

A Good Science Question:

1. Must be answerable with Observable Data
2. Leads to explanations about how the world works
3. Helps us predict the future and understand the Past.

Measurement: A statement of the amount of something

Desk	Classroom
5 sketchbooks	37 frappachinos
7 pencil holders	54 skeleton hands
11 1/2 iPhone 5c ✓	37 sketchbooks
9 iPhone 5c	1035 cm
25 Pink Erasers	30.5 boards
3 1/2 white boards	83 Peanut butter bar thing
12 sketch hands	30.5 boards
2.5 boards	240 phon charms
41 pencils	47 pencil holders
3 boards	72 pencils
3.5 Phon charms	59 pencils
4 pencils	56 \$
10 pencils	34 binders
6 pencils	73 iPhones
11 \$'s	
3 .75 binders	
9 iPhones	

Length: A measure of distance

Units:

Imperial
English
inches (in)
feet (ft)
yards
miles
Leagues
Nautical Mile


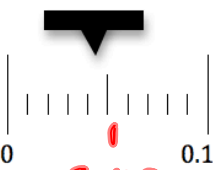
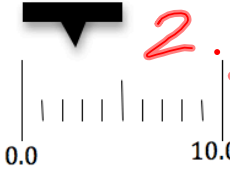

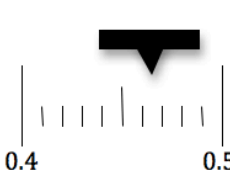

Metric
Picometer
millimeters (mm)
Centimeters (cm)
Decimeter (dm)
meters (m)
kilometers (km)
Astronomical Unit (AU)
Light years

Length of writing implement:

18.1 cm	16.5 cm
- 15 cm	- 18 cm
21.5 cm	14.9 cm
- 15 cm	13.5 cm
14.5 cm	- 14 cm
18.5 cm	14.8 cm
15.00 ± 0.05	

Reading Instruments Practice

Triple Beam Balances – Read the scale and put all answers in grams!

 <p>4.65 g 4.66 g ± 0.05</p> <p>Answer _____</p>	 <p>0.044 0.43 0.46 0.04 0.45 0.043</p> <p>Answer 0.04 0.045</p>
 <p>2.8 ± 0.5</p> <p>Answer _____</p>	 <p>0.045 ± 0.005 90.0 90.1 90.0 X</p> <p>Answer _____</p>
 <p>0.465 0.45 0.467</p> <p>Answer _____</p>	 <p>8.82 8.85 8.81 ✓ ± 0.05</p> <p>Answer _____</p>

Length

Weight: depends on gravity

pounds (lbs)

metric
Newton (N)

Mass: The amount of matter in something

Units: Grams, kilograms

Use a Triple Beam Balance



Volume: The amount of 3D space an object takes up

2 ways to measure

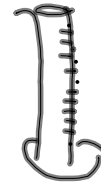
1. Length x width x height

$$cm \cdot cm \cdot cm$$

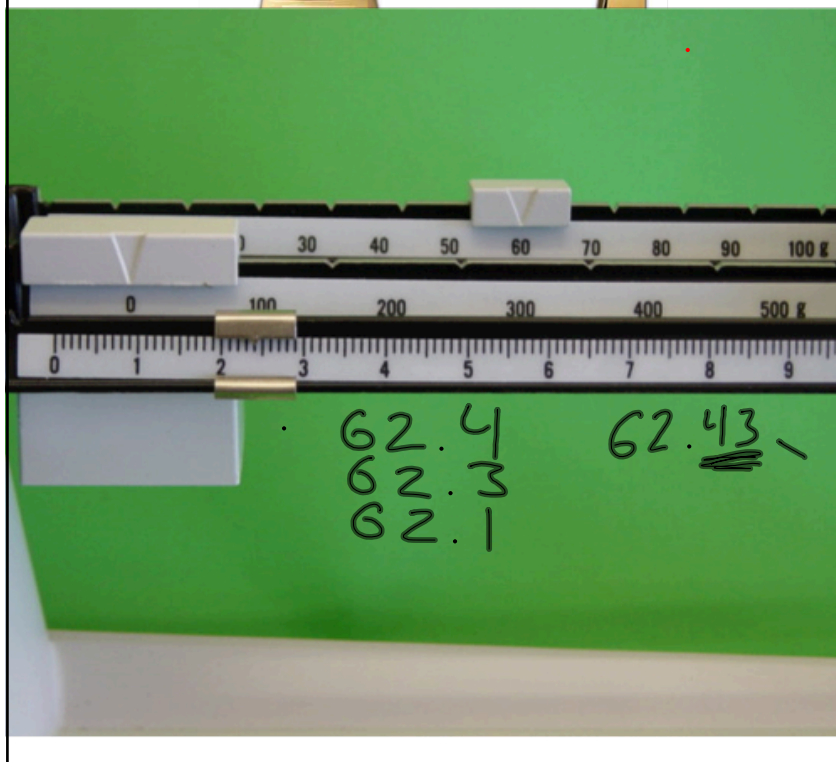
Units: cm^3 , m^3

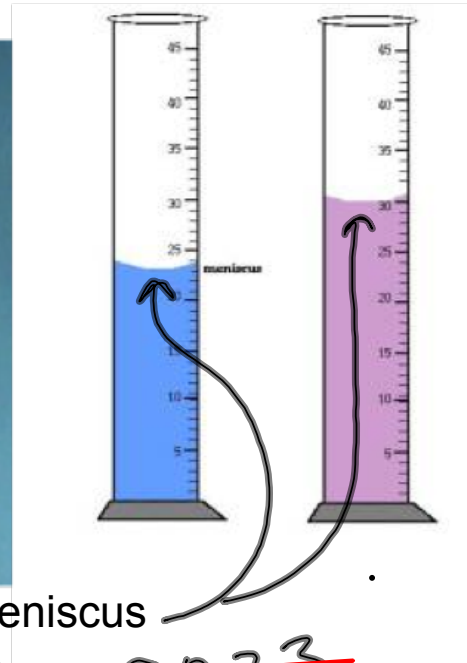
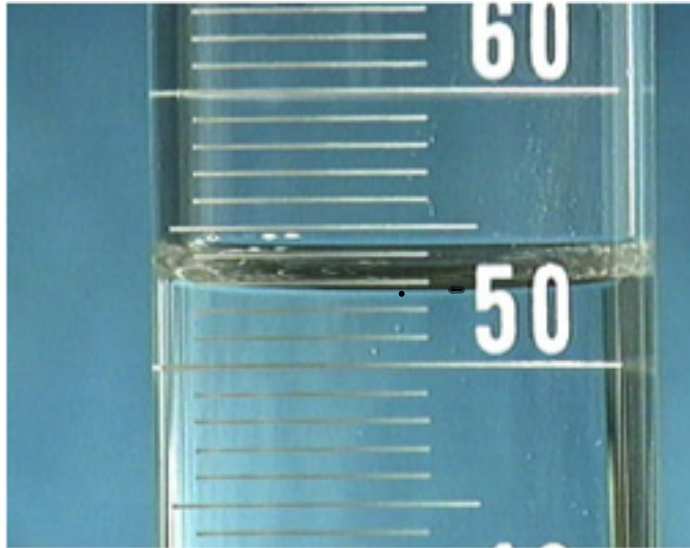
2. Liquid Volume: Use a graduated Cylinder

units: Liter, milliliter,



Mass





Read from the bottom of the Meniscus

52.8
52.7

52.8
~~50.3~~

~~50.23~~
~~53~~