Name_____ Period ____ Date_____Mail Box_____

Note Reference - Metric System

Part A. Matching

Word Bank:

Gram Liter Meter Newton Kilo Milli Centi

Spring Scale Balance Scale Metric Ruler Graduated Cylinder

1. _____ Used to measure length.
2. _____ Used to measure liquid volume.
3. _____ Used to measure mass.
4. _____ Used to measure weight.
5. _____ Basic unit of weight.
6. _____ Basic unit of mass.
7. _____ Basic unit of length.
8. _____ Basic unit of volume.
9. _____ Prefix (1000)
10. _____ Prefix (1/1000)
11. _____ Prefix (1/100)

Part B. Conversions

12. 10 m = _____ mm
13. 1600mm = _____ cm
14. 6500 kg = _____ g
15. 100 cL = _____ L
16. 12 g = _____ mg
17. 356km = _____ m
18. 67.8mL = _____ L
19. 99.1L = _____ kL

			METER 1			
Kilo	**Hecto**	**Deca**	**LITER**	**Deci**	**Centi**	**Milli**
1000	100	10	1	10th	100th	1000th
			GRAM 1			

1. 4.3 cm = _____ mm
2. 0.7698 km = _____ m
3. 8659.1 mg = _____ g
4. 21.67 cg = _____ hg
5. 698.23 hm = _____ km
6. 5.46023 m = _____ mm
7. 904.7 cL = _____ L

Name _____ Date _____ Period # _____

Metric Conversion Worksheet

1. Convert the following: 5 meters = _____ km
2. Convert the following: 3 meters = _____ mm
3. Convert the following: 7 meters = _____ cm
4. Convert the following: 60 millimeters = _____ km
5. Convert the following: 2.5 meters = _____ mm
6. Convert the following: 4.5 centimeters = _____ km
7. Convert the following: 77 meters = _____ dm
8. Convert the following: 37 decimeters = _____mm
9. Convert the following: .002 centimeters = _____ mm
10. Convert the following: 44 millimeters = _____ m
11. Convert the following: 25 kilometers = _____ m
12. Convert the following: 880 meters = _____ cm
13. Convert the following: 9.5 kilometers = _____ decimeters
14. Convert the following: 66 decimeters = _____ decameters
15. Convert the following: 5 meters = _____ hectometers

			METER 1			
Kilo	Hector	Deca	**LITER**	Deci	**Centi**	**Milli**
1000	100	10	1	10th	100th	1000th
			GRAM 1			

Name _____
Class # _____

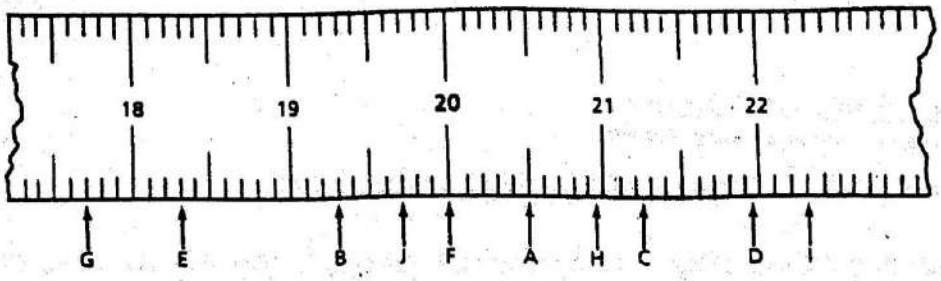
Metric Measurement

Part A. Reading Instruments

1. *An enlarged section of a metric ruler is shown below. There are letters along the bottom edge of the ruler. Write the measurement for each letter in the space next to the correct letter below.*

Keep in mind this ruler has been enlarged!

FIGURE 1-2.

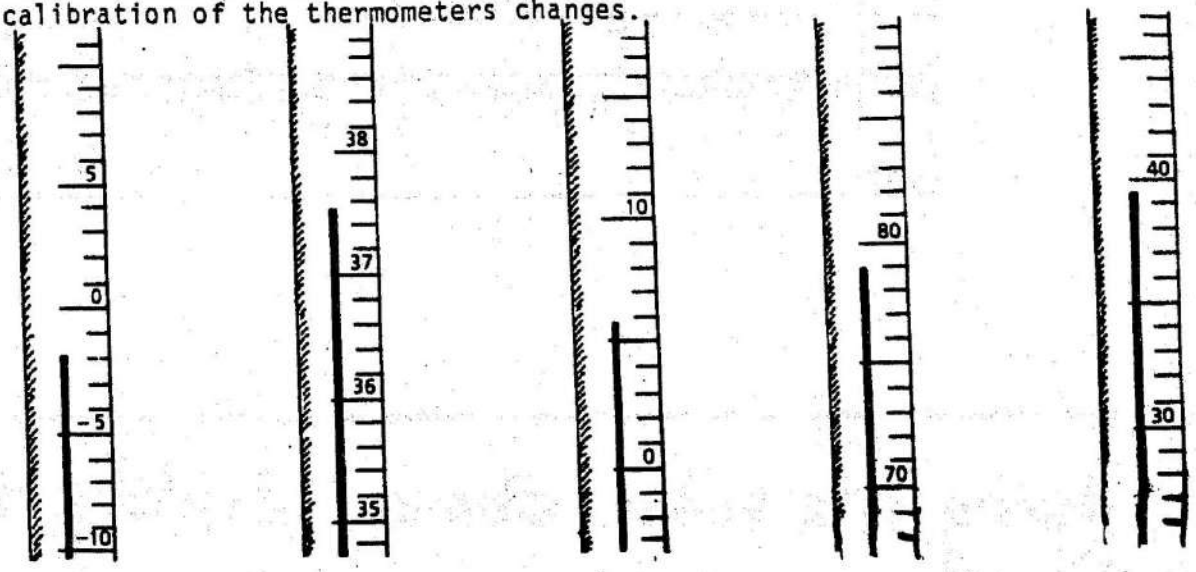


a. _____ c. _____ e. _____ g. _____ i. _____

b. _____ d. _____ f. _____ h. _____ j. _____

2. *Portions of five thermometers are shown. Record the temperature reading for each thermometer in the space provided.* Students should express their answer in °C. Note that the calibration of the thermometers changes.

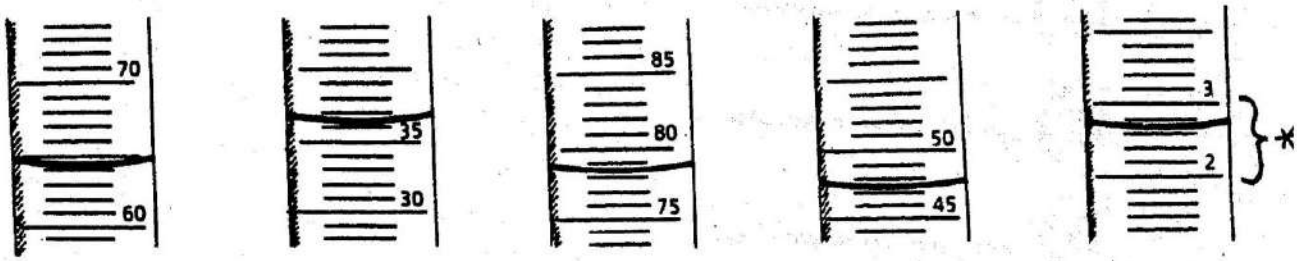
FIGURE 1-3.



a. _____ b. _____ c. _____ d. _____ e. _____

3. *Portions of five graduated cylinders are shown below. The water level in each is shown by a heavy dark line. Read the water level in each and record your answers in the spaces provided.*

FIGURE 1-4.



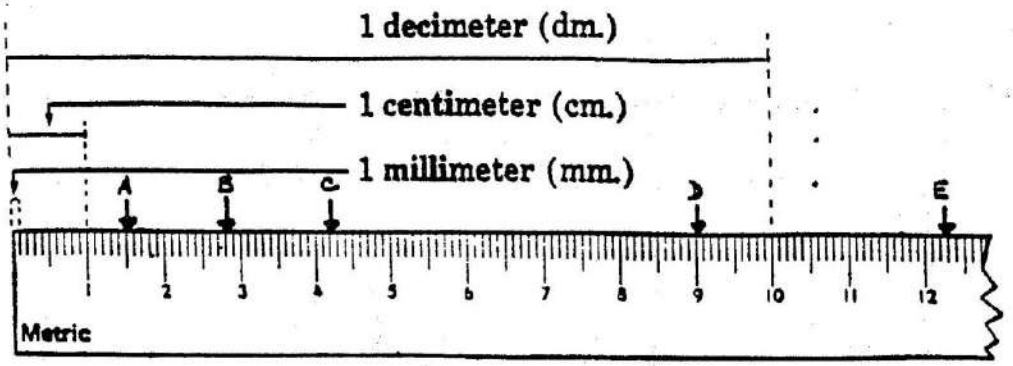
a. _____ b. _____ c. _____ d. _____ e. _____

Name _____
Date _____

Metric Units of Length

A meter (*m.*) is approximately 39.37 inches long.

To name a unit of length other than the meter, a *prefix* is attached to the word meter. This prefix denotes the relationship of that particular unit to the meter.



Using the ruler above, identify the following points.

A) _____

B) _____

C) _____

D) _____

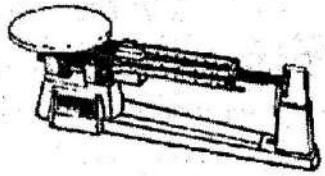
E) _____

Unit 1: Scientific Investigation

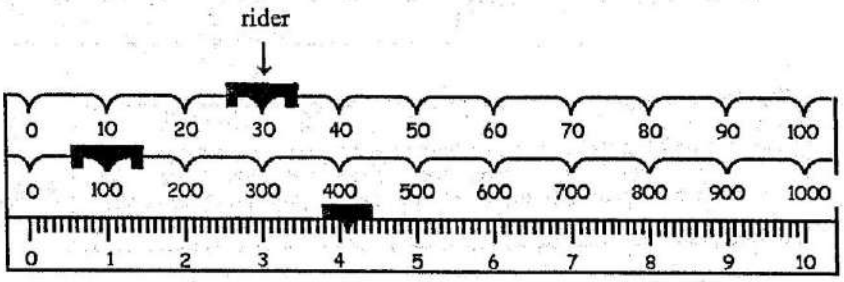
Name_____ Period _____

Measuring Mass

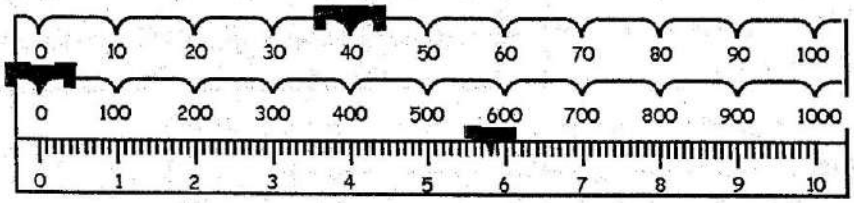
In the Metric System, mass is measured in grams (g) using a triple-beam balance. It is called a triple-beam because it has three beams that are used to determine the mass of an object.

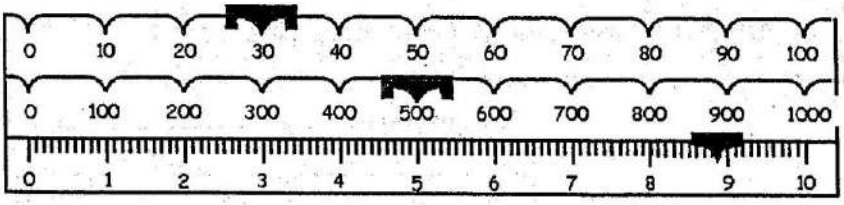


On each beam, there is a rider which can be moved to different reading until the object is balanced.



Determine the mass of the following objects pictured below.

1.  _____ g

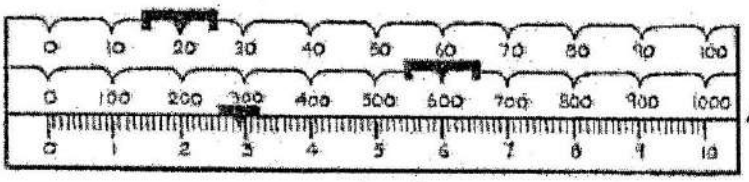
2.  _____ g

THE TRIPLE AND FOUR BEAM BALANCES

Name _____

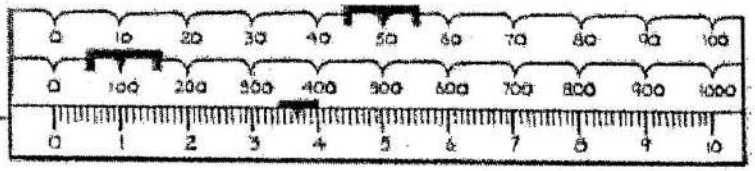
What masses are shown on each of the following balances?

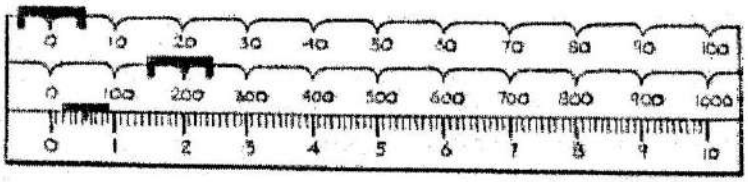
Triple Beam Balance



Answer: _____

Answer: _____

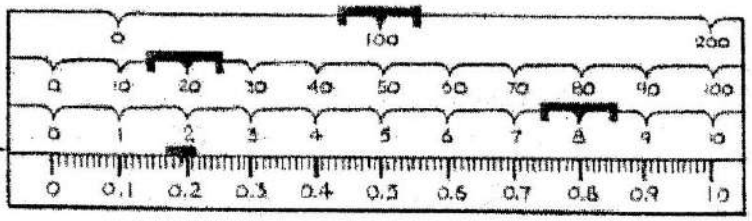


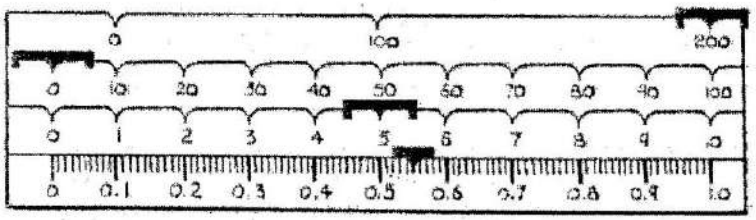


Answer: _____

Four Beam Balance

Answer: _____





Answer: _____

Answer: _____