



APPORTIONING OF PRIMARY SCHOOLS SCIENCE & TECHNOLOGY CURRICULUM

GRADE 2



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APPORTIONING OF PRIMARY SCIENCE & TECHNOLOGY CURRICULUM for GRADE 2

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GRADE 2 – TERM ONE

UNIT: STRUCTURE AND FUNCTION (GRADE 2)

Topic: Plants and Animals Develop in Different Ways

Duration: 6 Lessons (30 minutes each)

Objectives

Students should be able to:

1. Identify and name the different stages in the development of animals in their environment.
2. Identify and name the different stages in the development of plants in their environment

UNIT: ECOSYSTEMS (GRADE 2)

Topic: Adaptation of Organisms to their Environments

Duration: 2 Lessons

Specific Objectives

Students should be able to:

1. Investigate how organisms adapt to their habitats.
2. Identify some features of organisms that are designed to enable their survival in their habitats.
3. Appreciate that organisms are adapted to survive in their natural environments or ecosystems.

UNIT: MATTER AND MATERIALS (GRADE 2)

DURATION: 4 Lessons

OBJECTIVES

Students should be able to:

1. Identify different materials such as wood, glass, clay, plastic, rubber and metal.
2. List the properties of these materials.
3. Investigate and compare the hardness and strength (wood, plastic, metal, clay, paper etc.).
4. Match properties of materials to their use.

DURATION: 6 Lessons

OBJECTIVES

Students should be able to:

1. Design an object for a particular use.
2. Choose materials suitable for making an object to be used for a particular purpose.
3. Make an object for a particular use

DURATION: 2 Lessons

OBJECTIVES

Students should be able to:

1. Describe the properties of solids and liquids (using the senses).
2. Give examples of solids and liquids.

DURATION: 4 Lessons

OBJECTIVES

Students should be able to:

1. Recognize that water can be solid or liquid.
2. Identify the conditions under which water changes from solid to liquid and back.

DURATION: 2 Lessons

OBJECTIVES

Students should be able to:

1. Name examples of liquids found in the home.
2. Compare the properties of liquids used in the home.

UNIT: EARTH'S WEATHER (GRADE 2)

DURATION: 6 Lessons

OBJECTIVES

The students should be able to:

1. Draw a simple diagram to represent the water cycle.
2. Design and construct a simple rain gauge to measure rainfall.
3. Design and construct a simple anemometer to measure wind speed.
4. Take and compare measures of rainfall, temperature, wind direction and wind speed on different days.

GRADE 2 - TERM TWO

UNIT: SOLAR SYSTEM (GRADE 2)

DURATION: 3 Lessons

OBJECTIVES

Students should be able to:

1. Name the sun, earth and moon as parts of the solar system.
2. Infer the position of the sun at different times of the day.
3. Identify the phases of the moon.
4. Identify patterns in the occurrences of day and night.

UNIT: ECOSYSTEMS (GRADE 2)

Topic: Feeding Relationships and Defense (in animals)

Duration: 2 Lessons

Specific Objectives

Students should be able to:

1. Identify feeding relationships among organisms (use terms: herbivores, etc.).
2. Investigate predator-prey relationships.
3. Construct simple food chains to represent the feeding relationships among plants and animals.
4. Identify natural defenses that animals use to help them survive (spines, camouflage, etc.).

Topic: Effects of Environmental Destruction

Duration: 2 Lessons

Specific Objectives

Students should be able to:

1. Define the term environmental destruction.
2. Investigate the factors that result in environmental destruction.
3. Identify some ways in which environmental destruction may be prevented.

Topic: Solid Waste Management

(Integration of Life Science: Ecosystems: Earth and Space Science: Earth's Resources)

Duration: 2 Lessons

Specific Objectives

Students should be able to:

1. State the meaning of solid waste.
2. Identify methods of managing solid wastes in the home, school and community (recycling, etc.).
3. Discuss how the problem of litter in schools could be avoided.
4. Organize and participate in clean-up projects.
5. Construct a toy using discarded materials or items.

Topic: Making Different Sounds/Musical Instruments

Duration: 2 Lessons

Specific objectives

Students should be able to:

1. Name the human organ that is stimulated by sounds.
2. Classify sounds by pitch and loudness.
3. Construct and use simple musical instruments.

UNIT: FORCES, MOTION AND STRUCTURES (GRADE 2)

Topic: Effects of Forces

DURATION: 2 Lessons

OBJECTIVES

Students should be able to:

1. Identify forces used to create movement or change in given situations.
2. Demonstrate ways in which motion can be changed (start movement, increase speed, reduce speed, and change direction).

Topic: Simple Mechanical Devices

DURATION: 2 Lessons

OBJECTIVES

Students should be able to:

1. Identify simple mechanical devices.
2. State the functions of these devices.

GRADE 2 – TERM THREE

UNIT: DIVERSITY AND CLASSIFICATION (GRADE 2)

Topic: Human Variation

Duration: 2 Lessons

Specific Objectives

Students should be able to:

1. State ways in which people are alike and different.
2. Group themselves according to similarities.

Topic: Living and Non-living Things

Duration: 2 Lessons

Specific Objectives

Students should be able to:

1. Make a presentation displaying living and non-living things.

Topic: Characteristics of Living Things

Duration: 2 Lessons

Specific Objectives

Students should be able to:

1. Name some characteristics of living things such as reproduction, feeding, moving and growing.

Topic: How do Plants Differ?

Duration: 3 Lessons

Specific Objectives

Students should be able to:

1. Define: (i) plant (ii) Tree (iii) Shrub (iv) Vine (v) Herb
2. Identify different kinds of plants.
3. Name two types of leaves that are found in plants.
4. List different uses of leaves in everyday life.

UNIT: ENERGY (GRADE 2)

Topic: Making use of Technology

DURATION: 2 Lessons

OBJECTIVES:

Students should be able to:

1. List devices in the home and community that use electricity or other forms of energy.
2. State ways in which energy-using equipment has improved the quality of our lives.
3. Suggest difficulties we may encounter without the use of such equipment.
4. Appreciate that people use energy to solve some of their problems.
5. Compare old and new technological devices.
6. Infer that people keep inventing new things to make them better.

Topic: Windmills and Waterwheels

DURATION: 1 Lesson

OBJECTIVES

Students should be able to:

1. Observe and identify devices that use moving air and moving water as energy sources (e.g. windmills and water wheels).
2. Infer that wind and water are sources of energy.

UNIT: EARTH'S RESOURCES (GRADE 2)

DURATION: 8 Lessons

OBJECTIVES

Students should be able to:

1. Explain the dangers of litter.
2. Discuss how the problems of litter in schools could be avoided.
3. Organize and participate in a clean-up project.
4. Identify at least two air pollutants found in a particular area.
5. Discuss how pollutants affect people's activities.
6. Construct a trap for collecting dust from the air.
7. Compare the amount of pollution found in different areas using the constructed air trap.
8. Identify and compare devices developed to protect workers from air pollution.