

Periodic Trend Review

Name Key

- 2. I can use the periodic table to predict trends of given properties.
- 3. I can explain the electron trends for metals and nonmetals.
- 4. I can compare elements' electron attraction to their nuclei in regard to nuclear charge and e- distance by applying Coulomb's Law.
- 5. I can use the periodic table to predict the trends for atomic radius and ionization energy to estimate an element's reactivity.

1. What 2 variables are included in Coulomb's Law? distance and charge
2. How does attractive force change with each of these?
As distance increases, force of attraction decreases
As charge of protons increases, force of attraction increases
3. When you are comparing 2 elements in the same group, which variable in Coulomb's Law do you use? distance
4. When you are comparing 2 elements in the same period, which variable in Coulomb's Law do you use? charge - # of protons
5. This atom on the periodic table has the largest radius: Fr, #87
6. This atom on the periodic table has the smallest radius: He, #2
7. What is ionization energy? the amount of energy needed to remove e-
8. This atom on the periodic table has the largest ionization energy: He, #2
9. This atom on the periodic table has the smallest ionization energy: Fr, #87
10. This atom on the periodic table is the most reactive metal: Fr, #87
11. This atom on the periodic table is the most reactive nonmetal: F, #9
12. This group, noble gases, is a nonreactive group.
13. The Alkali Metals tends to lose 1 electron.
14. The Alkali Earth Metals tend to lose 2 electrons.
15. The Halogens tend to gain 1 electrons.
16. Noble Gases tend to not gain or lose electrons.

17. Which has greater attractive force?
 Rb, #37, or K, #19 Rb, #37 or Sn, #50 P, #15 or Cl, #17
18. Which has a larger radius?
Rb, #37, or K, #19 Rb, #37 or Sn, #50 P, #15 or Cl, #17
19. Which has a smaller ionization energy?
Rb, #37, or K, #19 Rb, #37 or Sn, #50 P, #15 or Cl, #17
20. Which element is more reactive?
Rb, #37, or K, #19 Rb, #37 or Sn, #50 P, #15 or Cl, #17

21. Reflect on your learning. List the ones that you do not understand and need to study.