

LESSON

Grade: 2

Topic: Measurement

Sub-topic: Comparing Mass

Duration: 60 minutes

Objectives: By the end of the lesson students should be able to:

- Identify by weight when a mass of an object is 1 kilogram.
- Compare the mass of different objects to the mass of objects of mass 1 kilogram.

Prerequisite Knowledge

Students should already know:

- What is mass
- To differentiate the weight of two object by knowing which is heavier or lighter.

Content outline

- The standard unit of mass is gram (g). The estimation of mass is a comparison of the mass of an item to another that is known. The known mass becomes the point of reference to make an estimate.

Materials/Manipulative

Objects in and around the classroom and or school environment, and objects that have a mass of 1 kilogram.

Procedure

Engage

- Allow the students to move around their immediate environment and find different objects of varying mass. Then allow them to work in small groups to compare the masses of the objects.
- Engage students in a class discussion about the size and mass of objects when compared.

E.g.

The mass of a large empty carton box as against the weight of a loaded stapler

Questions

Which one is most likely to be heavier?

Does the size of the object determine which one is heavier?

Explore

- Give students five items of different masses. Reveal to the students the item that has a mass of 1 kilogram. Allow students in groups to compare the mass of the objects to the object weighing 1 kilogram. [Encourage them to lift the objects]. Allow the students to state whether each object is about 1 kilogram, less than 1 kilogram or more than 1 kilogram.

Explanation

- Extend the activity so as to have a discussion with students as to how they could go about proving their predictions.
- Students in groups of four should write down everything they can remember from what they learnt in mathematics class today.
- Each group will share one thing they have written, however they cannot repeat anything that a group already shared.

Evaluation/Extension

- Share the following scenario with the students.

Scenario: One day Mr puppy and Mr Elephant went to the park to play. Mr Elephant said to Mr. Puppy let us play on the see-saw, so they went over to the see-saw to play. After a few minutes being at the see-saw, Mr Puppy and Mr Elephant decided that the see-saw was no fun.

Instructions

- Write a story in your journal on what are the possible reasons for Mr Elephant and Mr Puppy to not be having fun on the see-saw. Make reference to their mass using the words “heavy” “light” and think of the see-saw as a balance, tell what would happen to the see-saw.