

## Graphing Periodic Trends Activity

Purpose: You will discover the periodic trends for several properties of the elements by creating and interpreting graphs.

You will need to create four line graphs. The X axis for all graphs will be the atomic number of the representative elements in periods two, three, and four. The Y axis for each graph will be the following properties:

- Boiling point
- Valence electrons
- Atomic radius
- Electronegativity

1. For each property describe the trend as you go across a period.
2. How can you use the graph to see where one period ends and the next one begins?
3. Choose one other property of the elements that is listed on your periodic table. Describe the trend across the periods and down the groups.

Bonus: propose a reason to explain the atomic radius trend across periods and down groups.