





1. Solids B	A Only solid that floats in its liquid. 	True or False? If false, correct the statement. 
2. 1.0 g/mL D	B Tightly packed atoms; very dense.	Light things float. False . Only if less dense. Penny sinks
3. Gases C	C Loose atoms; low density.	Heavy things sink. False , only if more dense. Ships float.
4. 0.92 g/mL F	D Density of water.	
5. Density Column E	E Separates liquids by density.	
6. Liquids G	F Density of ice.	
7. Ice A	G Close atoms; medium density.	

Sinks or Floats in Water? 

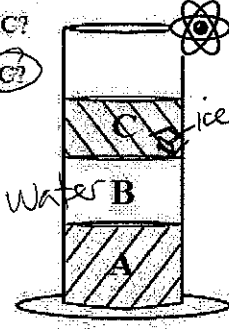
S D = 1.2 g/mL	F Styrofoam
F Ice	S A rock
F D = 0.85 g/mL	S D = 2.2 g/mL

Circle the one that is more dense. 

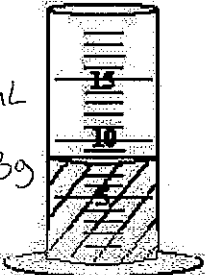
Liquid wax or solid wax?
 Solid water or liquid water?
 Liquid iron or solid iron?
 Liquid nitrogen or gaseous nitrogen?

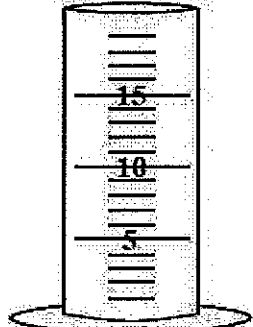
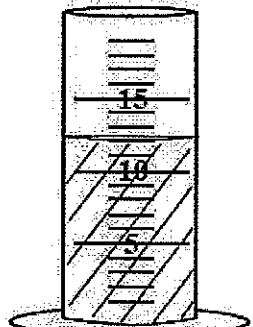
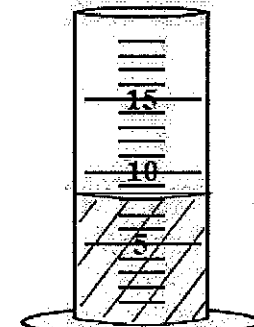

Which liquid is the most dense? **A**, **B**, or **C**?
 Which liquid is the least dense? **A**, **B**, or **C**?
 Which liquid is which? **A**, **B**, or **C**?
 D = 1.35 g/mL = Liquid **A**
 D = 0.86 g/mL = Liquid **C**
 D = 1.00 g/mL = Liquid **B**

Label the liquid you know.
 Draw where ice will float in the column.



What is the density of water? **1 g/mL**
 If you have 30 grams of water, how many mL of water do you have? **30 mL**
 How many grams is 23 mL of water? **23g**
 How many grams of water is in the graduated cylinder? **8 mL = 8gms**



			Mass of Liquid A: $24g - 12g = 12g$  Volume of Liquid A: 12 mL $D = m/V = \frac{12g}{12mL} = 1 g/mL$ Mass of Liquid B: $28g - 12g = 16g$ Volume of Liquid B: 8 mL $D = m/V = \frac{16g}{8mL} = 2 g/mL$ Which one would float on top? A (water)
Empty: 12 grams	With Liquid A: 24 grams	With Liquid B: 28 grams	

In the Lab

Mass of empty cylinder:

Fill in the following table for water.

Mass	Volume	Density
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From the findings of your data, explain the relationship between grams and milliliters.