**Name : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Periodic Table Graphing Lab VL**

Guiding Question: What are the periodic trends associated with radius, ionization energy, and electronegativity?

**Procedure: For all graphs, label the axes, use constant intervals, circle your points, and connect with a best fit line. Use pencil and a ruler. Your graphs will be graded on both accuracy and appearance.**

1. Using your reference table S, graph the following:
   1. Atomic Number versus Radius for the Halogens.

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| |  |  | | --- | --- | | **Atomic Number** | **Radius** | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  |  |  |  |  |  |  |  |
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* 1. Atomic Number versus Radius for Period 2.

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| |  |  | | --- | --- | | **Atomic Number** | **Radius** | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  |  |  |  |  |  |  |  |
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1. In a full sentence, state the trend between groups and atomic radius:
2. In a full sentence, state the trend between periods and atomic radius:
3. Using your reference table S, graph the following:
   1. Atomic Number versus Ionization Energy for the Alkali Metals.

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| |  |  | | --- | --- | | **Atomic Number** | **Ionization Energy** | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  |  |  |  |  |  |  |  |
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* 1. Atomic Number versus Ionization Energy for Period 3.

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| |  |  | | --- | --- | | **Atomic Number** | **Ionization Energy** | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  |  |  |  |  |  |  |  |
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1. In a full sentence, state the trend between groups and ionization energy:
2. In a full sentence, state the trend between periods and ionization energy:
3. Using your reference table S, graph the following:
   1. Atomic Number versus Electronegativity for the Alkaline Earth Metals

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| **Atomic Number** | **Electronegativity** |
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* 1. Atomic Number versus Electronegativity for Period 2.

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| |  |  | | --- | --- | | **Atomic Number** | **Electronegativity** | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  | |  |  |  |  |  |  |  |  |  |
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1. In a full sentence, state the trend between groups and electronegativity:
2. In a full sentence, state the trend between periods and electronegativity: