# YEAR 4 SCIENCE PORTION – FIRST TERM EXAMINATION-JANUARY 2022

### > UNIT 1- GROUPING LIVING THINGS

- Classification of living things according to common observable characteristics and based on similarities and differences.
- Some new species discovered by scientists; identifying unusual animals.
- The seven life processes of living things (MRSGREN)
- Characteristics of different vertebrate groups.
- Create simple dichotomous keys to identify a variety of plants & animals.
- Using classification keys to help group, identify and name a variety of living things in the local and wider environment.
- Compare and contrast living things from different habitats.

#### > UNIT 2 – DANGERS TO LIVING THINGS

- Effect of environmental changes on living things; changes in environments that sometimes pose dangers to living things.
- How environments can be changed in positive ways, for example, the creation of nature reserves, and in negative ways, for example, deforestation.
- Construct and interpret a variety of food chains, identifying producers, predators and prey.
- Link between sources of food and animal populations in an environment.

#### ➤ UNIT 3 – CHANGES OF STATE

- Compare and group materials together, according to whether they are solids, liquids or gases.
- Common properties of solids, liquids and gases.
- Effect of temperature on changing states of matter.
- Three states of water & how it changes from one to another at different temperatures.
- Change in state of some materials when they are heated or cooled & the temperature at which this happens in degrees Celsius (°C)
- Understand that heating or cooling materials can change their properties.
- Explain the process of Evaporation & Condensation
- Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

## **➤ UNIT 4 – PLANTS (GAP PORTION OF YEAR 3)**

- Different parts of flowering plants & their functions; different parts of a flower and their functions.
- Cite examples of some non flowering plants. e.g. conifers, ferns etc
- The part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.
- Parts of a seed & the process of germination in plants.
- Transportation of water in plants; the uptake of dye in celery, carnations etc to understand the way in which water is transported within plants.
- What plants need to grow well (water, light, nutrients, air and enough space)

- How soil provides minerals to help plants grow and how fertilisers/organic matter can supplement this.
- Revise from; Science Bug International Topic book & Workbook, Active Learn allocations, PowerPoint presentations & video links that are posted on Google Classroom. Learn the scientific vocabulary from the Glossary page for each unit.
- Scientific inquiry based questions related to the above topics will be included.
- ❖ Maximum marks − 50; Duration − 1hour 30 minutes