

Grade 6: Science

Unit 1 - The Responsible Scientist

Start: August

Duration: 7 weeks

LEARNING EXPERIENCES:

In this unit, students are introduced to the apparatus used in the science laboratory, along with the safety measures to be taken in the laboratories while performing experiments. Being an inquirer is paramount as students will be conducting experiments either independently or collaboratively and researching to explore connections between science and our everyday lives.

KEY CONCEPT:

Relationships

RELATED CONCEPTS:

Consequences, Form, Function

STATEMENT OF INQUIRY

To develop a responsible attitude, we must **relate** the **form** of equipment to their **function**, apply safety principles and be aware of **consequences**.

INQUIRY QUESTIONS:

Factual:

Which are the basic scientific equipment used in a school laboratory?
 What are the safety rules which minimise hazard in the laboratory environment?
 What are the units of measurement used for the basic quantities (mass, volume, distance, time, temperature)?

Conceptual:

How can we select the appropriate equipment for an investigation and use them safely?
 How do we evaluate the scientific instruments we use for a specific measurement?

Debatable:

To what extent is accuracy ensured in a school laboratory?

OBJECTIVES AND ASSESSMENT CRITERIA:

Criterion A: Knowing and understanding

Students will:

- i. describe scientific knowledge.
- ii. apply scientific knowledge and understanding to solve problems set in familiar and unfamiliar situations.
- iii. analyse information to make scientifically supported judgments.

Criterion D: Reflecting on the impacts of science

Students will:

- i. explain the ways in which science is applied and used to address a specific problem or issue.
- ii. discuss and evaluate the various implications of the use of science and its application in solving a specific problem or issue.
- iii. apply scientific language effectively.
- iv. document the work of others and sources of information used.

ATLs

Communication, Research

RESOURCES:

MS Teams/ Laptops / Notebooks / Worksheets / Lab work / Videos

SUMMATIVE ASSESSMENT:

1. Assessment on "Glass Apparatus" Research Essay (Criterion D)
2. Assessment – End-of-Unit Test (Criterion A)