Name: _____

Period: _____

Density

Which one is more dense, the ping pong ball or the golf ball?

B

A

| What was your definition of Density? | What was your picture for Density> |

The density of an object could be increased in two ways:

C 1)
2)

D

$$D = \frac{m}{v}$$

What does this equation say in plain English?

_____

Ex. An 20 gram object has a volume of 5 cm³. Find its density.

E

Practice:

F Find the density of an 45 gram object that's volume is 15 mL.

G If a 10 mL object weighs 22 grams, what is its density?

H In class find the density of the three object that you are given.

	Mass	Volume	Density
Object 1:			
Object 2:			
Object 3:			

I

Team	Mass	Volume	Density
J.L.A.			
Thundercats			
F.F.			
G.E.			
Autobots			
S.F.C.			
FOTR			
Avengers			
Kobra Kai			

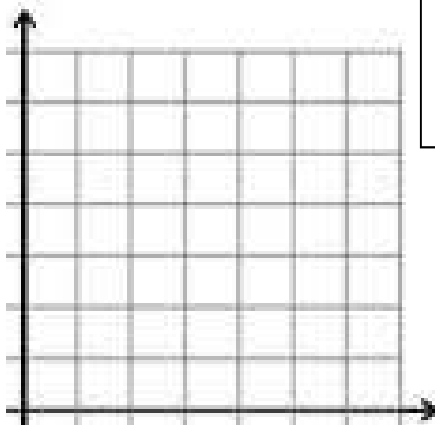**Does the Density Change?**

Each group will find the density of the given object.

Name the Graph

_____

What variable is the Y axis?

_____

What variable is the X axis?

_____

Find the slope of the graph

$$M = \frac{Y_2 - Y_1}{X_2 - X_1}$$

What does the slope of the line mean?

_____

_____

Water is more dense as a liquid than a solid. And good thing, too!
Many forms of life depend on ice being less dense.
Name one:

In class find the density of water:

Mass   Volume   Density

J

List the densities of the 3 objects from the first page and record if they floated or sank.

	Density	Sink or Float?
Object 1:		
Object 2:		
Object 3:		

What did you find out about floating or sinking substances and density?

If an object has a density of 1.35 g/mL, will it float or sink in water?

Use the data below to calculate the density of each substance. Show your work in the space below

Object	Mass g	Volume mL	Density g/mL
Ethyl Alcohol	5.523	7	
Glycerin	6.3	15	
Isopropyl Alchohol	6.96	18	
Water	25	25	
Corn Syrup	24.66	18	

Label where each of these liquids would be located in the graduated cylinder below. Use colored pencils to color where each liquid would be and how much space it would take up.