Intro to the Periodic Table Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. For each of the following, label as a metal, nonmetal, or metalloid.
2. Poor conductor of electricity \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Usually a solid at room temperature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Ductile \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Chlorine \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Semi-conductors \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Silicon \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Malleable \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Usually a gas at room temperature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. Cobalt \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. Good conductor of heat \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. Brittle \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
13. Oxygen \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
14. Fill in the blanks to describe each part of the periodic table.
15. Vertical columns on the periodic table are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
16. Horizontal rows on the periodic table are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
17. The number of protons in an atom is that element’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ number.
18. The number of protons and neutrons in an atom is that element’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ number.
19. The number of electrons in an atom is that element’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ number.
20. The ability of a material to be drawn into a thin wire is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
21. The ability of a material to be pounded into thin sheets is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
22. The elements in groups 3 through 12 are called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
23. The elements in group 1 are called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
24. The elements in group 2 are called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
25. The elements in group 18 are called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
26. The elements in group 17 are called the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
27. The elements in group \_\_\_\_\_\_\_ are the most reactive metals.
28. The elements in group \_\_\_\_\_\_\_ are the most reactive nonmetals.
29. The elements in group \_\_\_\_\_\_\_ are inert – or very unreactive.
30. The elements in group \_\_\_\_\_\_\_ react very violently with water.
31. Complete the blanks in the table below.

|  |  |  |
| --- | --- | --- |
| **Number of Valence Electrons** | **Group Number** | **Common Name** |
| 1 |  |  |
|  | 2 |  |
|  |  | Boron Family |
| 6 |  |  |
|  | 17 |  |
|  |  | Noble Gases |

1. What are the names of the following elements?

C \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Cl \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Au \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Sr \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. In which group (give the common name, not the number) would you find the following elements?

Sulfur \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Iodine \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Ca \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Fe \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Use the periodic table to fill in the table.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Element | Symbol | Atomic Number | Number of Protons | Number of Electrons | Atomic Mass | Rounded Atomic Mass | Number of Neutrons | Group Number |
| Nitrogen |  |  |  |  |  |  |  |  |
| Potassium |  |  |  |  |  |  |  |  |
| Sodium |  |  |  |  |  |  |  |  |
| Lawrencium |  |  |  |  |  |  |  |  |
| Dubnium |  |  |  |  |  |  |  |  |
| Antimony |  |  |  |  |  |  |  |  |
| Europium |  |  |  |  |  |  |  |  |

1. Which of the following is a property of metals?
2. They are dull b. They are good conductors

c. They break easily d. They are not malleable