**5-3 Chapter 5 Periodic Table Name:**

**Metals**

1. Where on the periodic table are metals located?
2. What are elements in Group 3-12 called?
3. What name is given to all vertical columns of the PT?
4. What name is given to each horizontal row of the PT?
5. In the modern periodic table elements are arranged in order of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. An electron that is in the highest occupied energy level of an atom is a \_\_\_\_\_\_\_\_\_ electron.
7. Elements in the same group have the \_\_\_\_\_\_\_ number of valance electrons.
8. The reactivity of alkali metals \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from the top of the group to the bottom.
9. Difference in reactivity among alkaline earth metals are shown by the way they react with \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
10. The most reactive of all metals is group \_\_\_\_\_\_\_\_\_.
11. The elements that make up the iron triad are \_\_\_\_\_\_\_\_\_\_\_\_\_.
12. Elements in group 2 have \_\_\_\_\_\_\_\_ valance electrons.
13. Atomic number \_\_\_\_\_\_\_\_ as you move left to right across the periodic table.
14. What do we call the letter or group of letters that represents an element?
15. How many valance electrons does group 13 have?
16. List three ways elements in the PT are classified.

**Rare Earth Metals and Metalloids**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1. Elements with atomic numbers from 58 through 71 are part of the \_\_\_\_\_ series.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_2. Elements with properties of both metal and nonmetals are called\_\_\_.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_3. Elements with atomic numbers from 90 through 103 are part of the \_\_\_\_\_ series.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4. Metals from group 13 are used to produce \_\_\_\_\_\_\_, substances that conduct electricity under certain conditions.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5. All elements in the Boron group except boron are \_\_\_\_\_\_\_\_\_.

6. What period do the elements in the actinide series belong?

7. How many elements make up the lanthanide series?

8. What period do the elements in the lanthanide series belong?

9. Which element in the lanthanide series has the highest atomic number?

b. What is the atomic mass of this element?

10. Which element in the actinide series has the greatest atomic number?

b. How many protons are in the nucleus of one atom of this element?

**Nonmetals**

1. How does Helium differ from the other Nobel gases?
2. How does Bromine differ from the other nonmetals?
3. What is the most abundant element in the Earth’s crust?
4. Name 2 metalloids in group 14.
5. Name 2 elements in group 15 that are used in fertilizer.
6. Group \_\_\_\_\_\_\_ is the most reactive nonmetal group.
7. Name 3 characteristics of noble gases.
8. How can an element that does no react easily with other elements be useful?
9. What element can be characterized as a metal or nonmetal, and belongs to no group?
10. How many valance electrons does group 16 have?
11. How many valance electrons does group 18 have?

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| --- | --- | --- |
| **Characteristic** | **Metal** | **Nonmetal** |
| Appearance of solid |  |  |
| Is it malleable? |  |  |
| Is it ductile? |  |  |
| Does it conduct heat well? |  |  |
| Does it conduct electricity well? |  |  |
| Most common state at room temp. |  |  |