

Subject: Science

Grade: 6

Date: Monday, September 7, 2020

Duration: 60 minutes

Theme: Living Things, Life Processes, and the Environment

Topic: The Environment

Focus Question 1: Why is it Important to Care for the Environment?

Attainment Target:

- ✓ Recognise the variety of living things, their interdependence, and their inter-relationship with the environment.
- ✓ Gain an understanding of and apply the engineering design process.

Benchmarks:

- ✓ Be aware of some environmental problems (climate change, solid waste disposal, soil degradation) and how to mitigate against them.
- ✓ Show concern by being respectful and responsible towards the environment and the organisms living in it.
- ✓ Display curiosity, objectivity, and perseverance in their approach to activities.

Objects:

- ✓ Formulate a definition of environment.
- ✓ Justify the importance of conserving the natural environment
- ✓ Outline the effects of human activities on the environment

Key Skills: Communicate, think critically (compare, define operationally), collaborate, Observe,

Key Vocabulary: Environment, conservation, urbanization, environmental change, physical features, preservation, adaptation, slash and burn, over-fishing, coral reefs, mangrove swamps

Materials/Resources: Videos/slideshow, cardboard, paper, paste, scissors, books, computer with software to make digital presentations, multimedia projector, Internet, image/video recording device (e.g., camera) and any other available technologies

Content Outline:

The Environment is a complex mixture of all the natural living and non-living things. It includes the different interactions that take place among all those things. The Natural environment includes non-living soils, water, sunlight, and air that all living things need or interact with to survive. It also includes all living organisms on land and in water. The built environment includes non-living buildings, vehicles, roads, and other structures that are man-made and used for various activities.

The things we observed at school and at home are in our immediate environment. Things in our immediate environment can be classified as close and distant. Old cars dumped in an open lot might be close and affect our immediate environment right away.

Distant things may be quite far away but can still eventually affect our environment. These include oil-spills in far oceans, wind blowing smoke from a city garbage dump, dust from the Sahara in Africa blowing into the Caribbean, or a hurricane coming from off the coast of Africa.

Prior Learning:

Check that students:

- ✓ Understand that there are interactions among living things and with their environment.

Learning Outcome:

Students who demonstrate understanding can:

- ✓ Explain the meaning of environment and describe the features of different environments
- ✓ Develop a logical argument in support of conserving the natural environment
- ✓ Demonstrate good stewardship in their efforts to preserve/protect/conserve/(care for) their environment
- ✓ Work individually and as members of a team
- ✓ Use selected ICT tools to browse and search for information, and to produce multimedia presentations for communicating information

Assessment Criteria:

- ✓ Observations appropriately recorded
- ✓ Physical features and organisms in each environment correctly identified
- ✓ Acceptable definition of environment

Engage:

Students will create a KWL table similar to the one below. They will write what they know about the topic and what they want to know. They will complete the table at the end of the lesson.

What I Already Know (K)	What I Want to Know (W)	What I Have Learnt (L)

Students will then examine the following picture closely and discuss what things make up that environment.



Using students’ responses teacher will create a list on the board,

Students will recall and write things that are in their school environment beside list copied from board.

In groups of 5, students will discuss and answer the following question. ‘Are there any similarities of differences in the things that are in both environment?’

Explore:

In groups, students will explore different parts of their school environment and record their observations including temperature and light conditions. They will:

- a. Take photos or make labelled drawings of their observations.
- b. Classify pictures/drawings under the headings:
 - i. Natural Environment
 - ii. Built Environment
- c. Take careful note of the following:
 - ✓ Weather conditions
 - ✓ Non-living things
 - ✓ Living organisms
 - ✓ Dead and decaying things

Explain:

Students will share their information with the rest of the class using any/one of the following forms:

- a. Report
- b. Chart
- c. Poster

Elaborate:

Using the questions below, students will in their respective groups be guided into a discussion.

1. Why did you classify the things the way you did?
2. Which non-living things affect you and others?
3. Why are they important to you?
4. Can you, or other living things survive without those living things?
5. What happen if those non-living things were not in that environment?

Evaluate:

Students will write a definition of 'environment' using what they learnt from their observations and class discussion.

Students and teachers will work together to select the definition that gives the most accurate information.

Student will:

- ✓ complete (L) column of KWL table.
- ✓ List all the natural and man-made things that are in their home environment.
- ✓ Indicate the ones that differ from things around their school.
- ✓ Say how they interact.

Extended Learning

To answer the following question.

“In how many different surroundings do you carry out your everyday activities?”

Students will be asked to:

1. Keep a journal of the different places in which you live, play, and interact for one week.
2. Record which plants, animals, soil or other living organisms you interact with.
3. List the non-living parts of each surroundings, such as air, water, sunlight, or rocks.
4. Explain how you interact with each living and non-living part of your surroundings.

For Example:

- a. How did you get to your surrounding?
- b. Did you eat or drink anything from your surrounding?

Evaluation (Teacher):

Comments:

Areas of strengths:

Areas of weaknesses:

Actions to be taken:
