

## **Measurement**

**Goal: The learner will understand and use measurement concepts.**

**Objective:**

**2.01 Determine the effect on perimeter, area or volume when one or more dimensions of two – and three – dimensional figures are changed.**

To achieve this objective, students should:

- Recognize that the change in only one dimension is consistent with the corresponding change of area and volume in the new object.
- Explore the relationship between the factors used to change the dimensions of an original object and the multiplicative change in the area and volume.
- Develop and use generalizations relating scale changes in the linear dimensions of a figure to the resulting changes in perimeter, area, circumference, surface area, and volume in the new object.
- Determine whether a change is proportional or non-proportional and justify your reasoning.