Name: Elements

Use your textbook to help you complete the following statements.

**What is matter made of?**

1. A substance that cannot be broken down chemically into simpler substances is an

2. One important property of an element is its at room temperature.

3. Another important property of an element is the way that it with other elements.

4. Today we know that an is the smallest unit of an element that has that element’s properties.

**What are atoms and molecules made of?**

5. The center of an atom is its .

6. An atom’s nucleus contains particles called protons that have a charge and particles called that have no charge.

7. Negatively charged particles called move around the nucleus.

8. Because an atom has the same number of and electrons, the atoms has no overall charge.

9. The number of protons in an atom is that atom’s

10. An atom’s protons and neutrons have about the same mass, which is one unit or a.m.u.

11. The mass of all particles of an atom added together is its

12. Two more more atoms joined into a signal particle form a

13. Molecules have properties that are different from the that form them.

**How are elements grouped?**

14. Dimitri Mendeleev created the of elements.

15. The table’s columns group elements according to their

**What are the most common elements?**

16. In space, the most common elements are and helium.

17. On Earth, the seven most common elements are

**Read each clue. Write the answer in the blanks using terms from the word box.**

**atom element molecule nucleus**

**electron metal neutron proton**

1. The smallest unit of an element that retains that element’s properties is a(n)

2. The particle in an atom that has negative charge is a(n)

3. A substance that chemical reactions cannot break down into something simpler is a(n)

4. An element that has properties such as shine, conductivity, and flexibility is a(n)

5. Two or more atoms that are joined into one particle are a

6. In the nucleus of an atom, a particle that has no electrical charge is a(n)

7. The center of an atom is its

8. In the nucleus of an atom, a particle that has a positive electrical charge is a