

Second term Basic Science E-Lesson Note

JS 1 (BASIC 7)

SUBJECT: BASIC SCIENCE

SCHEME OF WORK

WEEK TOPIC

1. **Disease prevention: Clean water**
2. **Prevention of STI's, HIV\AIDS.**
3. **Drug Abuse/Addiction/misuse and sources of drugs**
4. **The earth in space.**
5. **Description of eclipse, climate and seasons.**
6. **Matter.**
7. **Classification of matter.**
8. **Plants and animals.**
9. **Characteristics of living things.**
10. **Activities of living things.**
11. **Revision for the term.**
12. **Examination.**

WEEK 1

DATE.....

TOPIC: Disease Prevention

CONTENT

- Water borne diseases; cholera, diarrhea, typhoid.
- Sources of clean water
- Water treatment processes
- Immunization against human diseases

Sub-topic 1

Water borne diseases

Diseases caused by unclean (dirty) water are called water borne diseases. The following are some of the water borne diseases.

- (1) **CHOLERA:** It is caused by harmful bacteria that inflame the intestine and cause extreme diarrhea. Cholera is the most common diseases that can be contacted by drinking unclean water.

The symptom of cholera is frequent stooling with vomiting which lead to dehydration. Cholera can be prevented by boiling water before drinking.

2. **DYSENTRY:** It can be caused by a one-celled animal called Amoeba or by certain bacteria.

3. **DIARRHOEA:** the symptom of diarrhea is frequent stooling which leads to dehydration, abdominal pains, bloating of the belly, feverish conditions and cramps. To prevent diarrhea, the food we eat and our drinking water should be hygienic.

4. **TYPHOID:** It is caused by bacteria called salmonella typhi. Symptoms of typhoid fever manifest within three weeks of infection.

Symptoms include feeling cold, serious headache, running stomach,

Second term Basic Science E-Lesson Note

Constipation, enlarged liver and spleen and high fever. Typhoid fever could be prevented by boiling water before drinking, hygienic handling of food and being immunized against the diseases.

Sources of clean water.

- 1 Pipe-borne water
- 2 Spring water.
- 3 Rain water
- 4 Deep well water

Evaluation

Mention three borne diseases.

List the sources of clean water.

Sub-topic: 2: Water treatment processes

FILTRATION: - This is the process of removing impurities i.e. mud, soil, leaves from water. Filter paper is used in the laboratory while filter beds are used at water co-operations.

CHLORINATION: - Chlorine gas is added to water to kill bacteria. It is harmless to human beings. It is also used to purify the water in swimming pools.

DISTILLATION: - This is a process of obtaining pure water from impure water by using an apparatus called Lie Bib Condenser.

DESALINATION: - This is the process of taking away salt from sea water.

FLOCCULATION: This is the dissolution and stirring of alum in water to make tiny solid particles suspended in water to stick together (flocculate).

Advantages of using pipe-borne water

1. It is clean and colourless.
2. It is odourless.
3. it is tasteless.
4. It is conveniently available in the home.
5. It is treated to kill disease-causing living organisms.
6. Suspended matter has been removed.

Sub-Topic 3

IMMUNIZATION

Immunization is a method of stimulating resistance against specific diseases in the human body using microorganisms (bacteria or viruses) that have been modified or killed. It is also called **vaccination or inoculation**. The system in the body that keeps disease-causing organisms from entering our body is called **Immune system**. Immunization of the child begins during pregnancy. The deadly diseases that require immunization are Polio, chickenpox, Pneumonia, measles, whooping cough, hepatitis, malaria, tuberculosis, cholera, tetanus diphtheria etc.

NO	Type of vaccine	To prevent	Age given	No. of time given	Minimum interval between age
1	Oral polio	Polio	At birth, 6 weeks,	4	4 weeks

Second term Basic Science E-Lesson Note

			10 weeks, 14 weeks		
2	Measles	Measles	9 months	1	-----
3	BCG	Tuberculosis	At birth, 0-11 months	1	-----
4	DPT	Diphtheria, whooping cough, tetanus	6 weeks 10 weeks 14 weeks	3	4 weeks
5	Tetanus	Tetanus	TT1-Early pregnancy TT2[4 weeks] TT3[6 weeks] TT4[1year] TT5[4 years]	5	4 weeks

Where to get immunization is a reputable hospital e. g government hospital around you.

Evaluation

1. Name three diseases that are caused by unclean water
2. What are anti-bodies? Explain how they work
3. list all the methods of purifying unclean water
4. What is immunization?

Reading assignment: read basic science made easy by F.I. Kehinde pages 48-55.

Weekend assignment:

1. List examples of diseases immunization can prevent.
2. Write down the time table for various immunizations.

WEEK 2

Date.....

Topic: Prevention of STI'S, HIV/AIDS.

Content: 1. Definition of STI's HIV/AIDS

2. Safe age for reproduction.
3. Abstinence, responsible sexual behavior
4. Avoid use of unscreened blood, injection, needles and clippers.

Second term Basic Science E-Lesson Note

Sub-Topic 1: **Definition of STI's HIV\AIDS.** STI'S means sexually transmitted infections. These are diseases that can be contracted through sexual activities. Examples include gonorrhea, syphilis, herpes, Chlamydia, Candida infections and HIV and AIDS.

HIV-AIDS

Aids is a very dangerous disease. The full meaning of AIDS is Acquired Immune Deficiency Syndrome. An aid is caused by a virus called Human Immune deficiency Virus (HIV). HIV-AIDS has no cure yet. Human body has an Immune defense system which protects our bodies against attacks from diseases. The virus (HIV) damages this Immune defense system.

When the virus is in the body; it is said to be HIV positive and that is what develops to HIV-AIDS. When this happens, the person's body will not be able to fight any other diseases (such as fever, cough, tuberculosis, pneumonia etc) that attack person. The person will die after some time. HIV-AIDS can affect anybody no matter the age.

Safe age for reproduction:

The safe age for reproduction is when somebody is fully matured and ready to take responsibilities. You have to answer the following questions:

1. Are you matured enough, physically, socially and emotionally?
2. Have you finished schooling?
3. Do you have a good job to take care of the family you are about to start raising up?

Evaluation:

1. What are sexually transmitted diseases?
2. What is the full meaning of HIV and AIDS?
3. Examples of STI are? (3 Examples)
4. STI fully means

Sub-topic 2: Prevention of HIV\AIDS and STI's

Signs of HIV\AIDS, how to detect it, how it can be transferred, and prevention of HIV\AIDS and STI's.

Signs of AIDS

1. Unexpected weight loss
2. Getting tired easily
3. Fever that is lasting more than one month.
4. Diarrhea which is longer than one man
5. Cold sores (wounds) all over the body
6. Swollen glands at two or more places on the body for more than three months
7. Coughing
8. Sweating profusely.

How to detect HIV:

Second term Basic Science E-Lesson Note

It can only be detected through blood test. It does not show in face or body, until it develops into AIDS. It can be passed from man to woman or woman to man.

Ways through which AIDS can be transferred:

- I. Through sexual intercourse
- II. Transfusion of unscreened blood
- III. Contaminated injection needles and syringes, razor blades, knife and other sharp objects.
- IV. Through contaminated instrument during ear piercing, circumcision and putting of tribal marks
- V. Pregnant mothers to unborn babies

Prevention of STI's, HIV-AIDS:

- I. Abstinence from sex when you are not married
- II. Husbands and wives should be faithful to each other
- III. Use sterilized clippers, needles and injections
- IV. Screen the blood very well before transfusion or passing to the body of a sick person. Safe age for reproduction is full adult.
- V. Boys and girls should wait till time of marriage before having sex.
- VI. Do not have boy or girl friend before marriage.

Evaluation:

1. What are antibodies and what are their functions?
2. What are ways of preventing STI and HIV
3. Name three diseases that are caused by contact with human waste and dirty water.
4. How can you detect HIV-AIDS
5. What is the function of the body immune defense system?

Reading assignment:

STAN pages 94-95 and basic science made easy by Kehinde pages 56-59.

Weekend assignment.

Discuss the consequences of irresponsible sexual behavior among youths.

Week 3

Date.....

Topic: Drug Abuse/Addiction/Misuse

Content:

1. Meaning of Drugs.
2. Uses of drug
3. Side effects of drugs.
4. Drugs\ substances abuse.

Second term Basic Science E-Lesson Note

5. Misuse of drugs
6. Other substances abuse

Sub-Topic 1: **Meaning of drug**..

Drugs can be defined as any substance used to make medicine to cure disease and ailment or any substance which when introduced in to the body cures the body illness.

Examples of drugs are: -

- I. Aspirin
- II. Phensic
- III. Panadol
- IV. Kola nut
- V. Alcohol

There are two types of drugs

- a. Common drugs
- b. Hard hard drugs

Uses of Drugs

- I. Drug can be used for medical purpose.
- II. It is used to reduce weight
- III. It is used to reduce pain
- IV. It is used to reduce sleep
- V. It is used as stimulant
- VI. It is used to cure illness.

SUB-TOPIC 2 Side effects of drugs.

When drugs are used in wrong way, they can lead to the following effects.

- I. They weaken the body
- II. They shorten one's life span
- III. They can damage the internal organs of the body
- IV. They can bring about lack of consecration
- V. They damage the brain
- VI. They bring about irregular breathing
- VII. They result in economical wastage.

Drugs are divided into two major ones, these are

- I- Common drugs
- II- Hard drugs – e.g. Cocaine, heroine

Classification of drugs

- I **Narcotics** e. g Opium
- II **Sedatives and Hypnotics** e .g Barbiturates
- III **Tranquilizers** e. g Valium, Librium.
- IV **Hallucinogens** e. g LSD (Lysergic acid diethyamide) and Marijuana.
- V **Stimulants** e .g Amphetamine, Cocaine,

What is Drug Abuse?

Second term Basic Science E-Lesson Note

Drug Abuse is the taking of medically prescribed drugs inappropriately.

SUB-TOPIC 3

How drugs can be abused.

1. Taking the prescribed drugs for a purpose other than that which it was intended
2. Taking a dosage other than the recommended.
3. Taking drugs to induce sleep without prescription from a qualified medical doctor
4. Taking drugs to gain confidence or boldness
5. Taking drugs to attain full sexual satisfaction without prescription.
6. Sharing a prescribed drug with other people
7. Taking drugs that are not prescribed by Doctors.
8. Taking of Expired drugs ignorantly.

Misuse of drugs

Some athletics use drugs in form of stimulants

It is also used as muscle builder.

It is also used to enhance one's performances in competition.

Other substances abused include:

Tea, alcohol, coffee, kola nuts, tobacco, aspirin and other pain killers.

Alcohol affects the body first making you excited, then making you depressed. The other substances affect the body by causing excitement and preventing sleep.

Evaluation

- 1.. Define drug
2. Mention some drugs you know
3. What are the uses of drug?
4. Kindly write out some side effects of drugs

Reading assignment:

Read Basic Science Made Easy by F.I. Kehinde pages 60-63. Read STAN pages 98-99.

Weekend assignment:

1. What are drugs?
2. State the medical uses of two drugs.

WEEK 4

Date.....

TOPIC: The earth in space

Content: 1. The solar system.

2. Rotation, evolution of the earth and moon.

3. The place beyond the atmosphere which is extremely large

Second term Basic Science E-Lesson Note

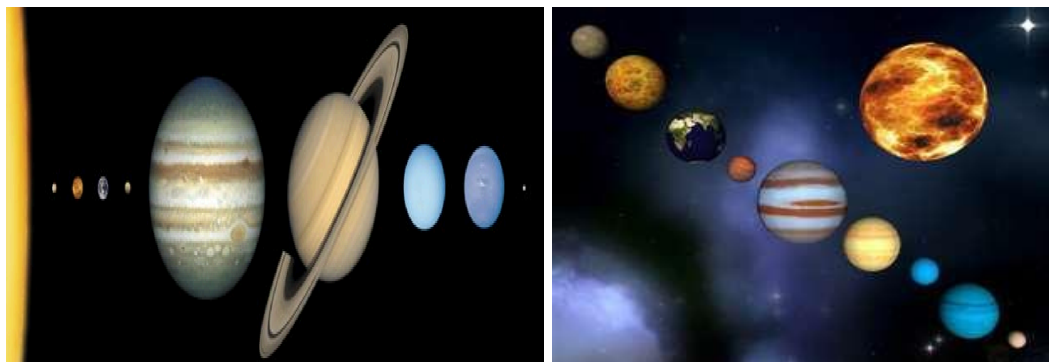
Is called space.

Sub-Topic 1: **The Solar System**

The planet earth, on which we live, is moving through space all the time. It is going round the sun. In doing this it carries us all through space. The earth travels through the space but we do not realize this because the air around the earth is carried along with it. The sun together with all the bodies which revolve round it makes up the solar system. The solar system consists of the sun, nine planets, 32 moons which revolve round some of the planets, many comets and asteroids.

The planets are:

- I. Mercury
- II. Venus
- III. Earth
- IV. Mars
- V. Jupiter
- VI. Saturn
- VII. Uranus
- VIII. Neptune
- IX. Pluto.



Evaluation:

1. Define the solar system?
2. List the nine planets.

Sub-topic 2: Rotation, evolution of the earth and moon.

Rotation of the Earth:

The earth rotates about an axis through the north and south poles. As the earth rotates different parts of its surface come into the light from the sun. The area that

is receiving light from the sun has day, and that which is away from the sun has night. The time it takes to rotate round its own axis is one day (24 hours).

Second term Basic Science E-Lesson Note

Rotation of the Moon:

The moon is a satellite of the earth and revolves round it once in about 29 days. Five phases occur during the rotation of the moon. They are as follows:

- I. New moon
- II. Quarter moon
- III. Half moon
- IV. Three quarter moon
- V. Full moon.



Evaluation:

1. Why is moon referred to as a satellite?
2. What happens during the rotation of the earth?
3. State the types of phases you can see when you observe the moon.
4. In which of the planets do you live?

Weekend assignment:

1. What is space?
2. Define the term satellite.

Reading assignment:

Read basic science made easy pages 98-103 and Stan pages 122,123,133.

WEEK 5

Date.....

Topic: Description of Eclipse, climate and seasons.

Content: 1. Eclipse
2 Climate and the Seasons.

Sub-Topic 1: **Eclipse**

Sun is a large luminous body from which light shines on to the earth and the moon. Because of the movement of the earth and the moon, it is possible for one to shield (Eclipse) the other from the sun.

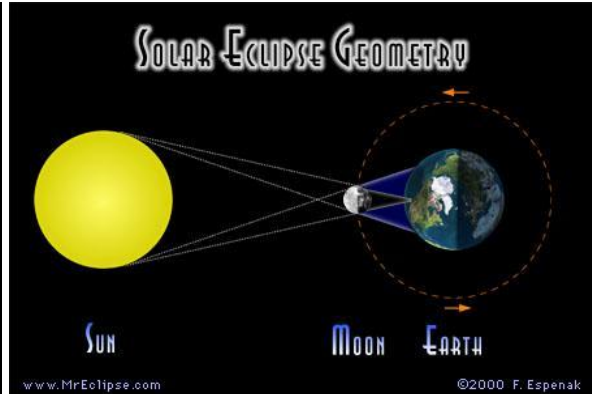
There are three types of eclipse:

Second term Basic Science E-Lesson Note

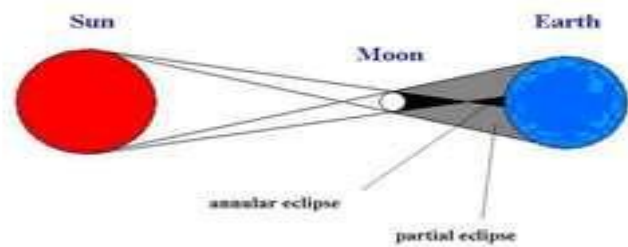
1. An eclipse of the moon: this is formed when the earth comes between the sun and the moon; the moon is in the shadow of the earth.
2. An eclipse of the sun: This is formed when the moon passes between the earth and the sun, the shadow of the moon falls on parts of the earth.
3. Annular eclipse: A times when the moon is so far away from the earth that no region of total shadow falls on the earth. The moon is then observed against the circular sun.



Annular Eclipse



Eclipse of the sun



Evaluation:

1. What is eclipse of the moon?
2. Explain the eclipse of the sun

Sub Topic 2: Climate and season.

Climate: This is the average condition of the weather of a place over a long period of time.

Elements of climate are:

1. Rainfall
2. Temperature
3. Wind
4. Ice

Second term Basic Science E-Lesson Note

The Seasons:

The revolving of the earth about the sun causes the season. The time it takes to go once round the sun is a year (365 $\frac{1}{4}$ days)

Types of Seasons:

Autum, winter, spring and summer. These four seasons are not well pronounced in the tropics. However, we have the rainy and dry seasons as it is in Nigeria.

Evaluation:

1. Mention the season you experience in your country
2. Define climate and list the elements of climate.
3. Explain what is meant by eclipse

Reading assignment:

Read basic science made easy pages 68-69 and Stan pages 123-129.

Weekend assignment:

1. Explain the season of the year in your country.
2. Write the names of the nine planets in order of their average distance From the sun.

WEEK 6

Date.....

TOPIC: MATTER

CONTENT: 1. Meaning of matter
2. Identification of matter.

Sub-Topic 1: Meaning of matter

Matter is anything in nature that has mass and occupies space. Stone, paper, plant, air, water, rubber etc. are made up of matter. Matter is made up of small particles called atoms.

Evaluation:

1. What is a matter?
2. Explain an experiment to show that particles move from one to another

Sub-topic 2: Identification of matter

Matter is classified into solid, liquid, and gas. All living and non-living things are made up of matter. It means that everything that you can see, touch, smell, breathe or eat is made up of matter.

Evaluation:

1. How could you explain why some substances dissolve in water and others do not?
2. Why is there a gurgling sound when you empty a bottle full of liquid?
3. Suggest a way of transferring air from one container to another.

Second term Basic Science E-Lesson Note

Reading assignment:

Read basic science made easy pages 70-71.

Weekend assignment:

What is matter made up of?

Explain the term diffusion.

WEEK 7

Date.....

TOPIC: CLASSIFICATION OF MATTER

CONTENT 1: States of matter

State of Matter:

Matter can be classified into the following group:

- I. Living and non-living things
- II. Using state of matter
- III. Using physical criteria like size, weight, texture, shape, color, smell, taste.

There are three states of matter which are solid, liquid and gas.

SOLID:

The particles of solid are arranged in an orderly manner. A strong intermolecular force holds the particles together. The particles are very much close together. Solids have definite shapes, volume and fixed mass. Examples of solid are salt, sugar, ice-block; stone e.t.c. solid undergoes translational motion and oscillatory motion.

LIQUID:

The particles of a liquid are not very close together. Liquid particles are a bit free to move about because of the moderate intermolecular force between particles. Liquid does not have a definite shape but takes the shape of the container. Liquid are fluid which flows or diffuse in all directions. Examples are water, blood, ink, urine. Liquid have definite volume, fixed mass. Liquid cannot be compressed or squeezed into a smaller space. Liquids undergo three kinds of motion, vibration, rotational and translational.

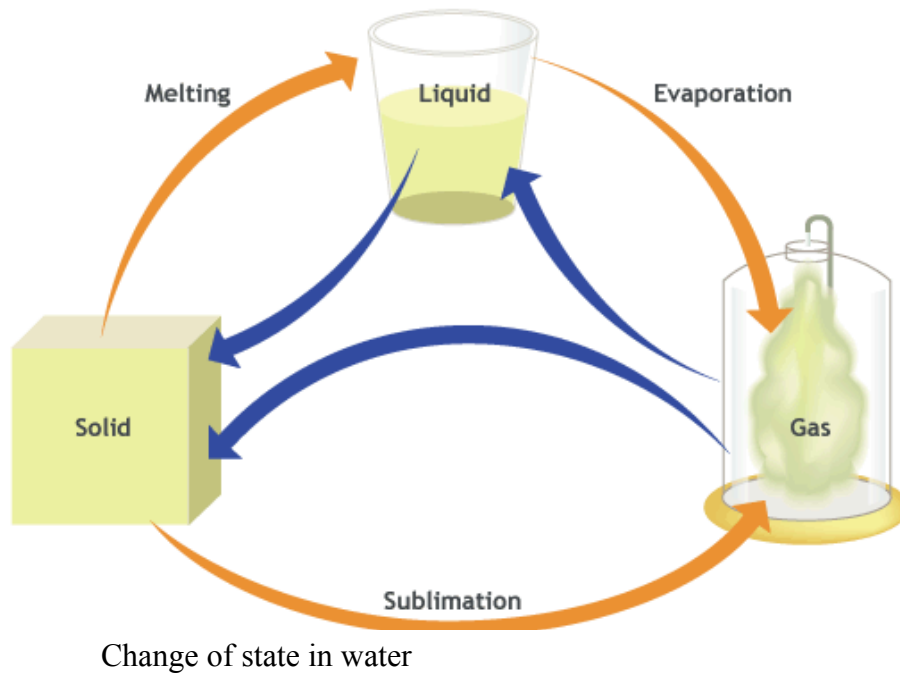
GAS:

The particles of gas are very far apart because of the very weak intermolecular force holding the particles. They move about freely at great speed. Gases have no definite shape, volume but have fixed mass. Gases can be compressed. Examples of gases are air, ammonia, steam, oxygen e.t.c.

Change of state

When solid water [ice] is heated, its particles move faster and break away from the ordered arrangement. The solid melts to become a liquid. **The melting point** of a substance is the temperature at which solid changes to liquid. **The boiling point** of a substance is the temperature at which liquid changes to gas.

Second term Basic Science E-Lesson Note



Evaluation:

1. List all the states of matter you know
2. How will you identify matter?
3. Differentiate between solid and liquid.

Reading assignment:

Read basic science made easy by Kehinde pages 71-75.

Weekend assignment:

1. How can we change a solid to liquid?
2. What is boiling point?
3. List three properties each of solids liquids and gases.

WEEK 8

Date.....

TOPIC: LIVING THINGS [PLANTS AND ANIMALS]

- CONTENT:**
1. Examples of plants and animals
 2. Characteristics of plant and animals
 3. Uses/importance of plants and animals

Second term Basic Science E-Lesson Note

4. Food, Medicine, Shelter
5. Economic Importance

Sub-Topic1: **Examples of plants and animals.**

The living things can be divided into plants and animals. Toad, housefly, ostrich, fish are examples of animals. Maize plant, grass, yam, hibiscus are examples of plants.

The characteristics of living things are as follows: MR NIGERCLAD

1. **Movement:** Movement is a change in position .Animals move from place to place. Plant only moves towards the light.
2. **Respiration :** This is the release of energy as a result of breakdown of food in the body
3. **Nutrition/Feeding:** Food is a substance which when taken provides energy or materials for building the body. Plant and animals feed in order to get energy to carry out their daily activities and also to grow.
4. **Growth:** Growth is the increase in size as a result of formation of new cells and increase of the new cells .All living things grow as they become older.
5. **Irritability/Sensitivity:** This is the ability to respond to change in the environment. All living things respond to changes in the environment.
6. **Reproduction:** all living things can reproduce their own kind/species.
7. **Excretion:** the removal of metabolic waste products from the body is called excretion
8. **Adaptation:** This is the way living things get used to their various environments.
9. **Competition:** This is the ability of living things to struggle for all the necessities of life in order to survive in their various environments. Plants and animals compete for food.
10. **Life span/ Death:** All living things must die because they have limited period of existence.

Sub-Topic 2: Uses/Importance of plants and animals.

Plants and animals can be used for the following purposes.

Uses of plants

1. Plants provides food such as vegetables, fruits, tuber, leaves etc for man and animals'
2. Provision of materials for shelter e. g timber for construction of houses.
3. Medicine: plants are used in the production of drug plant which is used as herb in treating diseases.
4. Plant is used to beautify our environment.
5. Plant leaves serve as wind break and also use to control soil erosion
6. Plants remove carbon-dioxide from the atmosphere during photosynthesis and give out oxygen.
7. It serves as source of income to the people and the nation.

Uses of animals

1. Animals serve as food for man.
2. Some animals are used as beasts of burden e .g donkeys and camels
3. Some animals are used as means of transportation e. g horses and camels.

Second term Basic Science E-Lesson Note

4. Animal such as dogs is used for security.
- 5 It also serves as source of income.

Evaluation:

1. Mention five examples of plant.
2. What are the uses of plants and animals?
3. List all the characteristics of plants and animals.

Reading Assignment:

Read basic science made easy by F.I. Kehinde pages 76-84.

Weekend assignment:

1. Mention names of five plants and five animals.
2. List four important uses of plants and animals to human beings.

WEEK 9

Date.....

TOPIC: Characteristics of living things.

Content: 1.Characteristics of Living Things
2. Differences between plants and animals.

Sub-Topic 1: Characteristics of Living Things

Living things can move.
Living things can reproduce.
Living things can feed.
Living things can excrete.
Living things can respire.
Living things can grow.
Living things can be sensitive to stimulus.
Living things can adapt to their environment

Sub-Topic 2: Differences between Plants and Animals

Characteristics	Animals	Plants
[i] Movement	Animals move freely from one place to another	Do not move freely.
[ii] Colour	Animal have different colours	Most animals are green due to chlorophyll
[iii] Shape	Animals have definite shape.	Plants do not have definite shape.
[iv] Feeding	They feed on already prepared food	They produce their own food through photosynthesis.
[v] Irritability	Animals respond to stimuli very quickly.	Plants respond to stimuli very slowly.

Second term Basic Science E-Lesson Note

[vi] Sense organ	Animal have sense organs e. g eye, Nose etc.	Plants do not have sense organ.
[vii] Excretion	Animals have well developed excretory organs for removing metabolic waste.	They do not have excretory organs.

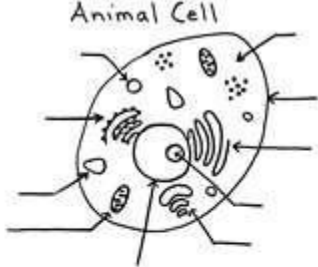
Sub-topic 3

The cell

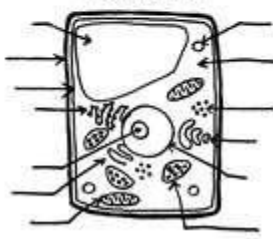
Cell is the basic unit of life. It is the structural and functional unit of life. Cells may exist as individual living organisms (unicellular organisms) or as group of cells (multicellular organisms).

Types of cells

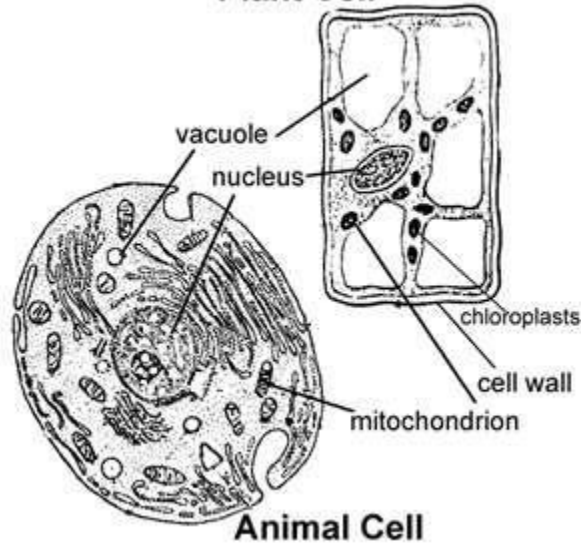
1. Animal cell



Plant Cell



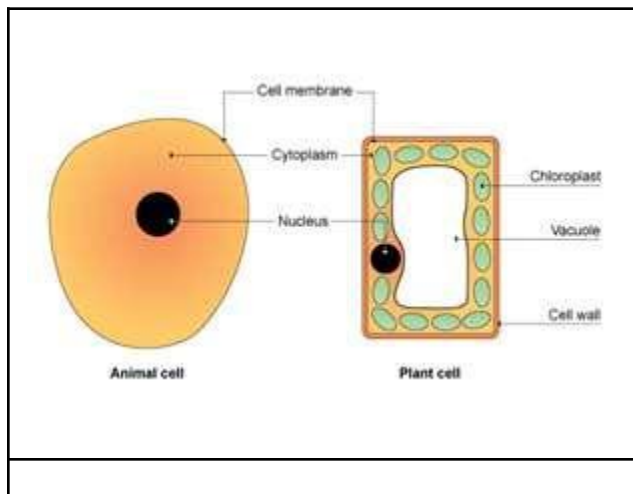
Plant Cell



Animal Cell

Plant and Animal cells

Second term Basic Science E-Lesson Note



Plant Cell	Animal Cell
1. It has an outer rigid cell wall, made up of cellulose.	Cell wall is absent. Plasma membrane is the outermost covering.
2. It has a distinct, definite shape because of the rigid cell wall. So, the shape of cell is permanent.	The shape of the animal cell is not so definite. It can change its shape.
3. It contains plastids. Most important of these is the green chloroplast.	Plastids are absent.
4. Vacuoles are fewer and larger.	Vacuoles are either absent or very small in number and size.
5. Centrosome is present only in the cells of some lower plants.	All the animal cells have centrosomes.
6. Dictyosome (Golgi Complex) is dispersed throughout the cytoplasm. It comprises stacks of single membranous lamellar discs.	Golgi complex is organized in the cytoplasm. It appears as shallow saucer shaped body or narrow neck bowl-like form. It consists of interconnecting tubules in distal region.
7. Lysosomes are found only in the eukaryotic plant cells.	Lysosomes are found in all cells.
8. It is larger than the animal cell.	It is small in size.
9. Mostly, starch is the storage material.	Glycogen is the storage material.
10. During cytoplasmic division, a cell plate is formed in the centre of the cell.	During cytoplasmic division, a furrow appears from the periphery to the centre of the cell.

Evaluation:

Second term Basic Science E-Lesson Note

1. Write five differences between plants and animals
2. State the characteristics of living things.

Reading assignment:

Read basic science made easy by F.I. Kehinde pages 80-81.

Weekend assignment:

Write ten differences between plants and animals.

WEEK 10

Date.....

TOPIC: Activities of living things

CONTENT: 1. Types e.g. movement; feeding, reproduction etc.
2. Associated organs;
3. Purpose/importance of the activities.

Sub-Topic 1: Movement

Types of movement

[i] **Active movement:** This occurs when a living thing moves by its own energy

[ii] **Passive movement:** This occurs when a living thing is carried by wind or water or animals from one place to another.

[iii] **Bending movement:** This occurs in plants which bend towards light, water or gravity.

Method of movement	Animals	Organ
Jumping	Frog, toad, monkey,	Fore and hind limbs
Walking	Man, leopard, lion.	Legs,
Crawling	Snake, lizard, crocodile	Belly ,fore and hind limbs.
Swimming	Fish, crocodile	Tails, fins
Flying	Birds, bats, insects(butterfly)	Wings,
None	Plants	Bending of stem toward light
Running	Goats, dog, horse, ants,	Fore and hind limbs
wriggling	Snakes and some worms	Belly, fore and hind limbs

Purpose of movement

[i] To search for food.

[i] To escape from dangers and enemies.

[iii] To respond to changes in the environment.

[iv] To seek reproductive mates or sites

Second term Basic Science E-Lesson Note

Types of movement in plants are phototropism; movement towards light. Geotropism is the movement towards gravity.

Mode of feeding:

1. Autotrophic mode of feeding: This is found in green plants. Light energy is trapped by green plants and combined with inorganic materials (CO_2) to produce food. eg photosynthesis.

2. Heterotrophic mode of feeding: This is found mainly in animals. They are unable to produce their own food hence depends on already manufactured solid food which must be digested and absorbed. Under this mode of feeding, organisms (animals) can be classified according to their feeding habits.

A] **Herbivorous:** These are the animals that feed mainly on plants. These are called ruminants. Examples are goats, sheep and cattle.

B] **Carnivorous animals:** These are animals that feed mainly on flesh. Examples are lion, cat and tiger.

C] **Omnivorous animals:** These are animals that can feed on both plants and animals materials e. g man.

Sub-topic 2

Reproduction

Types of reproduction:

1. Asexual reproduction:

2. Sexual reproduction.

[a] In plant

a. Sexual reproduction: This is the reproduction of plant through seeds.

b. Asexual reproduction: This is the process by which plant reproduces itself through vegetative means. This method includes cutting, layering, budding and grafting.

[b] Animal

Sexual reproduction: This is the fusion of male and female reproductive organs together. It is the only means of reproduction in animals.

Types of growth:

1. **Apical** is the growth that involves growing tip of plant, growing tall from time to time.

2. **Intercalary** is a type of growth that involves every part of the body growing at the same time.

Types of respiration

1. **Aerobic respiration** oxygen is used to liberate energy.

Anaerobic respiration involves a chemical process common with organisms like bacteria.

Evaluation:

1. In a tabular form highlight the types of movement in animals.

2. Explain the two types of growth in living things

Sub-topic 3

Associated organs

Second term Basic Science E-Lesson Note

Characteristics	Organs
Movement	Muscles and the skeletal system, shoot (phototropism), root (geotropism)
Respiration	Nose, lungs, heart, stomata, lenticels
Nutrition	Mouth, stomach, intestines, leaves, root, stems.
Irritability	Nervous system, leaves
Growth	Bones, muscles, shoots, roots, stem
Excretion	Skin, kidney, stomach, lenticels
Reproduction	Male and female reproductive organs, Flowers, buds.

Purpose/importance of the activities

Movement: It enables plants and animal to search for food. It enables animals to change position.

Respiration: (Wastes product) carbon (IV) oxide gets rid of the body systems.

Nutrition: this enables plants and animals to get energy for their daily activities. This enables plant and animal to grow.

Irritability: it enables plants and animals to be sensitive to changes in their environment.

Growth: The food eaten is used to increase size and weight of plants and animals.

Excretion: All the wastes product are eliminated from the body system during excretion.

Reproduction: Plants and animals are able to bring forth young ones like themselves. This brings about increase in population .It is for continuity of life.

Evaluation:

1. How many types of movement do you know in plant?
2. Mention the importance of the activities in living things.

Reading Assignment:

Read Stan pages 104-108.

Weekend assignment:

1. Mention the activities of living things.
2. State the purpose of the activities mentioned above.
3. State reasons why you will group Human Being as special animal.

The End.