

2nd Form Integrated Science Revision Topics 2017

1. 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 gas in air, e.g. nitrogen makes up 78% of air
 - 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

2. 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 nutrients
 - 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
3. 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, 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