

Measurements Review

The following skills and knowledge will be tested (you need to know and be able to do)

1. Measure length accurately in centimeters, then change the same measurement into millimeters (1 cm = 10mm).
2. Calculate area of a rectangle (length x width) using correct units – cm^2
3. Calculate volume of a rectangular object (length x width x height) using correct units – cm^3 .
4. Know immersion method for measuring volume of irregularly shaped object, for example, a rock: put a certain amount of water into a graduated cylinder, note the volume, add the object, measure the volume of water and the object together, subtract the original volume – this will give you the volume of the object. Remember that unit of liquid volume is mL; solid object's volume will be in cm^3 . Also remember that 1 mL = 1 cm^3 .
5. Know the definitions of mass and volume.
6. Know the definition of weight.
7. Distinguish between mass and weight. Know that weight depends on gravitational pull, while mass does not.
8. Know the measurements units and conversions:
Length
 - 1 kilometer = 1000 meters
 - 1 meter = 100 centimeters
 - 1 centimeter = 10 millimeters
Mass
 - 1 kilogram = 1000 grams
 - 1 gram = 1000 milligrams
Volume
 - 1 liter = 1000 milliliters
 - 1 mL = 1 cm^3
9. Know the SI units for temperature – Kelvin, weight – Newton
10. Know two advantages of SI system: all the countries in the world use it; and it is simple to use as it is in multiples of ten.