

Name: \_\_\_\_\_ Block: \_\_\_\_\_

### Graphing Data

#### General

Independent variable is defined as:

Dependent variable is defined as:

The x-axis is the \_\_\_\_\_ variable.

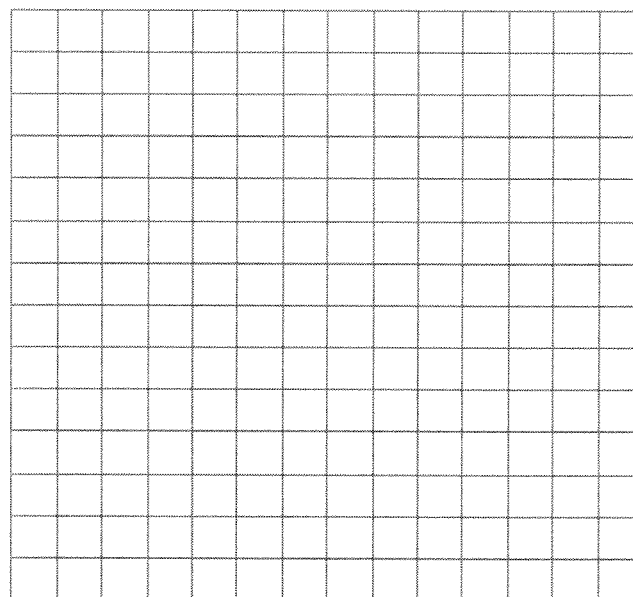
The y-axis is the \_\_\_\_\_ variable.

What is a slope?

Graph 1: Mass-Volume

#### Graph 1:

Table 1: Mass-Volume		
Mass (g)	Volume (cm <sup>3</sup> )	m/v (g/cm <sup>3</sup> )
54.7	20.1	2.72
65.7	24.4	2.69
83.5	30.9	2.70
96.3	35.8	2.69
105.7	39.1	2.70



The slope for this graph is:

The independent variable is:

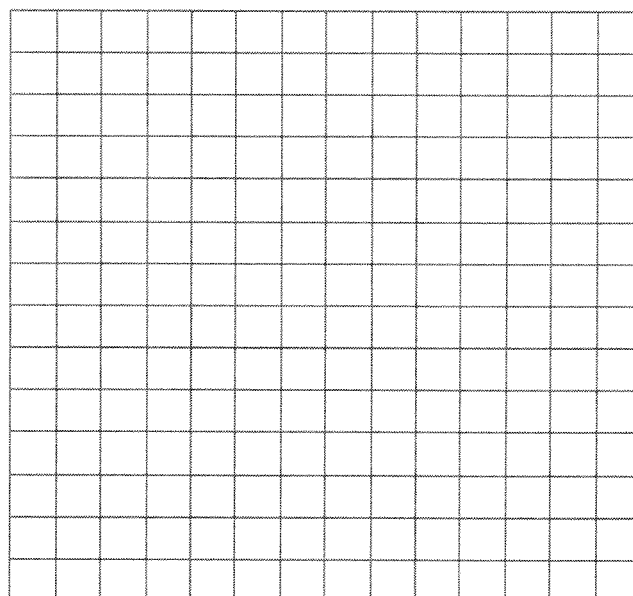
The dependent variable is:

What observations can be made about graph 1:

#### Graph 2:

Table 2: Pressure-Volume		
Pressure (kPa)	Volume (cm <sup>3</sup> )	PxV
100	500	50 000
150	333	50 000
200	250	50 000
250	200	50 000
300	166	49 800
350	143	50 100
400	125	50 000
450	110	49 500

Graph 2: Pressure- Volume



The slope for this graph is:

The independent variable is:

The dependent variable is:

What observations can be made about graph 2:

**Conclusion:**

What are the differences in graph 1 & graph 2:

**STOP: Rest to be done in next class**

Graph 1 is known as being \_\_\_\_\_.

Describe what this means in simplistic terms:

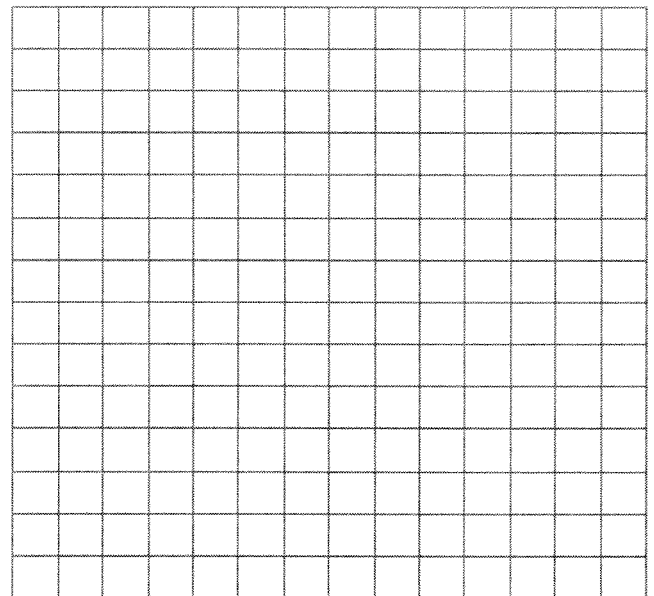
Graph 2 is known as being \_\_\_\_\_.

Describe what this means in simplistic terms:

**Practice:** Graph the data below and determine what type of relationship exists between the variables:

Graph 3: Cesium 137 Half Life

Table 3: Cesium-137 Half- life	
Amount of sample (kg)	Time (years)
1.00	30.2
0.5	60.4
0.25	90.6
0.125	120.8
0.0625	151



The independent variable is:

The dependent variable is:

What observations can be made about graph 3:

This is a \_\_\_\_\_ graph.