Name: _____ Date: _____ Period: _____

Physical Science Metric System Unit

Metric System Review Sheet

1. Define:
   a. Matter:

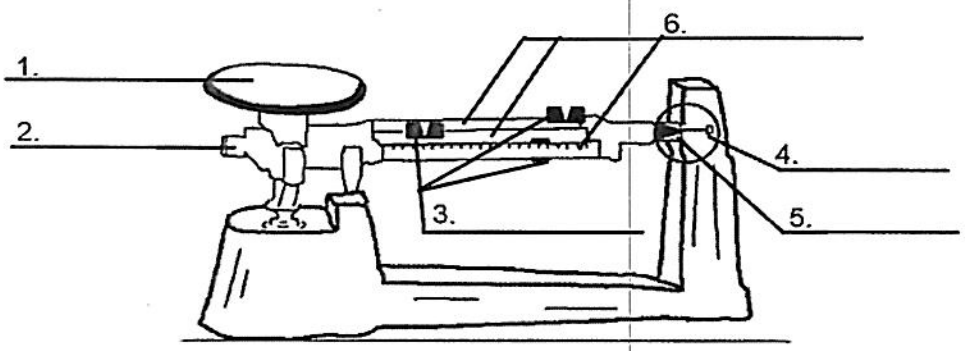
   b. Mass:

   c. Volume:

   d. Meniscus:

   e. Density:

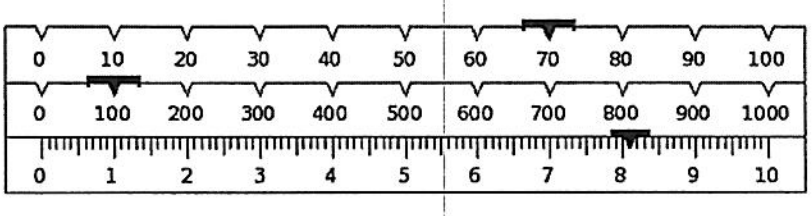
2. Label the parts of the triple beam balance:



3. What is the basic SI unit for mass?

4. Describe how we read the mass of an object on a triple beam balance.

Mass: _____

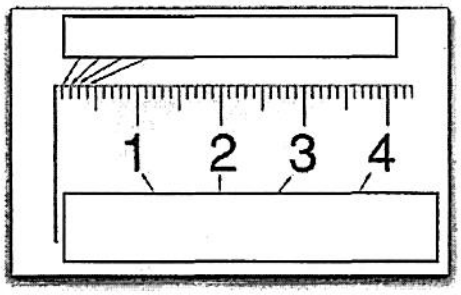


5. What is the basic SI unit for length?

6. What two tools are used to measure length?

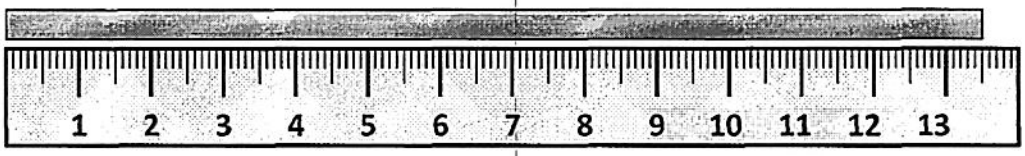
7. What are the numbered lines on a metric ruler? What are the tiny lines?

8. How can you convert between these two units?

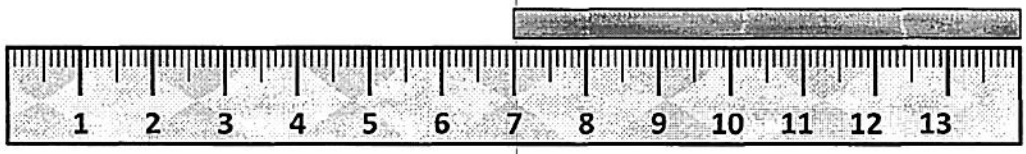


9. What are the lengths of the bars in centimeters to the nearest tenth?

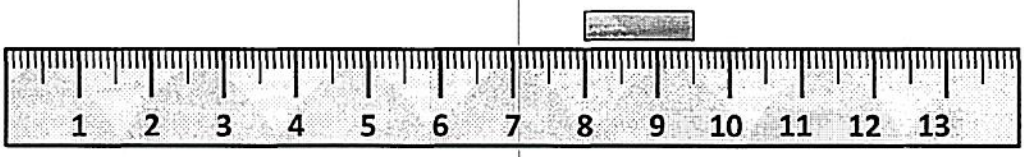
a. _____



b. _____

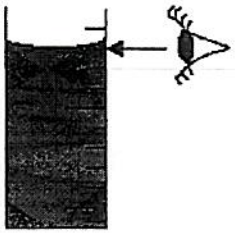


c. _____



10. What tool do we use to determine the volume of a liquid? What units do we use?

11. How do we read the volume of a liquid in a graduated cylinder?



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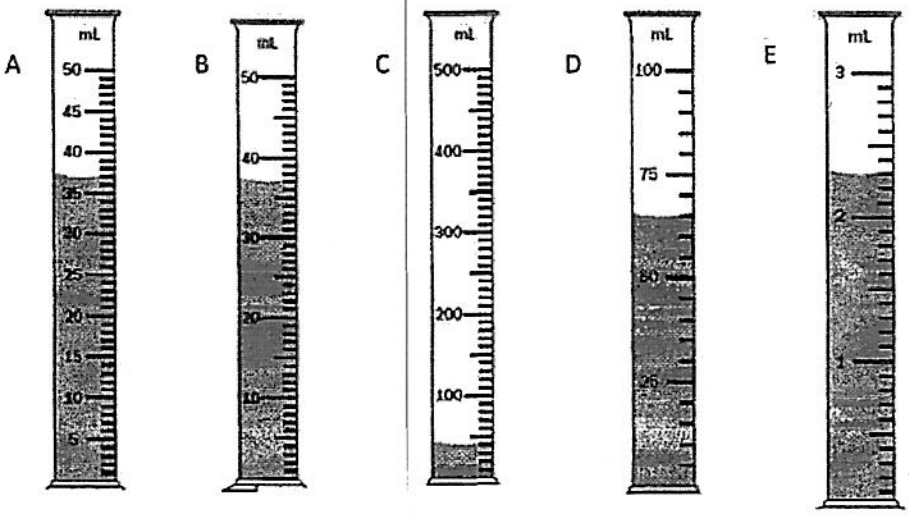
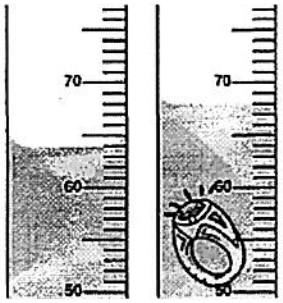
12. Determine the volume in the following cylinders:



13. What method do we use to determine the volume of regular objects? What units do we use?

14. What method do we use to find the volume of irregular solids? What units do we use?
Note: 1mL = 1 cm^3

15. Write out the steps you need to take in order to find the volume of an irregular solid in a graduated cylinder.



Ring's volume: _____

16. What is the density formula? What does the density triangle look liked?

17. What is the density of water?

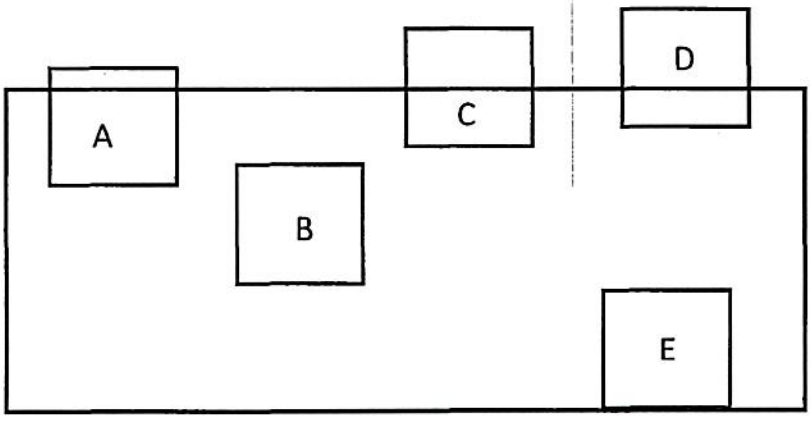
18. If an object has a density that is greater than the density of water, what will happen to the object when it is placed in the water?

19. If an object has a density that is less than the density of water, what will happen to the object when it is placed in the water?

20. If an object has a density that is the same as the density of water, what will happen to the object when it is placed in the water?

21. Describe what happens to the density of a material if the material is cut into smaller pieces. How does the density of the pieces compare to the density of the original material? Explain.

22. What are the approximate densities of these cubes in water?



Density Practice Problems:

1. A foam square has a mass of 62 g and a volume of 72 cm^3. What is the density?

Formula:	
Substitution:	
Final Answer with Units:	

2. A wooden block has a mass of 986 g and a density of 16 g/ cm^3. What is the volume?

Formula:	
Substitution:	
Final Answer with Units:	

3. A soda has a volume of 560 mL and a density of 3.2 g/mL. What is the mass?

Formula:	
Substitution:	
Final Answer with Units:	