**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_**

**8th grade study guide: Chapter 7 - The Periodic Table**

1. Chapter 7 Vocabulary (all of the words).

2. The number of known elements at the time of Mendeleev. 60

3. The four things found on an “element’s key”. Element name, chemical symbol, atomic number, and it atomic mass.

4. Three-fourths of the periodic table consists of metals.

5. Which of the following is NOT one of the repeating patterns in Mendeleev’s periodic table?

|  |  |  |  |
| --- | --- | --- | --- |
| **A** | melting point | **C** | atomic mass |
| **B** | boiling point | **D** | reactivity |

Atomic mass increases throughout the table.

6. Differences between nonmetals, metals, and metalloids and their properties.

Metals – shiny, malleable, ductile, high BPs and MPs, etc.

Nonmetals – not shiny, not malleable, not ductile, low BPs and MPs (basically the opposite of metals).

Metalloids – Properties of both metals and nometals

7. The location of the groups on the periodic table of elements (this information is on your foldables).

8. Which of the following properties is NOT common to alkaline earth metals?

|  |  |
| --- | --- |
| **A** | soft and silvery |
| **B** | low density |
| **C** | react more quickly than alkali metals |
| **D** | do not occur naturally |

9. The element that makes up most of the human body is nonmetals (More than 96 percent of the mass of your body comes from just four elements-- oxygen, carbon, hydrogen, and nitrogen).

10. Why are noble gases so special/unique? They rarely form compounds in nature.

11. The location of metals, metalloids, and nonmetals on the periodic table. Metals are located in groups to the left of the periodic table (Groups 1-12). Nonmetals to the right of the periodic table (groups 13-18). Metalloids are located along the zigzag line on the periodic table and are found in groups 13-18 for a total of 8 metalloids.

12. Mercury (Hg) is the only liquid solid at room temperature.

13. When a metal and a halogen element react, they form a salt.

14. Elements in rows/columns (Families/Groups) share similar chemical properties (pick/circle one).

15. Elements on the periodic table are arranged in order of their atomic number.

16. Identify at least one reason why scientists may use a model instead of a controlled experiment.

Come up with a reason of your own.