

ICP: Measurement Notes

The Metric System

● A decimal system of units for measurements of _____, _____, _____, etc.

● _____ (SI) units - modern form of the metric system; based on number _____.

SI Units:

Quantity (Dimension)	Name of Unit	Abbreviation
Length		
Mass		
Volume		
Temperature		
Time		
Power		

Length:

Basic SI unit of length: _____

Instrument used to measure SI length: _____

Draw a horizontal line that is 12-cm long.

Mass:

Basic SI unit of mass = _____

Instrument used to measure mass = _____

People often confuse weight and mass. What is the difference between weight and mass?

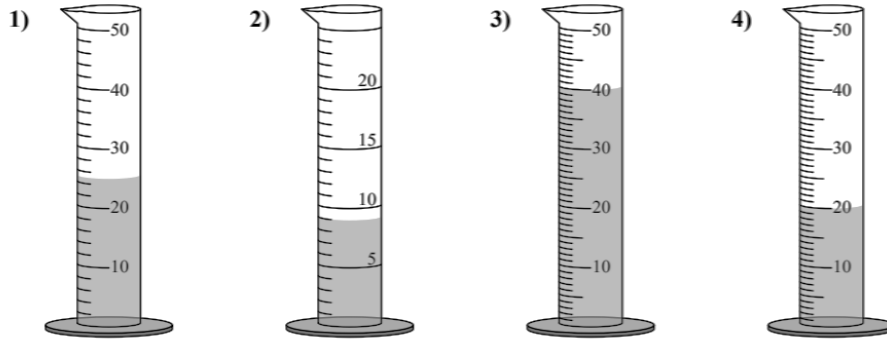
Volume:

Basic SI unit of volume = _____

Unit of volume typically used in lab = _____

What is a meniscus?

How much water is in each graduated cylinder? Write the volume beside the graduated cylinder. Do NOT forget your units!



To find the volume of an irregularly-shaped object, use the _____ method

1).

2).

3).

Bizarre Measurements: Watch the video clip provided while completing the chart below.

Quantity	Dimension	Definition/Facts
Smoot	Length	Oliver Reed Smoot's height; 620 meters
	danger	
		1 BED of ionizing radiation comes to about a _____ of a _____.

Metric System (SI) Prefixes

Prefixes	Value	Standard form	Symbol
	1 000 000	10^6	M
	1 000	10^3	k
	0.1	10^{-1}	d
	0.01	10^{-2}	c
	0.001	10^{-3}	m
	0.000 001	10^{-6}	μ