

WHY DO THEY CALL IT A PERIODIC TABLE?
ANALYSIS AND CONCLUSION QUESTIONS

DATE _____
NAME _____

1. Compare your six graphs. Do any of the graphs show a repeating, or cyclic pattern? Focus on elements with very large or very small values. Explain in the space below.

Oxygen vs Atomic # and Chlorine vs Atomic #

MP vs Atomic # and BP vs Atomic #

Ionization E vs Atomic # and Electronegativity vs Atomic #

2. Based on your graphs, why is the chemist's organization of elements called a Periodic Table?

3. Where are the elements with the highest oxide numbers (most oxygen vs atomic #) located on the Periodic Table? How about the elements with the highest chloride numbers?

4. Predict which element would have the lowest boiling point: selenium (Se), bromine (Br), or krypton (Kr)? Explain your prediction.

5. Which should have the lowest ionization energy: rubidium (Rb) or cesium (Cs)? Explain your prediction.

6. Which should have the highest ionization energy: antimony (Sb) or tellurium (Te)? Explain your prediction.