

# REVISION GUIDE

## Module 3 – The mysteries of life

- Characteristics of living things
- Living and non-living things
  - Structure of plant and animal cells and functions of the parts
- Characteristics of plants and animals
- Animals – Vertebrates and invertebrates
- Vertebrates classified as mammals, reptiles, birds, amphibians, fish, and the features of each category of vertebrate
- Flowering and non-flowering plants
- Plant structure and function – flowers: structure and function of main parts (eg parts include stigma, sepal, etc);
  - Pollination – definition of, and agents/methods of pollination
  - Label parts of a seed and know the function of each part
  - Germination – definition; conditions needed for germination of a seed
- Photosynthesis – definition; conditions needed for photosynthesis, word equation for process; importance of photosynthesis
- Feeding relationships– definitions of terms to include producer, consumer, herbivore, carnivore, omnivore and examples of each
  - Food chains and food webs – difference between the two/definitions of each; how to construct your own food chain using organisms on land and in water
- Air – gases which make up air and percentage composition of each uses of oxygen, carbon dioxide, nitrogen and noble/inert gases (such as argon, helium, etc)
- Household pests – definition of pest
  - Common household pests; disease or type of destruction associated with different pests; means of controlling the pests
- Soil
  - Common organisms found in soil
  - Types of soil – clay, loam and sand
  - Soil conservation

## Module 4 – Sense and sense organs

- The eye
  - Label a diagram of the human eye
  - Functions of the various parts of the eye
  - Response of eye to changing light intensities (bright and dim light)
  - Accommodation of the eye
  - Eye diseases and eye defects
  - Importance of vitamin A in maintaining good eyesight
- The ear – functions of the parts of the ear
- The tongue
  - The four main types of substances which can be tasted by the tongue and where
- Nutrition – definitions: nutrient, food, nutrition, diet, malnutrition, meal, balanced diet
  - Name the six food groups in the Caribbean (e.g. food from animals, staples, fruits, etc.) and give the nutrients (e.g. protein, vitamins, carbohydrates, etc.) found in each food group
  - The importance of each nutrient in the diet of Man
  - Examples of foods which contain the different nutrient
  - Deficiency diseases e.g. night blindness, kwashiorkor, marasmus, scurvy, etc., and the deficient nutrient (nutrient lacking from the diet) which causes these diseases
- Teeth and digestion
  - Types of teeth and functions of each type
  - Parts of tooth – descriptions and functions
  - Tooth decay – describe what it is and identify measures which can be taken to prevent tooth decay
  - Definitions – digestion, absorption, egestion, ingestion, assimilation and the names of the stages involved in the digestion of food

## Module 5 – Energy

- Energy
  - Definition
  - Forms of energy e.g. solar, potential, etc.
  - Energy transformations e.g. electrical energy → sound energy
- Electricity – how an electric current flows
  - Electrical conductors and insulators – definitions and examples
  - Circuits – parallel and series circuits: know diagrams and symbols (such as cell, switch, bulbs, etc.) and how each type of circuit works
- Heat energy and types of heat transfer: conduction, convection radiation, evaporation – definition and examples of each
- How to read an electric meter and calculate an electricity bill
- Ventilation – importance of proper ventilation; how sweating works to keep the body cool