Forensic Science Name _____
Worksheet
Metrics and Measurement Per ____ Due Date _____

Scientists use the metric system of measurement, based on the number 10.
It is important to be able to convert from one unit to the other.

Study the following chart…

kilo	hecto	deca	**Basic Unit**	deci	centi	Milli
(k)	(h)	(da)	**gram (g)**	(d)	(c)	(m)
1000	100	10	**liter (L)**	.1	.01	.001
10^3	10^2	10^1	**meter (m)**	10^{-1}	10^{-2}	10^{-3}

Using the chart above, you can determine how many places to move the decimal point and in what direction by counting the places from one unit to the other.

Example Convert 5 mL to L
To go from milli (m) to the base unit , liters, count on the above chart three places to the left. Hence, move the decimal point 3 places to the left and 5 mL becomes 0.005 L

Example Convert 12.4 kg to cg
To go from kilo (k) to the centi (c), count on the above chart five places to the right. Hence, move the decimal point 5 places to the right and 12.4 kg becomes 1240000 cg

Convert the following

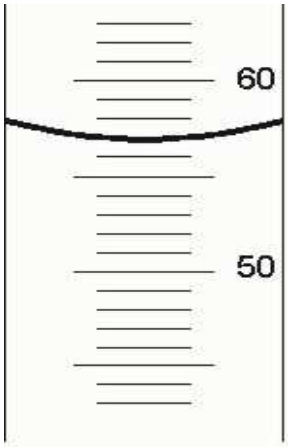
1. 35 mL = _____ dL
2. 950 g = _____ kg
3. 275 mm = _____ cm
4. 1000 L = _____ kL
5. 1000 mL = _____ L
6. 4500 mg = _____ g
7. 25 cm = _____ mm
8. 0.005 kg = _____ dag
9. 0.075 m = _____ cm
10. 15 g = _____ mg

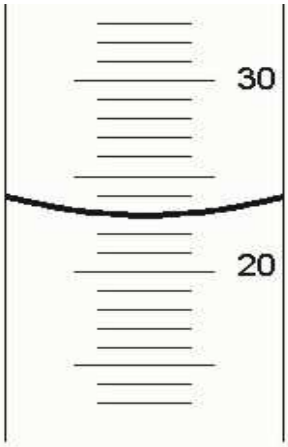
Forensic Science
Worksheet
Using Graduated Cylinders

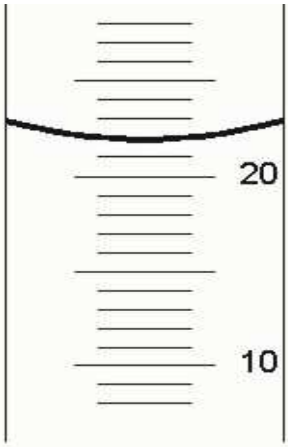
Name _____

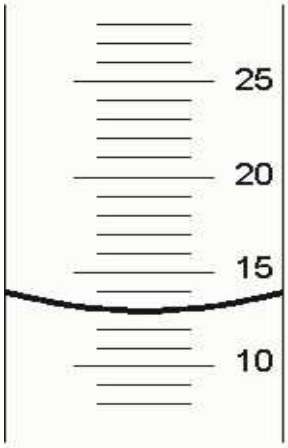
Per ____ Due Date _____

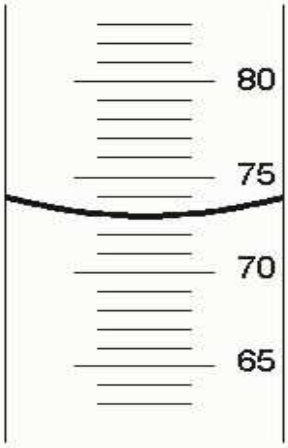
Directions: What does each of the graduated cylinders shown below read?

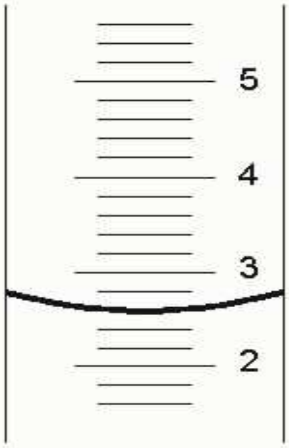


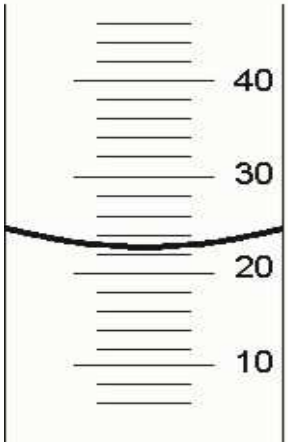


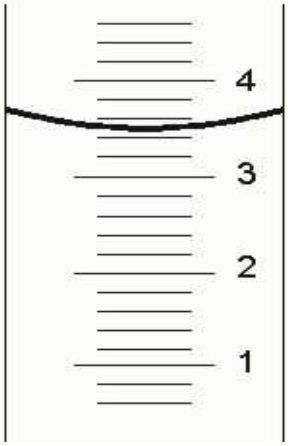


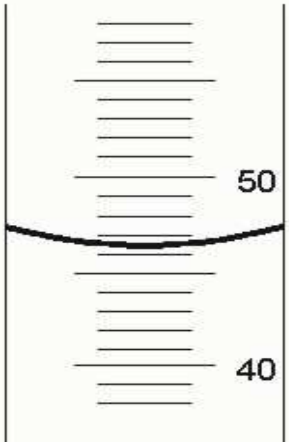










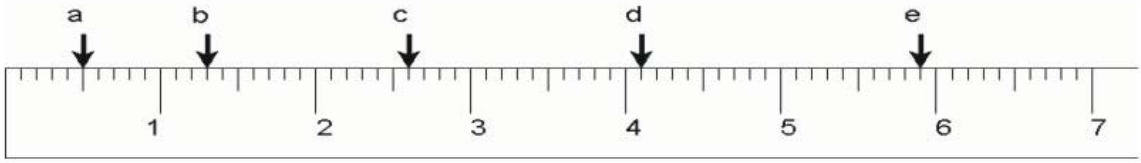


Forensic Science
Worksheet
Measuring Length

Name _____

Per ____ Due Date _____

Directions: What lengths are marked on the centimeter ruler shown?



	cm	mm
A		
B		
C		
D		
E		

Directions: Measure each of the following lines with a centimeter ruler. Record your answers on the lines at right.

F. _____ _____

G. _____ _____

H. _____ _____

I. _____ _____

J. _____ _____

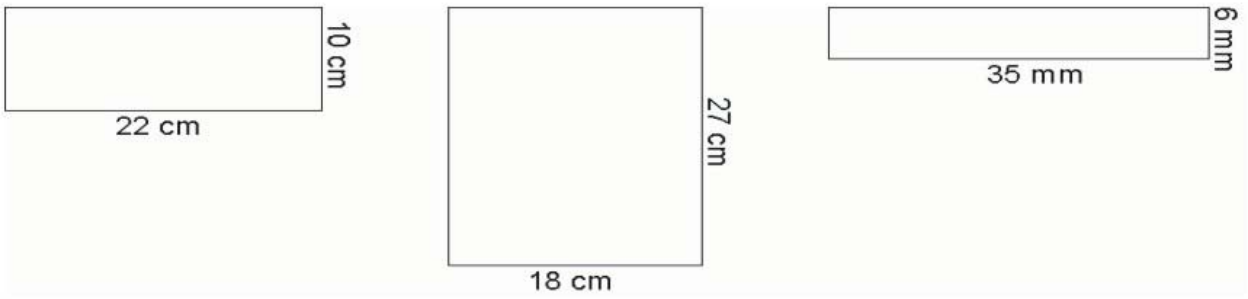
K. ___ _____

L. _____ _____

Area of a Rectangle

The area of a rectangle is given by the formula where A = area, L = length, and W = width. $A = LW$

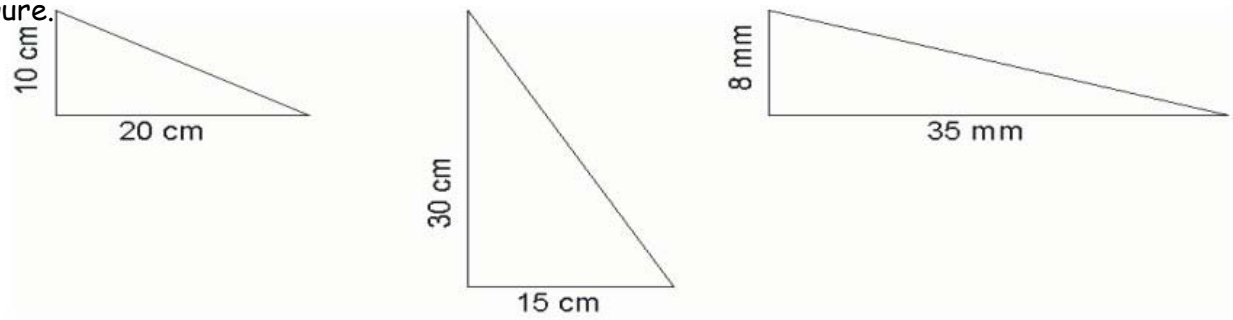
Calculate the area of each of the following rectangles. Write your answer inside the rectangle.



Area of a Right Triangle

The area of a rectangle is given by the formula where A = area, b = base, and h = height. $A = \frac{1}{2}bh$

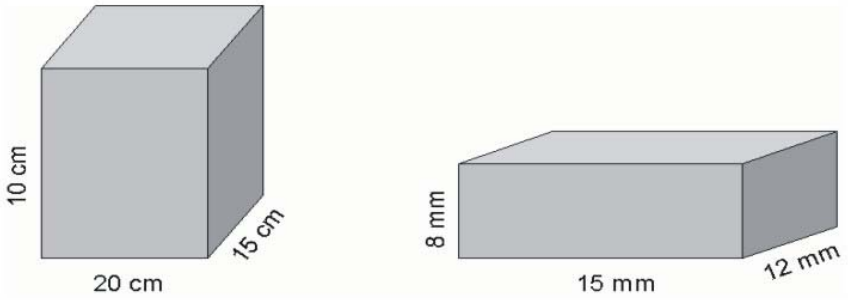
Calculate the area of each of the following right triangles. Write your answer inside the figure.



Volume of a Rectangular Solid

The volume of a rectangular solid is given by the formula where V = volume, L = length, W = width, and H = height. $V = LWH$

Calculate the area of each of the following solids.. Write your answer under each figure.

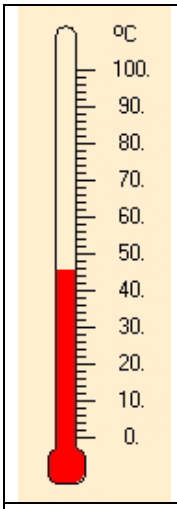
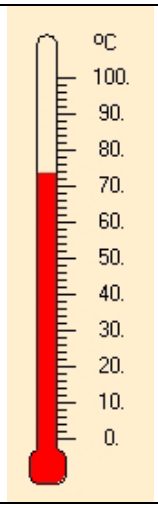
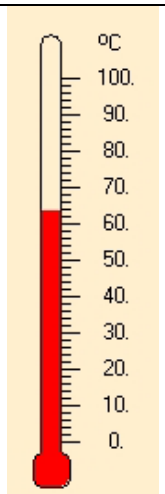
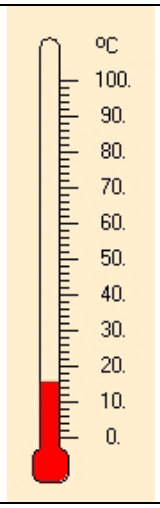
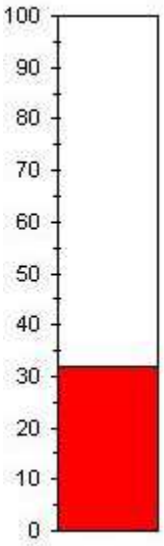
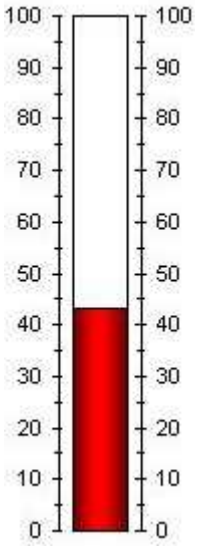
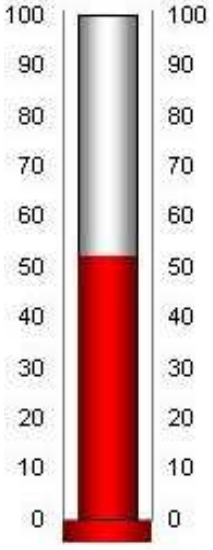


Forensic Science Name _____

Worksheet

Thermometers and Temperature Conversions Per ____ Due Date _____

Directions: Several thermometers are shown. Write the temperature shown in the box below each picture.

Directions: Convert the following temperatures as indicated. Show all of your work.

1. 55°C to °F

2. 101°F to °C

3. 22°C to Kelvin

4. 0°C to °F

5. 0°F to °C

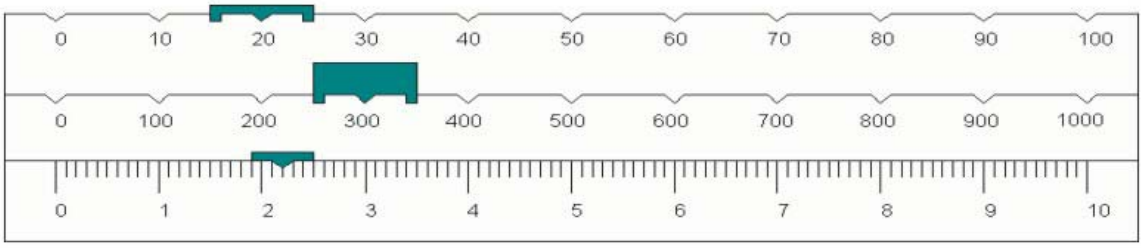
6. 0°C to Kelvin

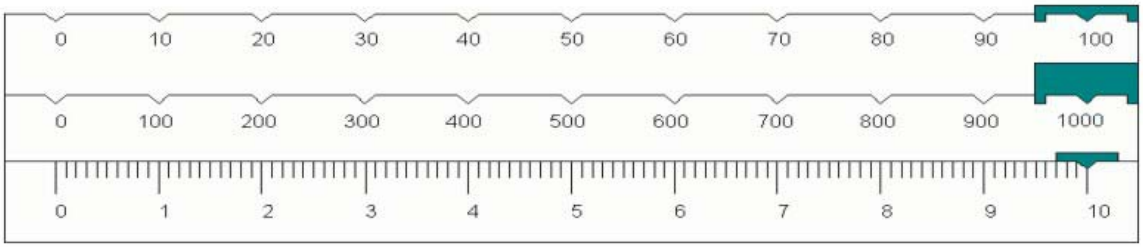
Forensic Science Name _____

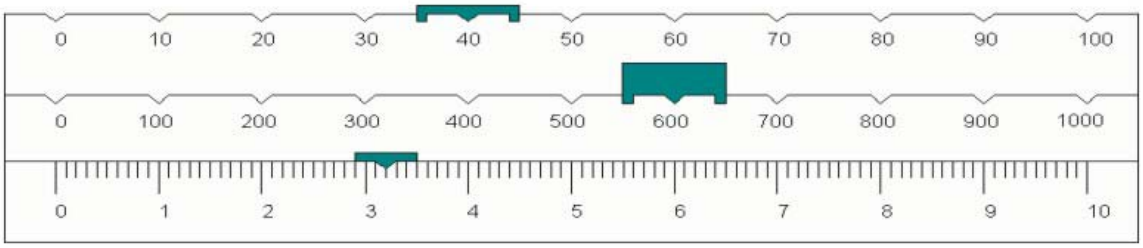
Worksheet

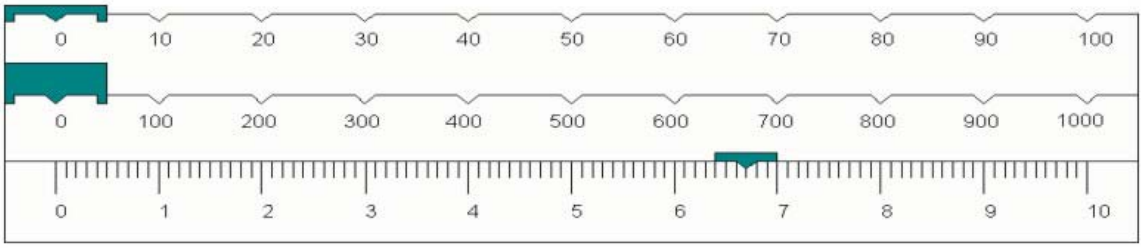
Using Triple Beam Balances Per ____ Due Date _____

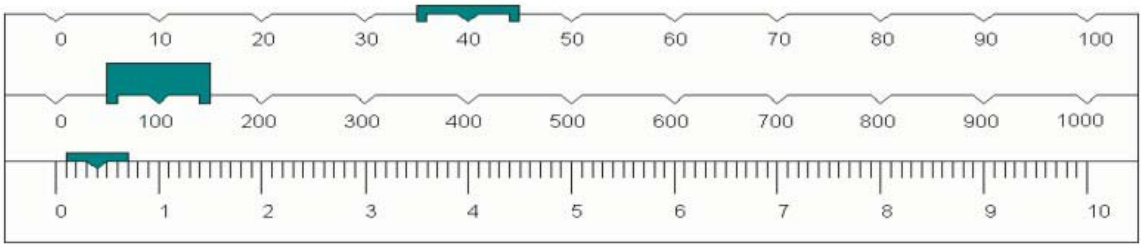
What mass is shown on each of the following balances? Write your answer in the left margin.

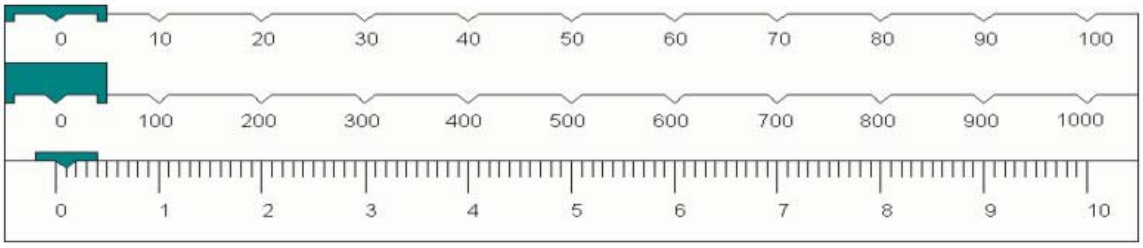








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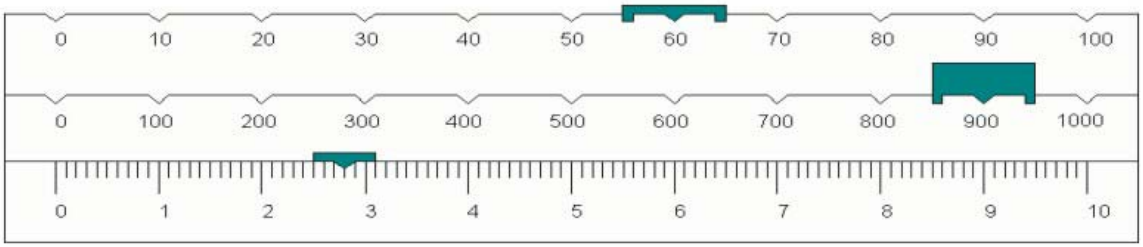
0 100 200 300 400 500 600 700 800 900 1000
0 1 2 3 4 5 6 7 8 9 10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0 100 200 300 400 500 600 700 800 900 1000
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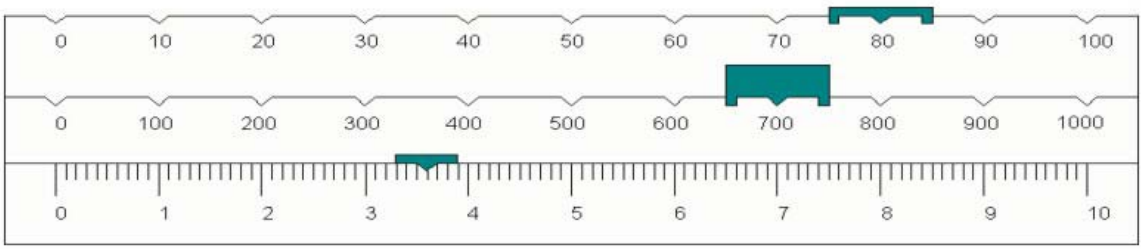
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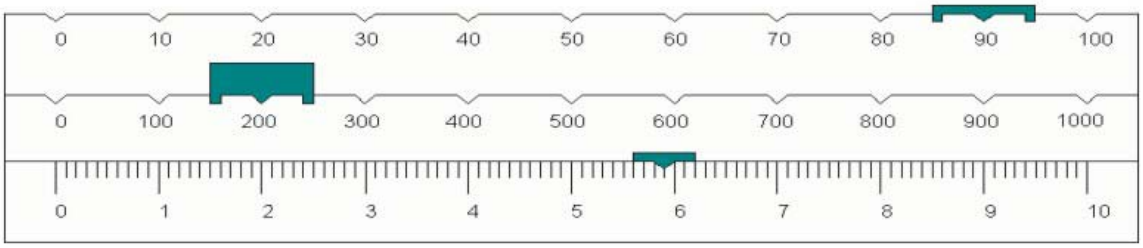
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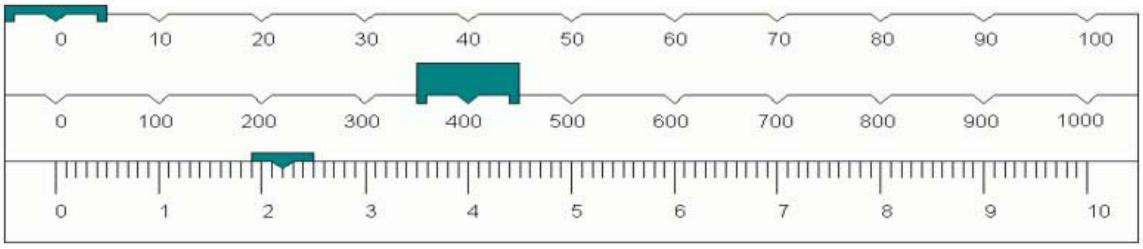
0 1 2 3 4 5 6 7 8 9 10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0 100 200 300 400 500 600 700 800 900 1000
0 1 2 3 4 5 6 7 8 9 10