

1075 LOVU SANGAM SCHOOL

SUBJECTS: ELEMENTARY SCIENCE

YEAR: 6

WORKSHEET#1

STRAND	Matter
SUB – STRAND	Investigating Matter
CONTENT LEARNING OUTCOME	Measuring temperature, volume and of objects Explore means of changing the 3 states of matter.

LESSON NOTES: Measuring Temperature

- **Thermometer** is used to measure temperature (how hot/cold an object/material).
- The temperature of the air , water, ice can also be measured by a thermometer
- The thermometer has an outer casing of glass and mercury (red) contained at the base shaped like a bulb. The unit used in thermometer is degree **Celsius**.
- When the **air or water** is **hot** the mercury in the thermometer will **rise** and when the **air or water** is **cold** the mercury will **fall**.
- Normal body temperature is **37** degree Celsius. **Hot/Boiling point** will be more than 100 degree Celsius. **Freezing 0** degree Celsius.



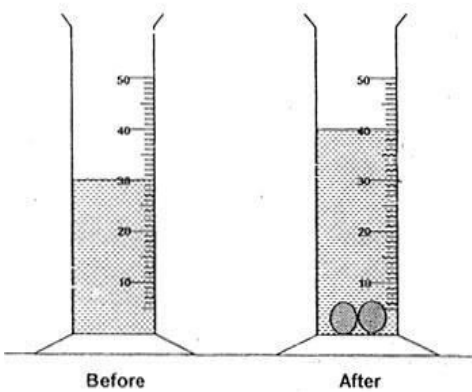
Activity: Complete the table

Types of water	Temperature (Rise/Fall)
1. Ice water	
2. Hot	
3. Boiling tea	

Measuring of Volume and of Objects

1. The volume of the object is determined by the volume of water displaced. This can be written using Litres, Millilitres and cubic centimetres.
2. Scientist Archimedes states that any object placed in the fluid will move the fluid level up. Thus, the volume fluid displaced will be equal to the volume of the object.

Example given with formula

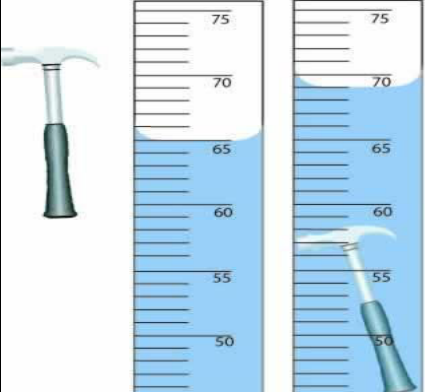


Volume of Marbles = Final water mark – Initial water mark
= 40ml - 30ml
= 10 ml or 10 cm³

Therefore for each marble
2 marbles = 10ml; 1 marble = x
x = 10ml ÷ 2 marbles
Each Marble = 5ml or 5cm³

NOTE: Millilitres is same as cm³/cubic centimeters, example 10ml = 10cm³.

Activity



1. Determine the volume of the object in the diagram shown.
2. What will be the volume in cubic centimeters?

Complete the table

Objects	Volume in ml	Volume in cm ³
Stone	30ml	
Rubber		23cm ³
Watch	85ml	

CHANGE OF STATE

- Substance can change from solid to liquid to gases as they get more energy – example ice (solid) to Water (Liquid) , then to steam (vapor , gas) -**Sublimation Process (includes – melting and vaporization)**
- Similarly we can change gases into liquid then to solid by taking away the energy – by cooling them down – **Reverse Sublimation process (condensation and freezing)**

