**BASIC SCIENCE JSS 1**

**FIRST TERM**

**SCHEME OF WORK**

**WEEK TOPIC**

1. Living thing and non-living thing (I)
2. Living and non living things (II)
3. Living and non living thing (III)
4. Living and non living thing (IV)
5. Human development
6. Family health (I)

7&8. Family health (II)

9. Family health (III)

10. Examination

**WEEK ONE**

**TOPIC: LIVING THING AND NON LIVING THING (I)**

**CONTENT**

* MEANING OF MATTER
* IDENTIFICATION OF MATTER
* CLASSIFICATION OF MATTER

**MEANING OF MATTER**

Matter is anything that has mass and occupies space.

Matter can be living things such as plants and animals, it can also be non- living things e.g. stones, tables, spoons, papers, etc.

NOTE: Living things are matters that have life in them, while non- living things are matter that have no life in them.

**EVALUATION**

1. What is matter?
2. Give two main classifications of matter with four examples each.

**IDENTIFICATION OF MATTER**

Matter can be identified based on the following criteria

1.Life in them 2. Colour 3. Size 4.Shape 5. Taste

The above are properties of matter which can be used to identify them.

Let’s take SUGAR and IRON as examples.

Sugar is a white crystalline solid which dissolves in water and tastes sweet, while IRON is metallic lustre. It can get rusted in the presence moisture and gives reddish deposit.

**EVALUATION**

1. List five properties of matter by which they can be identified
2. Give five examples of matter in your environment that can be identified by using colour.

**STATE OF MATTER**

Matter can exist in three states, namely:

1. Solid 2. Liquid 3. Gas

The fundamental difference between these three states of matter is the degree of movement of their particles.

**SOLID**

1. The particles are closely packed and held firmly together by forces of cohesion.
2. The force of cohesion determines the strength of restriction of movement of particles.
3. The particles can only vibrate and rotate about a fixed position.
4. Solids have definite shape and are difficult to compress.

**LIQUID**

1. The particles are slightly further apart than in solids.
2. The particles vibrate, rotate and translate.
3. Their movement are restricted.
4. They have volume but have no definite shape, instead assume the shape of the container in which they are placed.
5. Liquid are difficult to compress.

**GASES**

1. The particles are further spaced apart than in liquid.
2. The particles vibrate, rotate and translate with more particles.
3. The particles are free to move in all directions at great speed.
4. The particles are restricted by the wall of the container.
5. Gases have no definite shape.
6. They occupy the whole volume of their container.
7. Gases are easily compressed.

**EVALUATION**

1. Name the three states of matter.
2. State three properties for each of the states of matter.

**PARTICULATE MATTER**

Matter is made up of discrete particles. When a substance is heated, its particles acquire more kinetic energy, while when cooled; they lose kinetic energy and become less energetic. Matter can change its state when heated to a particular temperature. Change of state is brought about by heating or cooling. A given substance can exist as solid, liquid and gas.

STATE OF MATTER

**Solid**

**Liquid** **Gas**

The main particles of matter are:

1. Atom
2. Molecules
3. Ions

**EVALUATION**

1. State four properties of solid, liquid and gas.
2. What are the particles of matter?

**GENERAL EVALUATON**

1. Name the three states of matter.
2. State three properties for each of the states of matter.
3. What are the particles of matter?
4. Give two main classifications of matter with four examples each.

**WEEKEND ASSIGNMENT**

1. Matter can broadly be classified into--------and -----------[a] monkey and birds [b] living things and non-living things [c] living things and man [d] non-living things and table.
2. Examples of living things are the following except-----------[a] bird [b] goat [c] grass [d] plastics
3. All of the following can be compressed except----------- [a] oxygen [b] hydrogen [c] carbon dioxide [d] water
4. In which of the following is the kinetic energy of particles of matter is greatest? [a] gas [b] liquid [c] solid [d] stone
5. The process whereby a substance in solid state changes directly to gaseous state is known as------------ [a] freezing [b] sublimation [c] melting [d] cooling

**THEORY**

1. In a tabular form, give four differences between solid, liquid and gaseous substances.
2. Write briefly on atom, molecules and ions.

**WEEK TWO**

**TOPIC: LIVING THING AND NON LIVING THING (II)**

**CONTENT**

* Characteristics of Living and Non-living things
* Characteristics of Plants and Animals
* Importance of plants and animals

Living thing is an organism that has life. That is, it possesses all the characteristics features that enables it to perform certain activities that non-living things cannot perform.

The characteristics of living things can be used to make differences between plants and animals.

**EXAMPLES OF LIVING AND NON LIVING THINGS**

**Examples of living things**

Some examples of living things include the following organisms: goat, sheep, bird, cow, toad, rat, rabbit, earthworm, tapeworm, housefly, maize plant, mango tree, orange tree, coconut tree, rhizopus, euglena, etc.

**Examples of non living things**

The following are examples of some non living things around us: stone, pen, book, table, chair, beg, pencil, shoe, water, cup, bucket, air, radio, hand-set, cleaner. Etc.

**Characteristics of Living and Non-living things**

1. Living things can move, but non-living things cannot.

2. Energy is required by living things, while non-livings do not require energy.

3. Living things are capable of growth, reproduction and death.

4. Non-living things are non-motile, but living things can move around.

5. Living things respire; non-living things do not respire.

6. Living things adapt to the surroundings and respond to stimulus.

**EVALUATION**

1. State five characteristics of living and non living things.
2. List four examples of living things.

**Differences in Characteristics of Plants and Animals**

**PLANTS ANIMALS**

1. **MOVEMENT** Animals are active because they

have organs for movement e.g. Movement in plants is aided by external leg, limbs, cilia, flagella

forces such as wind and current

1. **RESPIRATION**

Plants take in carbon dioxide and Animal take in oxygen and

give out oxygen give out carbon dioxide

3. **NUTRITION** Animals move from one place

Plants make their food by using to another to obtain ready-

simple inorganic substance and sun made food.

energy

4. **IRRITABILITY** Animals respond quickly to

Plants respond slowly to external external stimuli

changes

5. **GROWTH** Animals have limited growth

Plants have unlimited growth

6. **EXCRETION** Animals produce a lot of

Plants produce very little waste waste products, because they

Products e.g. gum, latex are active. e.g. urine, faeces

**7. REPRODUCTION** Animals reproduce to give

Plants reproduce to give new individual young one. Some animals give

which are much more resembling each birth to young one alive, e.g.

other. E.g. mango and orange fruits man, goat, cow, monkey

**EVALUATION**

1. Give four differences between plants and animals
2. State five examples of animals that can give birth to young one alive

**IMPORTANCE OF PLANTS AND ANIMALS TO HUMAN BEINGS**

Plants are useful to human beings in the following ways:

1. They help in the beautification of man’s environment
2. They are sources of food for human
3. They provide fresh air to human beings by taking dangerous carbon
4. Oxide away from the air and releasing oxygen into air
5. They provide human beings with industrial raw materials e.g. plants for building
6. They provide fire wood for human beings to cook at home
7. They provide human beings with roughages to run their bowels
8. They return water back into the air to reduce the temperature to a bearable level for the comfort of human beings
9. They provide cloud formation by returning water into the atmosphere
10. They help to reduce soil erosion by holding the soil particles together.

**USES OF ANIMALS TO HUMAN BEINGS**

Animals are useful to human beings in the following ways:

1. Some animals serves as source of protein to human beings when they are consumed
2. Products of some animals are useful for human beings as food or medicine e.g. honey produced by bees
3. Products of some animals are raw materials to some manufacturing industries e.g. skin, milk, horn, etc.
4. Some animals e.g. horses and camels are used farm works
5. Some animals e.g. horses and donkeys serve as a means of transportation to human beings
6. Some animals serves as source of revenue to human beings e.g. hen etc.
7. Some animals e.g. dogs, provides security to human beings
8. Some animals e.g. dogs are used for hunting by farmers
9. Some animals are trained to entertain human beings

**EVALUATION**

1. State five uses of animals to human beings
2. State five uses of plants

**GENERAL EVALUATION**

1. Give four differences between plants and animals
2. State five examples of animals that can give birth to young one alive
3. State two differences between plants and animals
4. State five uses of animals to human beings
5. State five uses of plants

**WEEKEND ASSIGNMENT**

1. -----------------is the site for photosynthesis in plants[a] cell wall [b] nucleus [c] chloroplast [d] ribosome
2. -------------- is an act of changing position of parts or the whole of an organism [a]Excretion [b] Irritability [c] movement [d] reproduction
3. The organ that assist mammal to move is [a] leg [b] muscle [c] hand [d] bone
4. --------------- is the act of getting rid of waste product out of the body of living thing [a] respiration [b] irritability [c] excretion [d] reproduction
5. Ability of plants to respond to stimuli is very slow because [a] they are too large [b] they have leaves [c] they do not have organs for movement [d] they have very thick bark.

**THEORY**

1. State eight differences between plants and animals.
2. Mention two examples of animals that can

a) give birth to young one alive.

b) lay eggs before hatch them to produce young one.

**WEEK THREE**

**TOPIC: LIVING AND NON LIVING THING (III)**

**CONTENT**

* CHARACTERISTICS
* USES/ IMPORTANCES

**DIFFERENCES BETWEEN PLANTS ANDS ANIMALS**

**Plants**

1. Plants generally are rooted in one place an do not move on their own
2. Plants contain chlorophyll and can make their own food
3. Plants give off oxygen and take in carbon dioxide given off by animals.
4. Plants cells have cell walls and other structures differ from those of animals.
5. Plants have either no or very basic ability to sense.

**Animals**

1. Most animals have the ability to move fairly freely.

2. Animals cannot make their own food and are dependent on plants and other animals for           food.

1. Animals give off carbon dioxide which plants need to make food and take in oxygen which they need to breathe.
2. Animal cells do not have cell walls and have different structures than plant cells
3. Animals have a much more highly developed sensory and nervous system.

**EVALUATION**

1. Give four examples of plants and 4 examples of animals.
2. State the seven characteristics of plants and animals.

**IMPORTANCES OF PLANTS AND ANIMALS**

**PLANTS**

1. Plants serve as sources of food to man e.g. okro, cassava, beans, rice, oranges etc.
2. As source of medicine to cure diseases e.g.Nyhm leaves to cure fever.
3. Plants are used as fire wood.
4. They are used in building and construction.
5. Plants give oxygen during photosynthesis.
6. Flowering plants are used to beautify our environment.
7. Some domestic and wild animals can feed on plants.

**ANIMALS**

1. Human being feed on animals e.g. cow, goat etc.

2. Man can make money from rearing of animals. E.g. cow

3. They are used as means of transportation e.g. horse

4. Some animals are used as toys e.g. puppies

Non – living things are the substances / materials that do not have life in them.

**EXAMPLES OF LIVING AND NON LIVING THINGS**

**Examples of living things**

Some examples of living things include the following organisms: goat, sheep, bird, cow, toad, rat, rabbit, earthworm, tapeworm, housefly, maize plant, mango tree, orange tree, coconut tree, hizopus, euglena, etc.

**Examples of nonliving things**

The following are examples of some non living things around us: stone, pen, book, table, chair, beg, pencil, shoe, water, cup, bucket, air, radio, hand-set, cleaner. Etc.

**Properties of Living Things and Non-Living Things**

Living things are made up of cells; exhibit characteristics of life, like growth, movement, reproduction, response to stimuli; they evolve, and require energy for daily activities. Some of the daily life examples of living things around us are human beings, animals, plants and micro organisms.

Non-livings things do not exhibit any characteristics of life. They do not grow, respire, need energy, move, reproduce, evolve, or maintain homeostasis. These things are made up of non-living materials. Some examples of non-living things are stones, paper, electronic goods, books, buildings, and automobiles.

**Uses of Living and Non- Living Things**

**PLANTS**

1. Plants serve as sources of food to man e.g. okro, cassava, beans, rice, oranges e.t.c.

2. As source of medicine to cure diseases e.g. Nyhm leaves to cure fever.

3. Plants are used as fire wood

4. They are used in building and construction

5. Plants give oxygen during photosynthesis

6. Flowering plants are used to beautify our environment

7. Some domestic and wild animals can feed on plants.

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2. Man can make money from rearing of animals. E.g. cow

3. They are used as means of transportation e.g. horse

4. Some animals are used as toys e.g. puppies

**EVALUATIO**N

1. Give four uses of plants.
2. State four uses of animals

**GENERAL EVALUATION**

1. What is non-living thing?

2. State five examples of non-living things around you.

3.        Give four examples of plants and four examples of animals.

4.        State the seven characteristics of plants and animals.

**WEEKEND ASSIGNMENT**

1. ---------- is the ability to respond to stimuli [a] Growth [b] Respiration [c]Irritability [d] Excretion

2. Animals are useful to human beings [a] False [b] True [c] All of the above [d] None of the above.

3. One example of the animals is ------------- [a] mosquito [b] tomato [c] okro [d] pawpaw

4. Plants are used for the following except---------- [a] shelter [b] medicine [c] food [d] transportation

5. Plants and animals can also be classified as [a] non-living things [b] living things [c] cow [d] leguminous

**THEORY**

1. Give four examples of
2. plant
3. animals

2a) briefly explain seven characteristics of living things.

1. State two uses of plant and two uses of animals.

**WEEK FOUR**

**TOPIC: LIVING AND NON LIVING THING (IV)**

**CONTENT**

* CLASSIFICATION OF NON – LIVING THING

Non – living things can be divided into two groups

1. Those that are never part of a living things e.g. stone, gold, silver, diamonds, metal.

2. Those that are part of living things e.g. coal, paper, jam, palm oil etc.

**METALS**

PROPERTIES OF METALS

1. They are shiny .

2. They can be hammered into a sheet.

3. They can be drawn into a wire.

4. They are good conductor of heat.

5. They are good conductor of electricity.

6. They make a sound when hit.

Example of metals are copper, iron, steel, tin, aluminum

**USES OF METALS**

1. Iron is used in making cars, ships, Lorries, ovens, generator, poles, corrugated iron sheet.

2. Steel is used in making electric fans, steel roofing, pillars, refrigerators etc

3. Copper is used in making electric wire.

4. Aluminum is used in making electric wire and cooking pots.

5. Steel can also be used in making household utensils.

6. Lead is used in making car and Lorries batteries.

7. Zinc is used in making torch batteries covering iron sheet to prevent rusting.

**EVALUATION**

1. State five examples of non-living things.
2. Mention three properties of metals.

**NON-METALS** PROPERTIES

1. They are not shiny.

2. They cannot be hammered into a sheet because they are brittle.

3. They cannot be drawn into a wire.

4. Bad conductor of electricity.

5. Bad conductor of heat.

6. They do not make sound when hit.

**USES OF NON – METALS**

1. Carbon is used in torch batteries.

2. Sulphur is used in medicines.

3. Oxygen is used for respiration and burring.

4. Nitrogen is a component of protein.

5. Chlorine is used in treatment of water.

6. Glass is used in making doors and windows.

**EVALUATION**

1. Give five differences between metals and non-metals.

2. State two uses of metals and three uses of non-metals.

**WEEKEND ASSIGNMENT**

1. Which of the following is not a living thing?

a) Grass b) Grasshopper c) Earthworm d) Iron

2. Copper is used to make electric wire because

a) it is a good conductor of electricity b) it is a non-metal c) it is shiny d) it is bristle

3. The following are example of non-metals except

a) carbon b) ulphur c) oxygen d) zinc

4. Example of non-living things that is part of living things is \_\_\_\_\_

a) coal b) stone c) gold d) silver

5. Movement from one place to another can only be exhibited by \_\_\_\_

a) non-living things b) metals c) non-metals d) living things

**THEORY**

1. Write five differences between metal and non-metals

2. Name five metals and five non – metals

3. Write four uses of metals and four used of non-metals

4. Give two properties each of metals and non-metals.

**WEEK 5**

**TOPIC: HUMAN DEVELOPMENT**

**CONTENT**

After birth, the process of sex-role socialization begins immediately. There may be small, physiologically-based differences present at birth that lead girls and boys to perceive the world or behave in slightly different ways. There are also well-documented differences in the ways that boys and girls are treated from birth onward. The behavioural differences between the sexes, such as differences in toy and play preference and in the degree of aggressive behaviour, are most likely the product of complex interactions between the way that the child perceives the world and the ways that parents, siblings, and others react to the child. The messages about appropriate behaviour for girls and boys intensify differences between the sexes as the child grows older.

It is not uncommon for children to touch or play with their genitals or to play games, such as “doctor” or “house,” that include sexual exploration. Such experiences are usually not labelled sexual by the children. Adults will often discourage such behaviour and respond negatively to it. Generally by the age of six or seven, children develop a sense of privacy and are aware of social restrictions on sexual expression.

As the first bodily changes of puberty begin, sometime from the age of 8 to the age of 12, the child may become self-conscious and more private. During this period, more children gain experience with masturbation (self-stimulation of genitals). Surveys indicate that about one-third of all girls and about half of all boys have masturbated to orgasm by the time they reach the age of 13, boys generally start earlier than girls. Because preadolescents tend to play with others of their own sex, it is not at all uncommon that early sexual exploration and experience may happen with other members of the same sex.

|  |
| --- |
| **Puberty** |

Puberty marks the second stage of physical sexual differentiation—the time when both primary and secondary sexual characteristics as well as adult reproductive capacity develop, and when sexual interest surges. Puberty typically begins in girls from 8 to 12 years of age, whereas boys start about two years later. The hypothalamus initiates pubertal changes by directing pituitary growth hormones and gonadotropins (hormones that control the ovaries and testes).

A girl's breasts grow, her pubic hair develops, and her body grows and takes on the rounded contours of an adult woman. This is followed by the first menstrual period (menarche) at about age 12 or 13 (although ages of onset range from 10 to 16.5), underarm-hair growth, and increased secretions from oil- and sweat-producing glands. It may take a year or two before menstruation and ovulation occur regularly. The hormones primarily responsible for these changes in young girls are the adrenal androgens, estrogens, progesterone, and growth hormone.

During puberty, a boy's testes and scrotal sac grow, his pubic hair develops, his body grows and develops, his penis grows, his voice deepens, facial and underarm hair appear, and secretions from his oil- and sweat-producing glands increase. Penile erections increase in frequency, and first ejaculation (thorarche) typically occurs sometime from the age of 11 to the age of 15. For a boy who has not masturbated, a nocturnal emission, or so-called wet dream, may be his first ejaculation. The ability to produce sperm may take another year or two and typically begins at about age 14. Growth hormone and androgens, particularly testosterone, are responsible for these pubertal changes in boys.

The fact that boys tend to develop more slowly than girls can cause some social awkwardness. Girls who have grown earlier may find themselves much taller than their dates, for example, and they may be more physically and psychologically mature than their male peers.

The first menstruation and first ejaculation are often considered the most important events of puberty, particularly for the individual. However, it is the development of the secondary sexual characteristics that serve as more apparent signals to others that the person is becoming a man or a woman. These signals lead to increasingly differential treatment of adolescent girls and boys by parents or other adults. The changes in hormone levels that occur during puberty may cause boys and girls to perceive the world in different ways, leading them to react differently to situations. Thus, puberty augments behavioural sex differences between young men and women. In some cultures and religions, puberty is recognized with rituals that mark the transition into adulthood.

**EVALUATION**

1. When does a child become self conscious and more private?
2. What age range does puberty begin in boys and girls?
3. What is puberty?

|  |
| --- |
| **Adolescence** |

Whereas the term *puberty* refers to the period of physical maturation, the term *adolescence* typically refers to the socially defined period during which a person adjusts to the physical, emotional, and social changes associated with the transition from childhood to adulthood. Adolescence, which occurs from about the age of 12 to the age of 17 or older, is a period marked by increased sexual behaviour. By the end of adolescence, two-thirds of young women and almost all young men have masturbated to orgasm. In recent decades, surveys indicate that more adolescents have begun engaging in intercourse at a younger age. However, studies of college students often find that 20 to 30 percent of these students have not had sexual intercourse. Adolescence can be particularly difficult for teens who feel different from their peers. Sexually active adolescents may wonder if their peers are abstinent, while sexually inactive adolescents may believe that their peers are sexually active. Others may struggle with same-sex attractions.

Sexual orientation may become a question during puberty or adolescence. The term *sexual orientation* refers to a person's erotic, romantic, or affectional attraction to the other sex, the same sex, or both. A person who is attracted to the other sex is labelled *heterosexual,* or sometimes *straight.* A person attracted to the same sex is labelled homosexual*.* The word *gay* may be used to describe homosexuals and is most often applied to men, whereas the term *lesbian* is applied to homosexual women. A person who is attracted to both men and women is labelled *bisexual.* A *transsexual* is a person whose sense of self is not consistent with his or her anatomical sex—for example, a person whose sense of self is female but who has male genitals. Homosexuality is not synonymous with *transsexuality.* Homosexual men's sense of self is male and lesbian women's sense of self is female.

**EVALUATION**

1. Define sexual orientation
2. What is the meaning of the word gay?

**GENERAL EVALUATION**

1. Differentiate between female and male in term of puberty.
2. Differentiate between puberty and growth
3. Who are homosexuals?
4. Define sexual orientation
5. What is the meaning of the word gay?

|  |  |  |  |
| --- | --- | --- | --- |
|  | **WEEKEND ASSIGNMENT** |  |  |
| 1. A person who is attracted to the other sex is labelled  A*. heterosexual B. intersexual C.transsexuality D.affectional*  2. A ----- is a person whose sense of self is not consistent with his or her anatomical sex A. *transsexual B. sexual orientation C. bisexual D. transsexuality*  3.The term refers to a person's erotic, romantic, or affectional attraction to the other sex, the same sex, or both. A. *sexual orientation B. orientation C. lesbian*  *4.* The term refers to the period of physical maturation. A. *puberty B. bisexual C.* awkwardness. D. *transsexual*  *5.* The term-------- typically refers to the socially defined period during which a person adjusts to the physical, emotional, and social changes associated with the transition from childhood to adulthood. A. *adolescence* B. puberty C. aging D. transsexual  **THEORY**   1. Differentiate between female and male in term of puberty. 2. Differentiate between puberty and growth. 3. Who are homosexuals? | | | |
|  | | | |

**WEEK SIX**

**TOPIC: FAMILY HEALTH (SANITATION) (I)**

**CONTENT**

* WHAT IS HEALTH?

**Sanitation** can be defined as the process whereby our bodies, clothes, shoes and environments are kept clean at all times, to prevent the microbial infections.

**Personal health** is a state of well being of our actual body, mind and the way we feel about ourselves and others. It is also defined by The World Health Organization (WHO) as a complete physical, mental and social well-being of human-being and not merely the absence of diseases.

**The Importance Of Sanitation**

1. It will reduce to a bearable minimum the number of germs or pathogens in our bodies and environments.
2. It will give us good looks and good health.
3. It enables us to save money we might have spent on drugs and medical bills.
4. It enables us to feel happy at all times.
5. It makes us look neat and attractive in the public.
6. It reduces government expenses on medical treatment of the citizens.
7. It makes us energetic and able to perform our duties.

**Methods of Keeping Human Bodies Clean**

* Taking bath regularly.
* Cleaning of the fingers and toe nails.
* Cleaning of the nose.
* Cleaning of the ears.
* Cleaning of the eyes.
* Cleaning of the hair.
* Cleaning of the hands.
* Cleaning of the feet.
* Cleaning of the teeth.
* Cleaning of the clothes.
* Cleaning of the shoes.

**EVALUATION**

1. Differentiate between personal health and sanitation.

2. Mention five importance sanitation.

**CLEANING OF EAR, NOSE AND EYES etc**

* You must be technical and careful about the way you wash the ear, nose and eyes when removing dust and dirt.

**EAR**

* The ear passage should be cleaned with cotton wool.

**NOSE**

* Do not use sharp objects in your nose.
* You should be careful in washing your nose.

**EYES**

* Do not use chemical like soap to wash your eyes.
* Avoid opening your eyes to a very bright light.

**HAIR**

* Cut your hair low and comb well to avoid lice living in it.

**TEETH**

* Clean your teeth with tooth paste and brush.
* Wash your teeth as many times as you desire especially after each    meal.

**CLOTHES, SHOES AND UNDERWEARS**

* Clothes should be thoroughly washed and dried in the sun and ironed properly.
* Underwear should be changed daily for proper hygienic conditions.

**Methods Of Keeping Homes Clean**

* Cleaning of the floor.
* Cleaning of the furniture.
* Cleaning of the window blinds.
* Cleaning of the bedroom.
* Cleaning of the sitting room.
* Cleaning of the kitchen.
* Cleaning of the bathroom.
* Cleaning of the toilets.

**EVALUATION**

1. State three ways of taking care of the eyes.
2. What are the methods of keeping our home clean?

**ADVANTAGES OF PERSONAL HYGIENE**

* We look attractive and beautiful.
* It inhibits the breed of germs in our environment.
* It helps in sharp and clear eyes.
* The brain will be alert.
* It helps to save money we might otherwise spend on medical treatment.

**DISADVANTAGES OF POOR HYGIENE**

* It makes us and our surrounding look untidy.
* We become unhappy when we are sick.
* It makes our parents spend money in the hospital when we are sick.
* Poor hygiene causes diseases – causing micro-organisms to develop on our bodies, shoes,    clothes, homes.

**GENERAL EVALUATION**

1.       State the ways of improving good health in the family.

2.        Identify the advantages and disadvantages of personal hygiene.

3.        State three ways of taking care of the eyes.

4.       What are the methods of keeping our home clean?

**WEEKEND ASSIGNMENT**

1 \_\_\_\_\_\_\_ is a state of well being of our actual body, mind and the way we feel about ourselves (a) Health (b) Family (c) Body (d) Relaxation

2 Poor hygiene causes \_\_\_\_\_\_ (a) Sound health (b) Sickness (c) Sharp and clear eyes (d) Wealth

3 Advantages of personal hygiene include the following except \_\_\_\_\_\_ (a) Looking attractive (b) ability to save more money (c) looking beautiful (d) looking untidy

4 \_\_\_\_\_\_\_ improves the health of the family (a) Exercise (b) Bad habit (c) Dirty environment (d) sickness

5 Which of the following might result from poor hygiene of the teeth (a) toothache (b) tooth decay (c) extracting the bad teeth (d) all of the above

**THEORY**

1 Explain personal hygiene.

2 State three advantages and three disadvantages of hygiene.

**WEEK SEVEN AND EIGHT**

**TOPIC: FAMILY HEALTH (II) (NUTRITION)**

**CONTENT**

* FOOD AND BALANCED DIET
* TYPE / COMPOSITION
* BALANCED

FOOD AND BALANCED DIET

**Nutrition** is the intake of food by all living organisms(i.e. plants and animals) in order to live well.

**Food** is a substance that we eat and digest in order to provide energy and help in body building. Food is also anything taken to provide energy, nutrients, to build the body, to relace worn-out cells and to grow and develop a healthy body. It includes many things we eat and drink except alcohol, cigarettes and drugs

**BALANCED DIET**: An adequate diet is one that is sufficient in quantity and food nutrients in required amount or proportions.

An **adequate** diet is called **balanced** diet.

In terms of quantity, the human body requires more carbohydrates followed by proteins lipids, vitamins and minerals.

**PROCEDURE FOR PLANNING A BALANCED DIET**

1 Plan in a tabular form, an adequate diet for your home, in your own part of Nigeria.

2 Use as far as possible locally produced food items.

3 In cases where you have a choice use food items you personally prefer.

**TYPES OF FOOD**

Types

1 Solid or liquid e.g.

Solid foods Liquid foods

Yam Milk

Rice Cocoa drinks like Milo

Bread Bourn vita

Beans Fruit juice

2. Local foods e.g.

Local foods

Beans

Rice

Yam

Sweet potato

1. Imported foods

Milk

Stockfish

Butt Pasta

1. Cereals, vegetables and fruits e.g.

Cereals

Rice

Corn flakes

Wheat

1. Fruits e.g. mango, orange, lemon, apple, pear, guava, etc.
2. Vegetables: okra, spinach, waterleaf, lettuce etc.

1. Foods eaten raw or cooked e.g.

Foods eaten raw

Lettuce

Pawpaw

Mango

Banana

Cucumber

1. Foods eaten cooked

Yam

Rice

Beans

Meat

Potato

Food can also be grouped into three categories according to the functions they perform in the body . These are:

1. Energy giving food e.g. carbohydrates, fats and oils.
2. Body building food e.g. proteins.
3. Protective food e.g. vitamins and mineral salts.

**EVALUATION**

1. Give three ways of planning for adequate diet.
2. State five examples of food eaten raw.

**Classes Of Food**

|  |  |  |
| --- | --- | --- |
|  | Classes of food | Composition |
| 1. | Carbohydrates e.g. Yam, Garri, Millet, Potato | Carbon, Hydrogen and Oxygen with Hydrogen and Oxygen in ratio 2 : 1 |
| 2. | Proteins e.g. milk, cheese, eggs, yoghurt, beans | Carbon, hydrogen, oxygen and nitrogen, sometimes sulphur and phosphorus |
| 3. | Fats and oils (lipids e.g. palm oil, groundnut oil, olive oil, animal fats | Carbon, hydrogen and oxygen fats are solid, while oils are liquid at room temperature. |
| 4. | Vitamins we have vitamin A,B,C,D,E AND K. | Vitamins are made up of living organisms. |
| 5. | Mineral salts e.g. potassium, calcium, sulphur, phosphorus, nitrogen | They are chemical substance for human health |
| 6. | Water | Water is made up of and oxygen |

**GENERAL EVALUATION**

1.       List six food types and their composition

2.       Define a balanced diet

3.       List the types of food we have.

4.       State five examples of food eaten raw.

**WEEKEND ASSIGNMENT**

1 Which of the following is not a food item? (a) Milk (b) Spinach (c) Orange (d) Alcohol

2. A disease that results from the lack of protein is called \_\_\_\_\_\_ (a) a hunger disease (b) a poverty disease (c) Kwashiorkor disease (d) vitamin deficiency disease

3 \_\_\_\_\_\_\_ is a substance we eat and digest and give energy to the body (a) Starch (b) Food (c) Protein (d) Balance diet

4 Which of the following is the function of vitamins in the human body ?(a) providing energy (b) preserving health (c) body building (d) none of the above

5 The following food items are sources of carbohydrate except (a) beans (b) yam (c) rice (d) orange

**THEORY**

1 Prepare an adequate diet chart.

2 List the six classes of food and their functions.

**WEEK NINE**

**TOPIC:** **FAMILY HEALTH (III) DRUG ABUSE**

**CONTENT**

* + Meaning of drugs
  + Uses and side effects of drugs

**DRUG**

Drugs are substances, other them food, that can affect the structure or function in a living organism.

**DRUG ADDICTION**

Drug addiction is when a person uses a particular drug from time to time and become unable to do without it.

**DRUG ABUSE/ MISUSED**

It is a patterned use of drug in which the user consumes the drug in amounts or with methods neither approved nor supervised by medical professionals.

**Drug abuse / misuse means**

- The use of a drug for a purpose which is not suited

- The use of a drug for an appropriate purpose but in an improper dosage

Drug abuse also means the excessive use of a drug without regard to accepted medical practice.

Addiction and habituation are used by legislative and legal authorities, while medical doctors use the word dependence.

**SIDE EFFECTS OF DRUG ABUSE**

* Problems at home.
* Creating legal problem.
* Teenage death.
* Poor school work.
* Loss of good friends.
* Bad habit.
* Suicide.
* Violence.
* Early pregnancy.
* Sexually transmitted infections.

**EVALUATION**

1. Define drug addiction.
2. State five side effect of drugs.

**SOURCES OF DRUG**

The sources of drugs are:

1. **Marijuana**

The Indian hemp is a plant grown as a fibre and of seed rich in oil.

The leaves and flowers are prepared and taken in various forms, this they may be eaten, drink, inhaled or smoked. Marijuana is not as addictive as other strongly addictive drugs such as heroin.

2. **OPIUM**

This is obtained from the **poppy plant**. Its seeds are used to prepare some food and as a source of oil.

The dried latex that usually come out from opium seeds is kneaded into balls of crude opium which drug traffickers market.

3. **MORPHINE**

It is obtained from opium by chemical process.

4. **Heroin**

It is a derivative of morphine. It is used medically and it is the most dangerous of the addictive drugs.

5. **COCAINE**

It is obtained from the coca tree. The commercial drug is obtained from the dried leaves by extraction with alcohol.

6. **ALCOHOL**

This is chemical that can be found in palm wine, wine, beer, stout and some strong alcoholic like gin, whiskey, rum etc.

Alcohol is classified as drug because:

i. it affects the sense when it is abused.

ii. it is a stimulant.

iii. it induces sleep.

iv. Prolonged used of alcohol is harmful to the brain, liver and other organs.

7. CIGARETTES / TOBACCO: All forms of tobacco smoking have been found to be dangerous to health.

**EVALUATION**

1. State five sources of drugs and discuss four.

2. Why is alcohol classified as drug?

**USES OF DRUG**

* To combat diseases.
* To save lives.
* To relieve suffering.

**EVALUATION**

1. State two uses of drug.

2. Give five side effects of drugs.

**CAUSES OF DRUG ABUSE**

1. Curiosity

2. Lack of self – confidence

3. Search for excitement

4. Reduction of stress and frustration

5. Trying to fit in a peer group

**EVALUATION**

1. What is drug abuse?

2. State four causes of drug abuse.

**GENERAL EVALUATION**

1. What is drug abuse?

2. State four causes of drug abuse.

3.  State five sources of drugs and discuss four

4. State two uses of drug.

5. Give five side effects of drugs.

**WEEKEND ASSIGNMENT**

1. Causes of drug abuse include the following except

a) Curiosity b) lack of self-confidence c) search for excitement d) cocaine

2. Marijuana is grown purposely for its

a) Addictive b) fibre and seed c) stimulant d) effects on brain and liver

3. One of these is a source of drug

a) drug b) abuse c) curiosity d) opium

4. The Indian hemp is a plant grown as a ---- and of seed rich in oil.

a) fibre b) opium c) seed d) All of the above

5. Drug abuse can lead to the following except

a) Problems at home b) Suicides c) Violence d) Sound health

**THEORY**

1. Give five side effects of drug

2. Give five sources of drugs with brief explanation

3. State four causes of drug abuse

**REFERENCE**

* Precious seed BASIC SCIENCE FOR JUNIOR SECONDARY SCHOOLS BOOK 1
* NIGERIAN BASIC SCIENCE PROJECT BOOK ONE, Integrated Science made Easy By F.I Kehinde