

P6 INTEGRATED SCIENCE TOPICAL BREAK DOWN, 2020

Term One Work

THEME: THE WORLD OF LIVING THINGS

TOPIC 1: CLASSIFICATION OF ANIMALS

- ❖ Classification of vertebrates and invertebrates
 - a) Vertebrates
 - i) Warm blooded animals
 - ✓ Mammals
 - ✓ Birds
 - ii) Cold blooded animals
 - ✓ Reptiles
 - ✓ Fish
 - ✓ Amphibians
 - b) Invertebrates
 - ✓ Arthropods
 - ✓ Insects (characteristics and metamorphosis)
 - ✓ Arachnids
 - ✓ Myriapods
 - ✓ Crustaceans
- ❖ Molluscs
- ❖ Worms (flat, segmented and round)
- ❖ Caring for and protecting vertebrates and invertebrates

Reference: P6 curriculum pg. 60 - 61

THEME: MATTER AND ENERGY

TOPIC 2: SOUND ENERGY

- Sound as a form of energy
 - ✓ Sources of sound
 - ✓ Natural sources
 - ✓ Artificial sources
- Musical instruments
 - ✓ Percussion
 - ✓ Wind
 - ✓ String
- Properties of sound
 - ✓ Pitch
 - ✓ Frequency
 - ✓ Volume of sound
- How sound travels
 - ✓ Echoes (definition and importance)

- ✓ How sound is; produced, stored and reproduced
- The human ear
 - ✓ Structure and functions
 - ✓ Diseases and disorders of the human ear
- Comparing human ear with organs of hearing in other animals
 - Fish
 - Snakes
 - Insects
 - Amphibians
 - Birds
- Ways of caring for the human ear

Reference: P6 curriculum pg. 63 - 64

THEME: HUMAN BODY

TOPIC 3: CIRCULATORY SYSTEM

- ✎ Blood circulation;
 - What it is
- ✎ Structure and functions of the heart
 - Parts of the heart
 - Structure of the left and right ventricles
 - Functions of the parts of the heart
- ✎ Blood vessels
 - Veins
 - Arteries
 - Blood capillaries
- ✎ Composition and functions of blood
 - Plasma
 - Red blood cells
 - White blood cells
 - Blood platelets
- ✎ Diseases and disorders of the circulatory system
- ✎ HIV/AIDS and blood
- ✎ Effects of HIV/AIDS on;
 - An individual
 - The family
 - The community
- ✎ PIASCY messages
- ✎ Increasing the volume of blood in circulation
- ✎ Health habits that help to keep the circulatory system in a healthy working condition

Reference: P6 curriculum 66 - 69

THEME: HUMAN HEALTH

TOPIC 4: ALCOHOL, SMOKING AND DRUGS IN SOCIETY

- ❖ Alcohol and alcoholism
 - What they are
 - How alcohol is made
 - Factors that lead to alcoholism
- ❖ Effects of alcoholism to;
 - An individual
 - The family
 - The community
- ❖ Smoking
 - What it is
 - Factors that lead to smoking
- ❖ Effects of smoking to;
 - An individual
 - The family
 - The community
- ❖ Drugs
 - What they are
 - Essential drugs
 - What they are
 - Characteristics (uses of essential drugs)
 - Storage of drugs
- ❖ Drug abuse, misuse and dependency
 - What they are
 - Factors that lead to drug abuse, misuse and dependency
- ❖ Effects of drug abuse to;
 - An individual
 - The family
 - The community
- ❖ Life skills to safeguard against alcoholism, smoking and drug dependency

Reference: P6 curriculum pg. 70 - 73

Term Two Work

THEME: THE WORLD OF LIVING THINGS

TOPIC 5: CLASSIFICATION OF PLANTS

Classification of;

a) Flowering plants

- ✓ Legumes
- ✓ Cereals

b) Non flowering plants

- ✓ Spore bearing plants (mosses, ferns, liverworts and horsetails)
- ✓ Conifers

➡ Seed and fruit dispersal

- ✓ Mechanism
- ✓ Agents
- ✓ Importance

➡ Plant propagation

- ✓ Seeds
- ✓ Suckers
- ✓ Stem cuttings
- ✓ Leaves
- ✓ Budding
- ✓ Layering
- ✓ Marcotting
- ✓ Grafting
- ✓ Bulbs

➡ Economic value of plants to people

Reference: P6 curriculum pg. 75 - 77

THEME: SCIENCE IN HUMAN ACTIVITIES AND OCCUPATIONS

TOPIC 6: KEEPING CATTLE

⇔ External features of a bull and a cow.

⇔ Types of cattle

- Dairy cattle
- Beef cattle
- Dual purpose cattle
- Work type (draught) cattle

⇔ Breeds of cattle

- Indigenous (local) breeds
- Exotic breeds

⇔ Caring for cattle

⇔ Grazing and watering cattle

- Free range grazing
- Rotational grazing (paddock, strip, tethering)
- Zero grazing
- ⇔ Feeding cattle
- ⇔ Housing cattle
- ⇔ Mating, gestation period and calving in cattle
- ⇔ Milking and milk products (butter, cheese, ghee, yoghurt and whey)
- ⇔ Cattle pests and diseases
 - Causes, spread, signs/symptoms, prevention, control and treatment of the diseases
- ⇔ Practices that harm cattle and other domestic animals in;
 - abattoir
 - home
 - transit
 - field
- ⇔ Starting a livestock farm

Reference; P6 curriculum pg. 78 - 81

THEME: THE ENVIRONMENT

TOPIC 7: RESOURCES IN THE ENVIRONMENT

- Non-living things as resources e.g. Soil, minerals, sun, fuel, water and air
- Living things as resources e.g.
 - ✓ Plants (fibre, wood, food and medicine)
 - ✓ Animals (meat, skins/hides, horns, milk, honey and medicine)
- Harvesting resources
- How people make use of the available resources
- Renewable resources e.g. Wind, water, sunshine
- Non-renewable resources e.g. Minerals
- Caring for and conserving of animals as resources
- Environmental degradation
 - ✓ Natural causes/factors
 - ✓ Human activities
- Water and air pollution
- Controlling environmental degradation

Reference; P6 curriculum pg. 82 - 83

THEME: HUMAN BODY

TOPIC 8: RESPIRATORY SYSTEM

- Respiration
 - ✎ What it is
- Respiratory organs
- Lungs and breathing
 - ✎ Structure and functions
 - ✎ Breathing mechanism
- Respiration in relation to food and oxygen
- Diseases and disorders of the respiratory system
- Keeping the respiratory system in a healthy working condition

Reference; P6 curriculum pg. 84 - 87

Term Three Work

THEME: SCIENCE IN HUMAN ACTIVITIES AND OCCUPATIONS

TOPIC 1: SCIENCE AT HOME AND IN OUR COMMUNITY

- ❖ Preparation of clean and safe water for drinking and washing
 - ✓ Boiling
 - ✓ Filtration
 - ✓ Distillation
 - ✓ Decantation
 - ✓ Water treatment
- ❖ Getting local salt from ash through filtration.
- ❖ Water impurities
 - ✓ Human wastes
 - ✓ Animal wastes
 - ✓ Pollutants from chemicals
 - ✓ Silt from erosion
- ❖ Cleaning clothes in a home
 - ✓ Sorting
 - ✓ Soaking
 - ✓ Washing
 - ✓ Rinsing
 - ✓ Wringing
 - ✓ Drying
 - ✓ Ironing

Reference; P6 curriculum pg. 89 - 91

THEME: HUMAN HEALTH

TOPIC 10: ACCIDENTS AND FIRST AID

- ◆ Burns and scalds
 - ✎ What they are
 - ✎ Causes, prevention and First Aid.
- ◆ Fever and convulsions
 - ✎ What they are
 - ✎ Causes, prevention and First Aid
- ◆ Near drowning
 - ✎ What it is
 - ✎ Causes, prevention and First Aid
- ◆ Fainting
 - ✎ What it is
 - ✎ Cause, conditions and First Aid
- ◆ Foreign bodies in passages
 - ✎ What foreign bodies are
 - ✎ Foreign bodies in the; mouth, nose, ears, anus, eyes, throat and vagina
 - ✎ Effective First Aid for removal of foreign bodies.

Reference; P6 curriculum pg. 92 - 94

THEME: HUMAN HEALTH

TOPIC 11: SANITATION

- ⇔ Toilets and Latrines
 - What they are
- ⇔ The VIP latrine and Ecosan
 - Characteristics
 - Differences
- ⇔ Convectional (ordinary) latrine and potty
 - Characteristics
 - Differences
- ⇔ The Water Closet/borne toilets
- ⇔ Importance of using a latrine/toilet correctly
- ⇔ Proper use and maintenance of toilets and latrines in good hygienic condition

Reference; P6 curriculum pg. 95 - 97

THEME: HUMAN BODY

TOPIC 12: REPRODUCTIVE SYSTEM

- Growth and development in human beings
- Puberty and adolescence
 - What they are
- Primary and secondary sex characteristics
- Social and emotional changes
- Reproductive organs and cells (male and female)
 - Structure and functions
- Fertilisation, conception and pregnancy
- Reproductive health
 - Problems in pregnancy
- Teenage pregnancy
 - Meaning of teenage pregnancy
 - Consequences of teenage pregnancy
- Care for reproductive organs
- Common diseases and disorders of the system (STIs)
- Family planning
 - What it is
 - Importance
 - Methods (natural and artificial)
 - Myths and misconceptions about family planning
 - Child spacing
- PIASCY messages about adolescence reproductive health

Reference; P6 curriculum pg. 98 - 100