

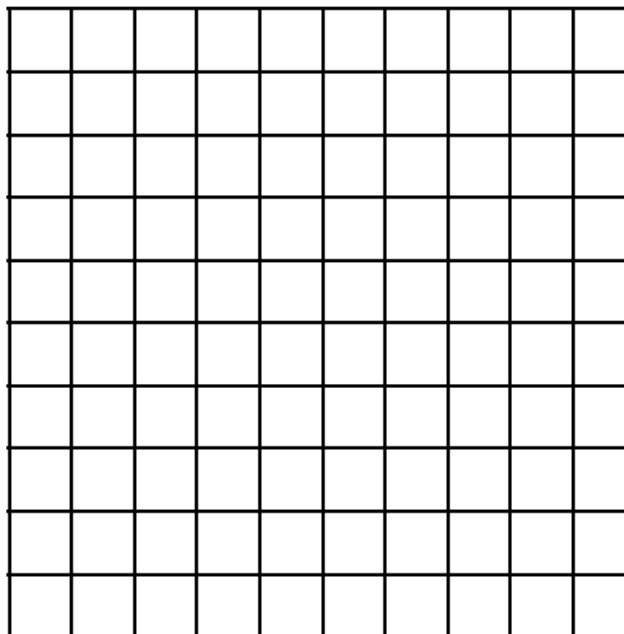
To Know for CORE 1 – Periodic Trends

- Finding the volume of an object using the water displacement method.
- Calculating the density of an object.
- Preparing a graph – *entering data, line of best fit*
- Using a graph to make predictions
- Calculating percent error.
- Using the periodic table to determine the number of valence electrons an atom contains.
- Drawing a Lewis dot structure for an atom.
- Writing electron configurations.
- Writing the charge of an atom when it forms an ion (cation or anion)
- Interpreting trends of the periodic table – *atomic radius, ionization energy, electronegativity*
- Knowing how the modern periodic table is arranged.

Graphing Practice

Use the following table of data (non-chemistry related) to make a graph. After you have plotted the points, draw a line of best fit and answer the questions below.

Net Force (N)	Acceleration (m/s ²)
0	0
1	10
2	17
3	30
4	41
5	52
6	59



1. What is the relationship between net force and acceleration?
2. Predict the value for acceleration when the net force is 3.5 N.
3. Predict the value for when the net force is 7 N.
4. If the actual value for acceleration was 68 m/s/s when a net force of 6 N was applied to the object, calculate the percent error.