

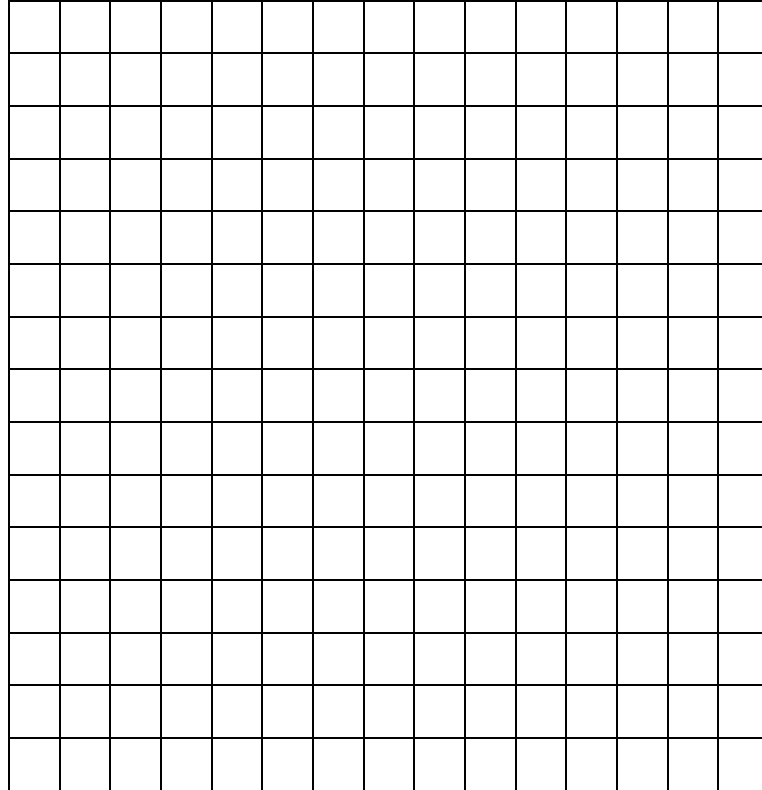
Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

### Graphing Density and Finding the Slope of a Line

1.) Graph the data, find the slope and answer the questions.

Mass (g)	1	4	8	10	15	12
Volume (mL)	2	3	5	7	10	8

Title: \_\_\_\_\_



Find the slope:

$$D = \frac{M}{V}$$

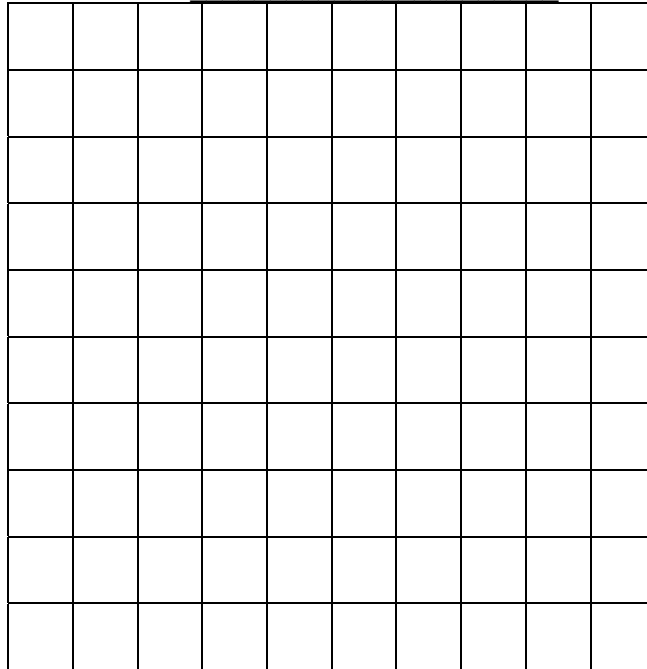
Questions:

- 1.) Describe why we use a “best fit line” when graphing data. \_\_\_\_\_  
\_\_\_\_\_
- 2.) The distance some points are from the “best fit line” indicate the amount of \_\_\_\_\_ in your measurement.
- 3.) When finding the slope what is the formula used? Slope = \_\_\_\_\_
- 4.) The “rise” in the slope formula represents what measurement when graphing density?
- 5.) The “run” in the slope formula represents what measurement when graphing density?

2.) Graph the following data, find the slope and answer the questions

Mass (g)	1.5	4	2	6	8	9
Volume (mL)	1	3	2	4	5	6

Title :



Find the slope:

$$D = \frac{M}{V}$$

Questions:

- 1.) When setting up a graph what must be true about the numbering of the scale?
- 2.) What two parts of the label must be included on the “X” & “Y” axis when setting up a graph?
- 3.) True or False: Every graph MUST have a title.
- 4.) True or False: The formula for slope  $Slope = \frac{Rise}{Run}$  is the same as  $Density = \frac{Mass}{Volume}$
- 5.) True or False: A line graph is used to show “rates of change” - how one measurement changes when the other measurement changes.
- 6.) When graphing, the variable that goes on the “Y” axis is called the (manipulated/responding) variable.
- 7.) When graphing, the variable that goes on the “X” axis is called the (manipulated/responding) variable.