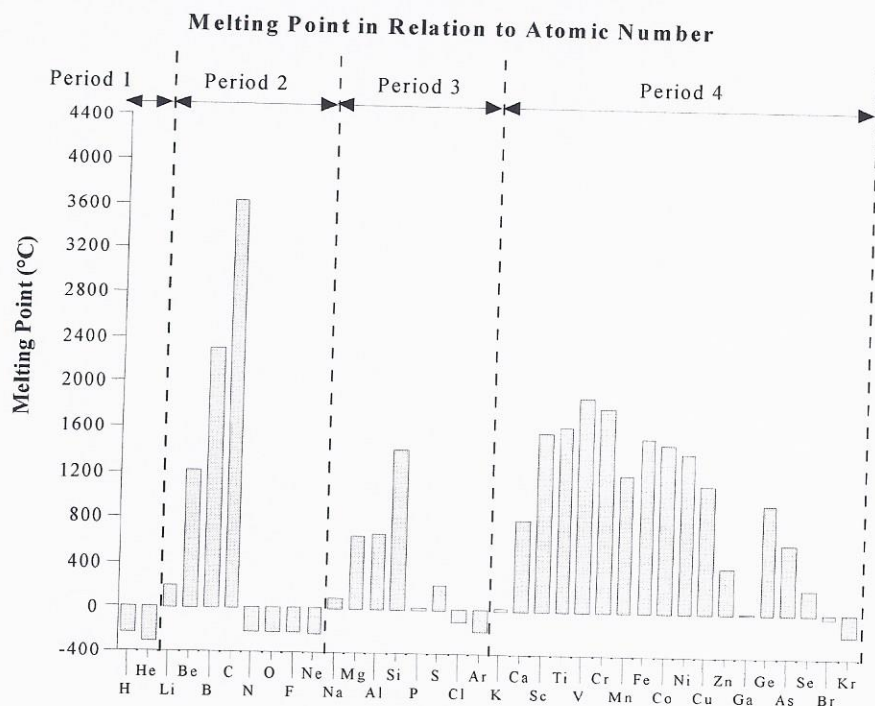


Trend Worksheet 2

1. The histogram below shows the distribution of the **melting points** of elements within the first four periods of the periodic table.



What pattern can be observed for the melting points?

- A) The melting points increase among the alkali metals.
- B) The melting points increase among the alkaline earth metals.
- C) The melting points increase among the halogens.
- D) The melting points increase among the metals across period 4.

2. Of the following elements, which one would have the largest radius?

- A) Hydrogen (H)
- B) Cesium (Cs)
- C) Sodium (Na)
- D) Potassium (K)

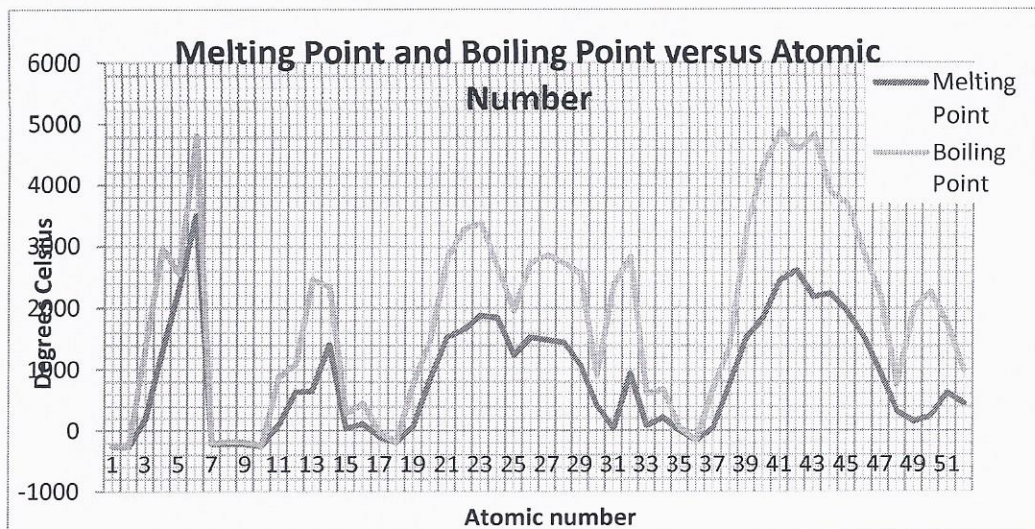
3. Of the following elements, which one would have the largest ionization energy?

- A) Hydrogen (H)
- B) Cesium (Cs)
- C) Sodium (Na)
- D) Potassium (K)

4. As you move from the top to the bottom of the periodic table:

- A) ionization energy increases and electronegativity increases
- B) ionization energy decreases and electronegativity increases
- C) ionization energy increases and electronegativity decreases
- D) ionization energy decreases and electronegativity decreases

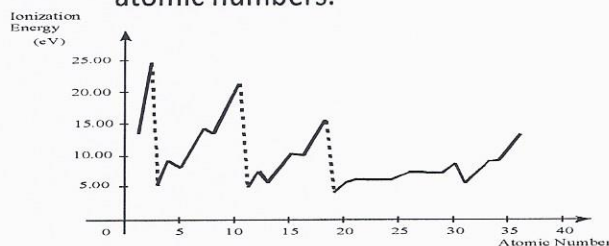
5. The graph below represents the melting point and boiling point of element 1 to 52



Which statement best describes the periodicity of melting point and boiling point for the first 52 elements of the periodic table?

- A) The melting point decreases within a period, whereas the boiling point increases
- B) The melting point increases within a period, whereas the boiling point decreases
- C) Both the melting point and boiling point increases, then decreases within a period
- D) Both the melting point and boiling point increases, then decreases within a period

6. The following graph shows the ionization energies of certain elements as a function of their atomic numbers.



According to this graph, which of the following statements is TRUE?

- A) Within a period, the ionization energy usually increases as the atomic number increases.
- B) Within a period, the ionization energy usually decreases as the atomic number increases.
- C) In general, the ionization energy of the elements in Period 3 is greater than the ionization energy of the elements in Period 2.
- D) The ionization energy of the elements in Period 4 varies regularly when the atomic number increases regularly.