

## 2.6 - Periodic Trends worksheet

Name \_\_\_\_\_

### I. Short answer

1. Label each group on the periodic table.
2. Explain what valence electrons are.
3. Explain what makes an element stable?

### II. Answer the questions using the symbols on the periodic table

\_\_\_\_\_ 1. What elements are in period 5?

What element(s) is a

- |                                |                            |
|--------------------------------|----------------------------|
| _____ 2. halogens              | _____ 6. transition metals |
| _____ 3. lanthanides           | _____ 7. alkali metals     |
| _____ 4. alkaline earth metals | _____ 8. actinides         |
| _____ 5. noble gases           |                            |

What elements are in the sublevel

- |             |             |
|-------------|-------------|
| _____ 9. s  | _____ 11. d |
| _____ 10. p | _____ 12. f |

What elements are

- \_\_\_\_\_ 13. metals,
- \_\_\_\_\_ 14. nonmetals
- \_\_\_\_\_ 15. metalloids,
- \_\_\_\_\_ 16. Which element is the most reactive nonmetal?
- \_\_\_\_\_ 17. Which element is the most reactive metal?
- \_\_\_\_\_ 18. Which element below is the least reactive?
- \_\_\_\_\_ 19. Which element has the largest radius in period 4?
- \_\_\_\_\_ 20. Which element has the largest radius in the Alkali metals family?
- \_\_\_\_\_ 21. Which element has the highest ionization energy in period four?
- \_\_\_\_\_ 22. Which elements has the second largest atomic number?
- \_\_\_\_\_ 23. Which element has the largest atomic mass?
- \_\_\_\_\_ 24. Which element is located at period 4, group 15?
- \_\_\_\_\_ 25. Which element is located at period 5, group 2?
- \_\_\_\_\_ 27. Which elements will form +1 ions?
- \_\_\_\_\_ 28. Which group of metals will have the same properties
- \_\_\_\_\_ 29. Which group of nonmetals will have the same properties
- \_\_\_\_\_ 30. On the back, define all chapter 5, section 3 vocabulary terms.

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