

Periodic Trend Research

1. Which trend are you researching? Shielding Effect
2. Define "**shielding effect**". _____

3. How is shielding **measured**? _____
4. What happens to the trend moving from **left to right** across a period? _____
5. Why? _____
6. What happens to the trend moving **down a group**? _____
7. Why? _____
8. How does shielding affect **valence electrons**? _____

9. What is "**effective nuclear charge**"? _____

10. How is **effective nuclear charge** different for: Na^{+1} , F^{-1} and Ne? _____

11. How does **Coulomb's Law** affect this trend? _____

12. Which period experiences the **greatest** shielding effect? _____ / _____
13. Which period experiences the **least** shielding effect? _____ / _____
14. How do you think this trend affects **chemical bonding**? _____

15. How does this trend affect the **other trends**? _____

List the other members in your group: _____