



APPORTIONING OF PRIMARY SCHOOLS SCIENCE & TECHNOLOGY CURRICULUM

GRADE 6



Reviewed by:

Curriculum Officer- Natural Sciences
Motielall Singh, 2015

Curriculum Officer- Natural Sciences
Giannetti George (Ag.), 2016

APPORTIONING OF PRIMARY SCIENCE & TECHNOLOGY CURRICULUM for GRADE 6

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GRADE 6 – TERM ONE

UNIT: STRUCTURE AND FUNCTION (GRADE 6)

Topic: Technology and Human Systems

Duration: 8 Lessons

Objective

Students should be able to:

1. Construct models of the various systems
2. Identify technology utilized in the various systems in humans.
3. Construct models of technological devices that are used in the various systems in humans.

UNIT: MATTER AND MATERIALS (GRADE 6)

DURATION: 3 Lessons

OBJECTIVES

Students should be able to:

1. Identify a production process taking place in the home and industry.
2. Draw a diagram to show stages in the process.
3. Identify some of the changes taking place in the production process.
4. List production processes that people used to change materials to satisfy their needs.

UNIT: EARTH'S WEATHER (GRADE 6)

Topic: Humidity

Duration: 2 Lessons

Objectives:

Students should be able to:

1. Define the term “humidity”
2. Describe how weather patterns may be influenced by humidity
3. Infer that cold air occupies less space than warm air.

UNIT: SOLAR SYSTEMS (GRADE 6)

Topic: Space Exploration

Duration: 4 Lessons

Objectives:

Students should be able to:

1. Distinguish between manned and unmanned space exploration
2. Research and display vehicles used in the exploration of space
3. Research and discuss benefits of space exploration

UNIT: EARTH'S RESOURCES (GRADE 6)

Topic: Land Pollution

Duration: 8 Lessons

Objectives:

Students should be able to:

1. Discuss different ways of disposing of waste materials and suggest when these are appropriate
2. Display correct methods of garbage disposal
3. Discuss the advantages of reducing the amount of garbage in the environment
4. Classify litter as recyclable and non-recyclable
5. Participate in a clean-up project
6. Design and construct useful items from discarded objects and materials

UNIT: ECOSYSTEM (GRADE 6)

Topic: Feeding Relationships

Duration: 4 Lessons

Objectives

Students should be able to:

1. Give examples of interactions among biotic factors in an ecosystem.
2. Identify food chains and food webs in an ecosystem
3. Explain competition among living organisms in an environment.

Topic: Our Changing Environment

Duration: 4 Lessons

Objectives

Students should be able to:

1. Describe the immediate environment.
2. Identify some ways in which an ecosystem can change.
3. List factors that can bring about changes to ecosystems
4. Examine and describe a local ecosystem that has experienced change.
5. Appreciate the fragile nature of ecosystems.

UNIT: DIVERSITY AND CLASSIFICATION (GRADE 6)

Topic: Pollination and Fertilization

Duration: 6 Lessons

Objectives:

Students should be able to:

1. Define pollination, cross-pollination and self-pollination.
2. Describe the processes of (i) self-pollination and (ii) Cross-pollination.
3. Distinguish between self-pollination and cross-pollination.
4. Classify flowering plants according to the type of pollination they undergo.
5. Name the agents of pollination.
6. Identify pollen grains and ovules as the reproductive cells or gametes in a flower.
7. Define fertilization as the fusion of male and female gametes.
8. Explain how fertilization occurs in a flower.
9. Appreciate the significance of the processes of pollination and fertilization in plants, as a means of obtaining seeds.

Topic: Seed Dispersal

Duration: 2 Lessons

Objectives

Students should be able to:

1. Define 'seed dispersal'.
2. List the agents of seed dispersal and give examples of seeds that are dispersed by each method.
3. Explain why it is important for seeds to be dispersed or scattered.

GRADE 6 - TERM TWO

UNIT: ECOSYSTEM (GRADE 6)

Topic: Conservation

Duration: 8 Lessons

Objectives

Students should be able to:

1. Compare the degree of air pollution in two different areas.
2. Hypothesize about the reason for the differences.
3. Investigate the cause(s) of air pollution in the two areas (to test hypotheses).
4. Design and construct a device to detect air pollution.
5. Discuss the importance of having clean air.
6. Identify natural sources of water.
7. State ways in which water may be polluted.
8. Discuss how people's activities may result in air and water pollution.
9. Construct a device to determine the turbidity of water.
10. Arrange water samples according to their degrees of turbidity.
11. Plan and design an experiment to make polluted water clean.
12. Discuss ways of reducing air and water pollution.
13. Design and make brochures, posters, etc. on conservation of air and water.

Topic: Earthquakes

Duration: 4 Lessons

Objectives

Students should be able to:

1. Describe an earthquake as a natural process and state what causes it.
2. Identify ways in which earthquakes have an impact on the environment.
3. State the safety measures to be carried out during an earthquake, and demonstrate each measure.

UNIT: FORCES, MOTION & STRUCTURES (GRADE 6)

Topic: Falling Objects I

DURATION: 3 LESSONS

OBJECTIVES

Students should be able to:

1. Determine experimentally that varying the mass of an object and the height from which it is dropped will vary the force exerted by the object.
2. Design a device to prevent an egg from breaking on impact after being released from a raised platform.

Topic: Falling Objects II

DURATION: 2 Lessons

OBJECTIVES

Students will be able to:

1. Determine experimentally that the surface area of a falling object affects the time for free-fall.

Topic: Forces and Materials

DURATION: 2 Lessons

OBJECTIVES

Students should be able to:

1. Investigate the strength of materials with reference to the forces materials can withstand.
2. Suggest ways of strengthening materials in an effort to make them more resistant to forces.

Topic: Simple Machine

DURATION: 2 Lessons

OBJECTIVES:

Students should be able to:

1. Operationally define a simple machine.
2. List examples of simple machines.
3. Infer that an inclined plane decreases the force required to lift an object.
4. Identify examples of inclined planes in common use.

Topic: The Wedge

DURATION: 1 Lesson

OBJECTIVES

Students will be able to:

1. 1 Define the term, wedge.
2. 2 Explain how a wedge functions in making work easier.
3. 3 List examples of wedges in common use and explain how they work.

GRADE 6 - TERM THREE

1. Completion of missing content areas
2. Review K-Grade 6
3. Practice questions –Bright Ideas USB
4. Quizzes
5. Field trips