used for seed germination

LESSON FOUR

Vocabulary

Stir Gravel
Settle Humus
Substance Fertile

Experiment to show that soil contains humus Humus

Humus is the decayed plant and animal remains in the soil.

Materials needed

Glass jar Soil sample

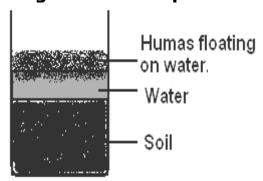
Water

Steps to follow

Put soil in a glass and add water to it.

Stir and leave it to settle.

Diagram of the experiment



Observation: Black substances float on top of water.

Conclusion: Soil contains humus.

How is humus formed?

By decomposition of organic matter

How is humus useful in soil?

- 1. Source of plant nutrients.
- 2. It holds the soil particles together.
- 3. Humus makes the soil fertile.

Activity

Recording observations

Types of soil There are three types of soil namely:

- Loam soil
- Sand soil
- Clay soil

Soil texture and soil structure

This is the smoothness or roughness of soil. Soil structure is the size of different soil particles. **The texture of different types of soil**



EXERCISE

- 1) Give the meaning of soil texture.
- 2) Apart from loam soil, name any other two types of soil.
- 3) Describe the texture of the following types of soil.
 - Sand
 - clay

ACTIVITY

Observing different types of soil.

LESSON SEVEN

Vocabulary

Characteristics Aerated
Mixture Components
Drainage Medium

Characteristics of loam soil

- Loam soil is a mixture of humus, sand and clay.
- It is dark in colour.
- It has medium sized particles.
- It is well drained
- It contains a lot of humus.
- It retains enough water for plant growth
- It is properly aerated.

Uses of loam soil

It is used for growing crops.

Loam soil is used for crop growing because it contains more humas which supports plant growth

ACTIVITY

Observing items made from soil

EXERCISE

- 1) Name three components of loam soil.
- 2) Why is loam soil the best for crop growing?

- 3) Give one use of loam soil to people.
- 4) Why is sand soil not fertile?

WEEK THREE: LESSON ONE

Vocabulary

Thumb Finest Glass Drainage Sample Medium

Characteristics of sand soil

- It has big soil particles.
- It is loose, light and easy to dig.
- It contains a lot of air.
- It allows water to pass through easily.
- It has less humus, so it's not fertile.
- It has the highest rate of drainage i.e. it dries quickly in hot weather.
- It feels rough when rubbed between the thumb and fingers.

Uses of sand soil

- Sand is used for building houses
- Sand is used for making blocks
- Sand soil is used for making glasses.
- Sand is used for making sand paper

ACTIVITY

Observing things made out of sand

EXERCISE

- 1) Why is sand soil not fertile?
- 2) Which type of soil allows water to pass through it easily?
- 3) Give two uses of sand soil to people.
- 4) Why is sand soil not good for crop growing?
- 5) Why does sand soil allow water to pass through easily?

LESSON TWO Vocabulary

Pottery Block Aerate Sticky

Brick Waterlogged

Characteristics of clay soil

- It has the finest soil particles.
- It does not allow water to pass through easily.
- It is sticky.

- It is poorly aerated.
- It has small air spaces

Uses of clay soil

- Clay soil is used for making pots
- Clay soil is used for making bricks
- Clay soil is used for making tiles

ACTIVITY

- Observing items made of clay.

EXERCISE

- 1) Why is clay soil the best soil for pottery?
- 2) Why is clay soil not good for plant growth?
- 3) Give two uses of clay soil.
- 4) Name two things at home that are made from clay.

What are ceramics?

Mention any two examples of ceramics

Importance of soil(uses of soil)

- 1. Provides food for the growing plants.
- 2. It keeps water for plants.
- 3. It contains air that living organisms need.
- 4. It holds plants firmly in the ground.
- 5. It's a home for many small animals e .g earthworm etc.
- 6. Soil is used for growing crops.
- 7. Soil is used for construction.
- 8. Soil is used for modeling.

LESSON THREE

Vocabulary

Arrangement Profile Vertical Gravel

Soil profile

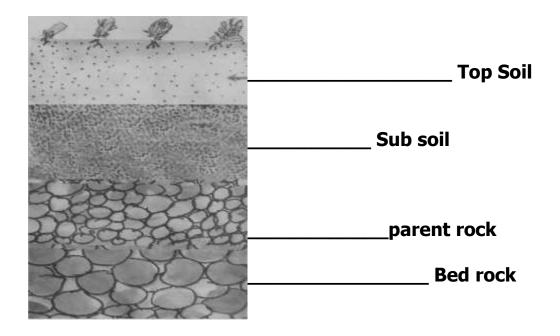
Soil profile is the vertical arrangement of soil layers.

Soil profile is the arrangement of soil layers from top to bottom.

Layers of soil

i. Top soiliii. Parent rockii. Sub-soiliv. Bedrock

Diagram of soil profile



Areas where we can observe different soil layers

Newly dug pit latrine Trenches along the road

EXERCISE

- 1) What is soil profile?
- 2) Which layer of the soil profile contains most humus?
- 3) Identify one place where we can observe soil layers in the environment.
- 4) Why does the top layer of soil support plant growth?
- 5) Why do most soil organisms live on the top layer?

LESSON FOUR Vocabulary

Living Colour Organism Thick Humus

Top soil

- It is the best layer for plant growth.
- It has a lot of humus.
- It is dark in colour.
- It is a layer which supports most plant and animal life.

Sub soil

- It is a brown layer.
- It contains less humus.

Parent rock

- It is a rock from which soil is formed.

Animals that live in the soil

Micro anmals

Are very tiny and ivisible animals which live in the soil.

Examples

Bacteria

Macro organisms

These are larger living organisms which live in the soil

Examples

Moles

Earthworm

Millipedes

Termites

Squirrels

Centipedes

Rats

Activity

Observing and naming some animals that live in soil.

EXERCISE

- 1) What name is given to the second layer of the soil profile?
- 2) List down any three animals that live in the soil apart from rats.
- 3) Why is top soil the best layer for plant growth?
- 4) Why aren't there many organisms in the sub layer of soil?

LESSON FIVE Vocabulary

Compost Mixture
Manure Garbage

Depth

Compost pit:

This is a pit where compost manure is produced.

Compost manure is a mixture of rotten organic matter that can be used in gardens to support plant growth.

Importance of a compost pit

It is used in the production of compost manure.

Materials used to make compost manure

- 1. Domestic garbage like banana peels, cassava peels, sweet potato peels, etc.
- 2. Animal wastes

3. Maize stalk

4.

Advantages of compost manure

- 1. Improves soil texture and aeration.
- 2. Improves soil fertility and structure.

Disadvantages of compost manure

- a. It is heavy to carry manure
- b. It requires a lot of time to make.

LESSON SIX AND SEVEN

Earthquake, lightning, thunder, hailstones, drought, mudslide, migration

TOPIC 2: CHANGES IN OUR ENVIRONMENT

There are two changes in the environment.

- a. Natural changes.
- b. Artificial changes.

Natural changes

Natural changes are changes brought about by nature.

Natural changes are changes in the environment that are not caused by man.

Examples of natural changes in the environment

- The sun rises from the East and sets in the West.
- Wind blows from different directions.
- Clouds appear in the sky.
- The moon appears at night
- o The sun is seen in the sky at day time and sets in the evening.
- Floods are brought in by heavy rains.

Causes of natural changes in our environment

Earthquakes Drought
Hailstones Lightning
Floods Mudslide
Storms Thunder

Effects of natural changes in our environment

Hunger

- Soil erosion
- Migration i.e. the movement of people from one place to another.
- Diseases/ epidemics
- Destruction of homes and property
- Death of people and animals.

Activity

Observing the mentioned causes of changes and their effects on video clips

EXERCISE

- 1) What are natural changes?
- 2) Mention two natural causes of changes in the environment.
- 3) State any one effect of natural changes in the environment.

WEEK FOUR: LESSON ONE AND TWO

Vocabulary

Environment Deforestation Artificial Bridges

Charcoal Habitats Accident

People-made changes [Artificial changes]

These are changes brought about by people's activities in our environment **Examples of people-made changes**

- Building homes.
- Building houses.
- Planting trees.
- Making bridges.
- Cutting down trees –deforestation.
- Draining swamps.
- Disposing wastes.
- Making and burning bricks.
- Making medicine from plants.
- Burning charcoal

Effects of people-made changes

Good effects

- Easy transport
- Building houses provides accommodation
- Planting trees conserves the environment

Bad effects

- Soil erosion
- Accidents
- Drought
- Soil exhaustion
- Death of animals
- Spread of diseases
- Desertification
- Destruction of animal habitats

ACTIVITY

Discussing human activities that lead to changes

EXERCISE

- 1) What are people-made changes?
- 2) Apart from deforestation, name any four people-made changes in the environment.
- 3) What is deforestation?

LESSON THREE

Ways of managing changes:

(a) How to manage floods Flood is when the drainage is full of water beyond usual. Flood is caused by heavy rains

How to manage floods

- Dig big trenches to avoid floods.
- Avoid draining swamps because they trap running water.
- Do not grow crops in swamps
- Do not build in swamps

(b) How to manage drought

Drought is a long period of sunshine without rain.

It is caused by heavy/ prolonged sunshine.

- Plant trees.
- Avoid draining wet lands.
- Dig valley dams.
- Use irrigation method.
- Avoid burning bushes.
- Proper farming methods e.g. crop rotation, terracing, mulching.
- Covering gullies with stones.
- Educating people about dangers of deforestation.
- Avoid poor disposal of wastes.

ACTIVITY

Observing ways of managing changes in our environment

EXERCISE

- 1) Give one way of managing floods in our environment.
- 2) Give two ways of managing drought.
- 3) Identify any one change which can be controlled by irrigation.

LESSON FOUR

Vocabulary

Agents Drought
Erosion Cultivation
Deforestation Grazing

Soil erosion:

Soil erosion is the carrying away of top soil by its agents.

OR

Soil erosion is the removal of top soil by its agents.

Agents of soil erosion are things that help in erosion to take place.

Agents of soil erosion

Running water

Strong wind

Animals

Man

Causes of soil erosion

Over grazing

Deforestation

Bush burning.

Over stocking

Over cultivation

ACTIVITY

Discussing the causes of soil erosion

EXERCISE

- 1) What is soil erosion?
- 2) Name the agents of soil erosion.
- 3) Give four causes of soil erosion.

State any one human activity that can lead to soil erosion.

LESSON FIVE

Vocabulary

Famine Exhaustion
Deforestation Manure
Gulley Burning

Siltation

Effects of soil erosion:

It causes desertification.

It leads to famine.

It leads to soil exhaustion.

It creates unnecessary gulley.

It leads to silting.

Soil exhaustion

Soil exhaustion is the loss of soil fertility.

Causes of soil exhaustion

Over cultivation Over grazing Leaching Bush burning Mono cropping

How to control soil exhaustion

By mulching
Use of crop rotation
Addition of manure
Use of fertilizers

ACTIVITY

Discussing the causes of soil exhaustion and how to control

EXERCISE

- 1) Give two effects of soil erosion.
- 2) Give two ways a farmer can control soil exhaustion.
- 3) State any one method of controlling soil erosion on the school compound.

LESSON SIX

Vocabulary:

Mulching Terracing
Contour Rotation
Ploughing Afforestation

How to control soil erosion Methods of controlling soil erosion

- 1. Crop rotation.
- 2. Planting windbreaks.
- 3. Terracing
- 4. Inter cropping.
- 1) By mulching –the covering of top soil with dry plant material
- 2) By terracing; The cutting of steps on a slope/a hill

Terraces reduce the sped of running water from the top of the hill **Diagram showing terraces**

- 3) Contour ploughing
- 4) Planting trees.
- 5) Planting grass on bare land.
- 6) Crop rotation.
- 7) Re-afforestation planting of trees where they were cut down.

ACTIVITY

Looking at methods used to control soil erosion in the school compound

EXERCISE

- 1) Write three ways of controlling soil erosion.
- 2) How farmers in mountainous areas control soil erosion?
- 3) What is re-afforestation?

LESSON SEVEN

Vocabulary:

Storms Erosion
Mulch Hazards
Husks Weeds

Materials

Mulching

Mulching- is the covering of top soil with dry plant materials.

Materials used for mulching

- Dry grass
- •Banana leaves
- Coffee husks

Advantages of mulching:

- It keeps water in soil.
- It rots to form manure.
- It controls growth of weeds.
- Mulching controls soil erosion.

Mulch prevent direct contact of top soil with strong winds / storms

Disadvantages of mulching

- It hides crop pests.
- Mulch can be fire hazards.
- Some mulch can turn into weeds.

ACTIVITY

Demonstrating how to mulch the garden

EXERCISE

- 1) What is mulching?
- 2) Name three examples of mulch.
- 3) Why do farmers mulch their gardens? Give two reasons.
- 4) Mention one disadvantage of mulching.

WEEK FIVE: Administering, marking and revising mid-term examinations

WEEK SIX: LESSON ONE

Vocabulary:

Season Fertility
Diseases Legumes

Erosion

Crop rotation

Crop rotation is the growing of different types of crops on the same piece of land seasonally.

Advantages of crop rotation

- Controls soil erosion.
- Improves on soil fertility.
- Controls crop pests and diseases.

Diagram showing crop rotation

Why are legumes included while practicing crop rotation?

Legumes add nitrates to soil which makes it fertile.

Activity

Demonstrating crop rotation on the school garden

EXERCISE

- 1. What is crop rotation?
- 2. State any two advantages of practicing crop rotation.
- 3. Why are legumes included while practicing crop rotation?

LESSON TWO

TREE PLANTING PROJECT

Vocabulary

Lemon Formation
Mvule Fuel
Jackfruit

Names of common trees

Trees that provide fruits

Mango tree
Orange tree
Lemon tree
Jackfruit

Trees that provide timber

Musizi tree mvule tree Eucalyptus tree Pine tree

Importance of trees in the environment

- 1. Trees act as wind breaks
- 2. Trees influence rain formation
- 3. Trees provide shade
- 4. Trees are habitats for some animals
- 5. Trees provide wood fuel
- 6. Trees provide timber
- 7. Fruit trees are source of food.

Activity

Observing and writing names of trees on the school compound **Exercise**

- 1. Name any two examples of trees which are sources of food in the environment.
- 2. Apart from providing food, how else are trees useful to people?
- 3. Give any one example of trees planted for timber production.

THEME V: ENVIRONMENT AND WEATHER IN OUR SUB COUNTY

WEATHER

Weather is the condition of the atmosphere at a given time.

The average weather condition of a place recorded for a long period of time is called **climate**

Types / states / conditions of weather

- 1. Rainy weather
- 2. Sunny weather
- 3. Cloudy weather
- 4. Windy weather

Elements of weather (factors / weather makers / aspects of weather Rainfall

1.	Hu	mic	VJIL

- 2. Air pressure
- 3. Sunshine
- 4. Temperature
- 5. Cloud cover

1.	What is weather?
2.	What term is used to mean the average weather condition of a place recorded for a long period of time?
3.	State any two conditions of weather. (i)

	(ii)
4.	Mention any two conditions of weather which affects farming greatly. (i)
	(ii)
5.	Which element of weather shows rainfall?
6.	Mention any two elements of weather. (i)
	(ii)

7. Match the weather condition to the correct weather maker

Weather condition	Weather maker
Windy	Cloud cover
Cloudy	Rainfall
Rainy	Sunshine
Sunny	Wind

Air

Air is a mixture of gases

Wind is moving air or air in motion.

Components of air

Nitrogen

Oxygen

Rare gases

Carbon dioxide

Percentage composition of air in the atmosphere

Nitrogen 78% Oxygen 21% Rare gases 0.97% Carbon dioxide 0.03%

Summary diagram

ACTIVITY

Naming components of air

EXERCISE

- 1) What do we call the mixture of gases?
- 2) Give two components of air.
- 3) Which component of air occupies the biggest percentage in the atmosphere?

LESSON FOUR

Properties of air

- Air has weight.
- Air occupies space.
- Air exerts pressure.
- Air expands when heated.
- Air can be compressed.

An experiment to show that air has weight

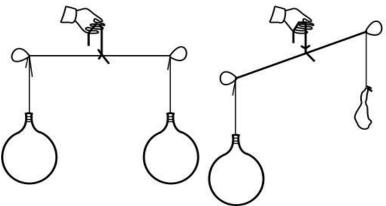
Materials needed

Two balloons Two strings Beam balance

Steps to follow

- 1. Fill the balloons with air.
- 2. Put a beam balance on a leveled table top
- 3. Tie the two balloons on the end of the beam balance
- 4. Prick one balloon with a pin to remove air.

Diagram of the experiment



Observation: The inflated balloon goes lower than the deflated one.

Conclusion: Air has weight.

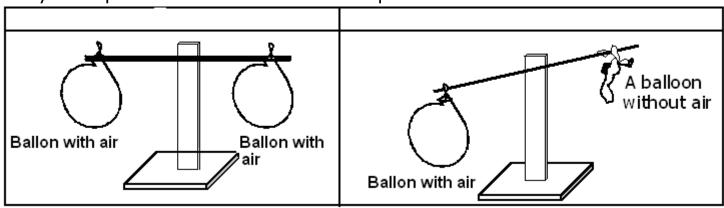
ACTIVITY

Carrying out the experiment Recording observations

EXERCISE

1 Write any three properties of air.

Study the experiment below and answer the questions that follow.



2) Why does the inflated balloon appear on the lower side?

LESSON FIVE

Vocabulary:

Trough Inverted Bubbles Slightly Occupies

An experiment to show that air occupies space

Things needed;

- ✓ Glass cup
- ✓ Basin
- ✓ Water.

Materials needed

Glass

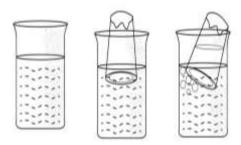
Basin (trough)

Water

Steps to follow

- 1. Fill the trough 34 with water
- 2. Lower an inverted glass directly into the water
- 3. Bend the glass slightly and observe

Diagram of the experiment



Observation

Air bubbles are seen escaping from the glass

Conclusion

Air occupies space

Activity

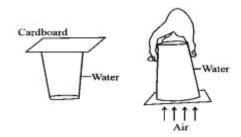
Carrying out a demonstration of the experiment

LESSON SIX AND SEVEN

Vocabulary:

Pressure Cardboard Atmosphere Exert

Experiment to show that air exerts pressure



Materials to use

Card board (hard paper)

Glass

Water

Steps to follow

- 1. Half fill a glass with water.
- 2. Cover it with a card board.
- 3. Turn it upside down while holding the cardboard
- 4. Leave the cardboard and observe.

Observation: The card board is held on the mouth of the glass.

Conclusion: Air exerts pressure.

ACTIVITY

Drawing an experiment which shows that air exerts pressure

An experiment to show that air can be compressed

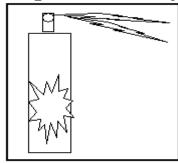
Materials to use

A ball or a balloon

Steps

- 1. Inflate a balloon
- 2. Place it on a flat surface
- 3. Step on it and observe

Diagram of the experiment



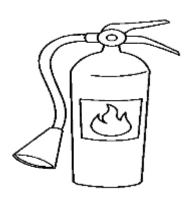
Some other things where compressed air is used are:

- a) Gas cylinders.
- b) Playing balls
- c) Tubes in bicycle/motorcycle tyres and car tyres.

Observation: The balloon loses shape

Conclusion

Air can be compressed.



Places where we find fire extinguishers

- Petrol stations
- Schools
- Hospitals
- Banks
- Hotels

Homes

WEEK SEVEN: LESSON ONE

An experiment to show that air expands when heated Materials needed

- 1. Two bottles of same size
- 2. Hot and cold water
- Two balloons

Steps to follow

- 1. Fix a balloon on top of each bottle
- 2. Label the bottles a and b
- 3. Place one of the bottles in cold and the other one in hot water for some minutes and observe.
- 4. Change the one which was in cold water to hot water and vice versa

Diagram of the experiment

P5 sci

Observation

The balloon of the bottle put in hot water swells up and when put in cold water, it collapses.

Conclusion

Air expands when heated.

ACTIVITY

Carrying out a demonstration on air expands when heated

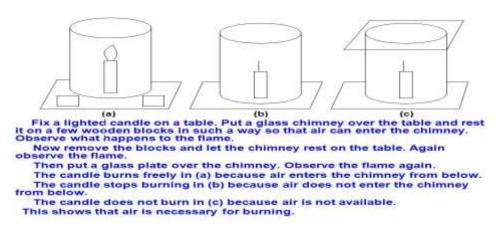
EXERCISE

- 1) What is the experiment about?
- 2) What did you see before heating?
- 3) Draw the experiment which shows that air expands when heated.

An experiment to show that air supports burning

Things needed;

a. Candle b. Matchbox c. Glass cup



Observation

- a. The flame burns for a short time then goes off (out)
- b. The flame goes out because there is no more oxygen to support it burning.

Conclusion

Air supports burning.

Note the part of air that supports burning is oxygen.

.LESSON TWO

Vocabulary:

Winnowing Dispersal Pollination Extinguisher

Germination

Importance/uses of air in the environment:

Oxygen supports burning.

Air is used for transport (Aeroplanes).

Wind is a source of power to drive wind mills.

Oxygen is used in germination.

Carbon dioxide is used to preserve drinks.

Wind is used in winnowing seeds.

Butane gas is used in gas cookers.

Air is used by birds to fly.

Wind is an agent of pollination.

Wind is an agent of seed dispersal

Moving air helps to cool our bodies.

Wind sails boats/ships/paper kites.

Carbon dioxide is used in fire extinguishers to put out fire.

Wind is used for flying kites

ACTIVITY

Observing activities and objects that use air in the environment

EXERCISE

- 1) Name the component of air used in preserving foods and drinks.
- 2) Which type of air supports burning?
- 3) Give three uses of air.
- 4) Why is carbon dioxide used in fire extinguishers?
- 5) Apart from school, name four other places where we find fire extinguishers.

WIND

Wind is moving air/ it is the air in motion.

Types of wind

(a) Calm wind (c) Strong wind (e) Stormy wind

(b) Light wind (d) Gale wind

Uses of wind

- 1. Wind sails boats.
- 2. Wind is used to run machines e.g. windmills
- 3. Wind is used for winnowing.
- 4. Wind dries our clothing.
- 5. Wind is used to fly kites.
- 6. Wind is an agent of pollination.
- 7. Wind is an agent of seed dispersal.



Dangers of strong winds

Strong wind carries away top soil. Strong winds break boats/ ships on water (destroy property)

(They break down crops and house).

Wind spreads diseases e.g. flu, measles mumps/tuberculosis etc.

Wind raises dust, spoiling our eyes and environment as well.

Strong wind blow off people's houses

Strong winds can capsize boats

Aspects of wind

1. Wind strength 2. Wind direction 3. Wind speed

Wind sock	Wind vane	Anemometer
It measures wind strength	It measures wind direction	It measures wind speed

ACTIVITY
1. What is wind?
2. State two types of wind. (i)
(ii)
3. Mention any two importance of wind to plants (i)
(ii)
4. State any two uses of wind to people. (i)
(ii)
5. Name the use of the following wind instruments. (a) Wind sock

(b) Wind
vane
(c) Anemometer
c Chata thus uses of wind to a former
6. State two uses of wind to a farmer. (i)
(ii)
7. Mention two aspects of wind that we measure and record. (i)
(ii)
8. Give any two disadvantages of wind. (i)
(ii)
9. Below is a diagram of a weather instrument. Use it to answer questions that follow.
10. Name the wind instrument shown below.
11. What is the use of weather instrument shown above?
12. Which aspect of wind is recorded using the instrument above?
13. Mention any other two wind instruments found at weather station. (i)

(ii)_____

EXERCISE

- 1) What do we call moving air?
- 2) Write any two diseases spread by air.
- 3) Give three dangers of wind to people.

TOPIC 2: THE SUN

Sunshine is the heat and light we get from the sun The sun rises from the East every morning.

It sets in the west every evening.

The sun is the main natural source of light.

The sun also produces a lot of heat.

Uses of the sun (importance of the sun)

- The sun provides heat.
- The sun provided light.
- The sun's heart dries clothes/seeds.
- It is a source of solar energy.
- Sunlight is used during photosynthesis.
- The sun helps in formation of rainfall.
- The sun helps living things to grow.
- The sun helps our bodies to make vitamin D

Dangers of the sun

- Too much sunshine dries crops in the garden.
- Too much sunshine dries water bodies.
- Too much sunshine leads to drought.
- Sunny weather makes animals thirsty.
- Strong sunshine has rays which can cause skin cancer.

The sun spoils our eyes if you look at it directly.

ACTIVITY

Identifying items that use energy from the sun

EXERCISE

- 1) Name the hottest star.
- 2) Where does the sun rise from?
- 3) How is the sun useful to our bodies?
- 4) State any two ways in which the sun is useful.

LESSON FIVE

Vocabulary:

Opaque Shadows Block Noon

Shadows and opaque objects

What is a shadow?

A shadow is a dark shape formed when light is blocked by an opaque object.

What is an opaque object?

An opaque object is an object that does not allow light to pass through.

- Shadows are longer in the morning and evening.
- Shadows are shorter at mid-day and noon.

Importance of shadows in our environment

- To tell time during the day.
- To show direction during day

How shadows appear at different hours of the day

A shadow in the morning	A shadow at noon (midday)	A shadow in the evening

ACTIVITY

Observing shadows in the school compound Measuring the length of shadows at different times of the day

EXERCISE

- 1) What is a shadow?
- 2) What are opaque objects?
- 3) How are shadows useful to people?
- 4) When is the shadow of an object shorter?

TOPIC THREE: WATER

Water:

Water is the colorless and tasteless liquid formed from hydrogen and oxygen.

Rainfall is the main natural source of water.

Natural sources of water

Lakes Oceans
Streams Rain
Rivers Seas

Artificial sources of water

Bore holes Springs
Valley dams Wells
Ponds

Activity

Observing items used in harvesting rain water.

EXERCISE

- 1) Name the main natural source of water.
- 2) Identify two other natural sources of water.
- 3) Mention two artificial sources of water.
- 4) Name the instrument used to measure rainfall.
- 5) Identify two ways of harvesting water.
- 6) Mention two ways of maintaining water sources.

Managing Water Domestic uses of water to people

- 1. Water is used for cooking.
- 2. We use water for drinking.
- 3. We use water for bathing
- 4. We use water for washing
- 5. We use water for cleaning

Industrial uses of water to people

- 1. For washing machines
- 2. Mixing building materials
- 3. For irrigation.

Other uses of water to people

- 1. Water is used for transport
- 2. Generating electricity
- 3. Irrigation
- 4. Recreational activities e.g. swimming, boat racing, raffling
- 5. Used for cooling and washing machines in industries

Uses of water to plants

- 1. It is used for germination
- 2. For photosynthesis

- 3. For transpiration
- 4. It dissolves mineral salts

ACTIVITY

Recording activities that use water at home

EXERCISE

- 1) Give three importance of water to people.
- 2) Write any two uses of water to plants.

LESSON TWO

.Water harvesting

Water harvesting is the collection of rain water for domestic use or irrigation.

Water harvesters

Water harvesters refers to containers in which we collect and store water.

Examples of water harvesters

Tanks, drums, buckets, jerrycans, pots and basins

Ways of harvesting water

> By using buckets, water tanks, basins, etc.

Importance of harvesting water

- It provides water for home use.
- It provides water for irrigation.
- ❖ Harvested water can be used later when water is scarce.

Ways of saving water.

- 1. Through building water tanks.
- 2. Through constructing valley dams.
- 3. By closing taps when not in use.

LESSON THREE

How water sources get contaminated

- Urinating in a water source.
- Dumping industrial wastes in a water source.
- Defecating in a water source
- Bathing/ swimming in a water source.
- Using dirty containers to collect water.
- Sharing a water source with animals.

Maintenance of water sources

Repairing the damages.

- Fencing the water sources.
- Cleaning water sources.
- Avoid dumping wastes in water sources.
- Avoid bathing in water sources.
- Avoid urinating in a water source.

Activity

Demonstrating how to clean water sources

Exercise

- 1. Identify any two ways water sources get contaminated.
- 2. State any two ways of maintaining water sources.
- 3. Why is it good to use clean containers to harvest water?

LESSON FOUR

Vocabulary:

Vapour

Evaporation Rain Condensation rainfall

Condense

RAIN

Rain is water falling in separate drops from clouds.

Rainfall is the amount of rain water that falls in a certain area at a certain time. The measuring units of rainfall are millimetres (mm)

How rain is formed:

Water cycle is a process by which rain is formed.

Water cycle

Experiment to show a water cycle (diagram)

Things to use

1. Kettle 3. Water

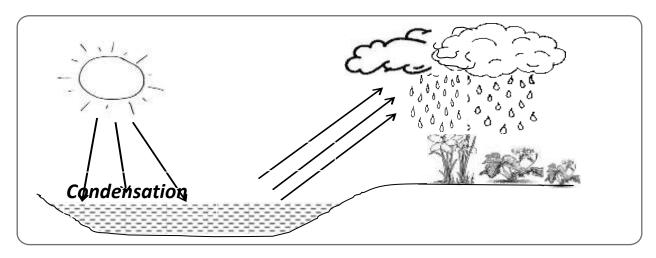
Source of heat
 Cold container

Comparison of the experiment to the rain cycle:

Kettle-water body

Fire-sun

Illustration of rain cycle



The sun **heats** the water.

Water **evaporates** to form water vapour.

Water vapour rises and **condenses** to form nimbus clouds.

When the clouds become heavy, they fall as rain.

Note:

Water cycle is a process by which rain is formed.

The water cycle involves the following process:

1. Evaporation:

This is a process by which water changes to vapour.

2. Transpiration: Evaporation

This is the process by which plants lose water to the atmosphere in form of water vapour through the stomata.

3. Condensation

This is the process by which vapour changes in to water.

Steps in the water cycle.

- The sun heats the water body and plants.
- > Evaporation and transpiration occur. (Evapotranspiration).
- > Water vapour condenses to form clouds.
- When clouds are heavy, they fall as rain by gravity.

ACTIVITY

ACTIVITY

Drawing diagram of the water cycle

EXERCISE

- 1. What is the use of sun in the rain cycle?
- 2. Which clouds give us rain?

- 3. Name the processes that take place in the rain cycle.
- 4. What is water cycle?
- 5. State the main source of heat in the water cycle.
- 6. Name the process by which rain is formed.
- 7. By what process do water changes to vapour?

LESSON FIVE Vocabulary:

Natural Formation Temperature Cycle

Importance of rain

- 1. It cools down the atmospheric temperature.
- 2. Rain is the main source of water.
- 3. It provides water for plant growth.
- 4. It helps farmers crops to grow and have good yields quickly.
- 5. It makes the soil soft for easy cultivation.
- 6. It increases the volume of water in water bodies for generation of electricity.

Disadvantages (dangers) of too much / heavy rain

- 1. Too much rainfall cause floods.
- 2. A lot of rainfall causes delay in transport.
- 3. A lot of rainfall causes very cold temperature.
- 4. Brings difficulty in constructing roads, houses etc.
- 5. Too much rainfall can spoil crops and buildings.
- 6. It also kills people.

Effects of rain on the environment

- 1. Rain reduces temperature in the environment
- 2. Rain reduces dust.
- 3. Rainfall softens soil

EXERCISE

1.	What is rainfall?
2.	State any two importance of rainfall to: (a) Crops in the garden (i)

	(ii)
	(b) The farmers. (i)
	(ii)
3.	Mention two disadvantages of heavy rainfall. (i)
	(ii)
4.	In which two ways are rainfall a problem to crop farmers? (i)
5.	State any two effects of rain on the environment (i)
	(ii)

LESSON SIX

Vocabulary: Instrument, gauge, instrument

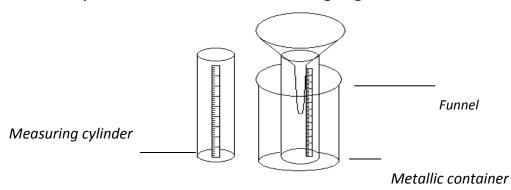
How rainfall is measured

a) A rain gauge is the weather instrument used for measuring rainfall.

A diagram of a rain gauge:

Instruments used to measure rainfall

Rainfall is measured by an instrument called a rain gauge



Rain gauge is supposed to be put in an open place.

Reasons why a rain gauge put in an open place

- To get the correct amount of rainfall received.
- To prevent obstruction of rain drops.
 The rain gauge should be raised 30cm above the ground to prevent running water from entering the measuring cylinder.

Reason why rainfall is measured in millimeters

To know how deep rain water has entered the ground

EXERCISE

- 1. Name the different parts of a rain gauge.
- 2. Give the functions of the different parts of the rain gauge.
- 3. Draw and name the parts of a rain gauge.
- 4. Where a rain gauge should be placed?
- 5. Why is a rain gauge important to a farmer?

Drawing a rain

LESSON SEVEN

Vocabulary: Strike, floods, mud, lightning, conductors, drainage **Dangers of heavy rainfall**

- Leads to soil erosion.
- Lightning can strike people and other animals.
- It breaks down houses and crops.
- It leads to floods.
- It makes murram roads muddy.

Solutions to the above problems

- By practicing better methods of farming
- By putting lightning conductors on the roofs
- Planting trees to act as wind breaks
- To avoid swamp drainage

Tarmac the roads

Effects of rain on the environment

- 1. Rain reduces temperature in the environment
- 2. Rain reduces dust.

Rainfall softens soil

	EXERCISE
6.	What is rainfall?
7	
/.	State any two importance of rainfall to:
	(c) Crops in the garden
	(i)
	(ii)
	(d) The farmers.
	(i)
	(ii)
8.	Mention two disadvantages of heavy rainfall.
	(i)
	(ii)
9.	In which two ways are rainfall a problem to crop farmers?
	(i)
	(ii)
10	. State any two effects of rain on the environment
	(1)

WEEK NINE: LESSON ONE

Vocabulary:

Nimbus Clouds
Cirrus Cumulus
Stratus Drizzles

CLOUDS

Types of clouds

Nimbus clouds

Cirrus clouds

Stratus clouds

Cumulus clouds

Clouds are grouped according to their heights and general shape.

Types of clouds

(a) Circus clouds

- They look like feathers in the sky.
- They are the farthest in the sky at a height of 800m to 16000m above the ground.

(b) Cumulus clouds

- They are white clouds which resemble cotton piles with a flat bottom.
- They can develop into thunder and thus they may indicate rain.

(c) Stratus clouds:

- They are nearer the earth than the cumulus cloud.
- They are a sign of fair weather.

(d) Nimbus clouds:

- They are clouds that bring us rain or give us rain.
- They are nearest to the earth.
- They are dark grey in colour.

EXERCISE

- 1) Which clouds bring steady rainfall?
- 2) Name the clouds that bring drizzles.
- 3) Mention the highest clouds

ACTIVITY

Observing different clouds in the atmosphere

LESSON TWO

Effects of clouds on the environment

- 1. Clouds block direct sunlight. This reduces the brightness in our environment.
- 2. Clouds lower the temperature in our environment by reducing heat from the sun.
- 3. Clouds bring rain

HUMUDITY:

Humidity is the amount of water vapour in the atmosphere.

When there is a lot of water vapour in the air, the weather is said to be **humid**. Humidity is measured by an instrument called **hygrometer** or a wet and dry bulb.

How clouds affect the environment:

Nimbus clouds bring steady rains. Clouds cool the temperature.

Dangers of clouds

- Clouds cause lightning
- Clouds bring heavy rain fall which cause floods
- Clouds cause accidents to people who use air transport.

EXERCISE

1) Mention two effects of clouds to the environment.

