

Name _____

Element or Compound? Deciphering the Building Blocks of Matter

Multiple Choice Questions

1. Which of the following statements is true about elements?
 - a) They can be broken down into simpler substances.
 - b) They are combinations of two or more elements.
 - c) They have unique chemical symbols.
 - d) They are always found in compounds.

2. What is the primary difference between elements and compounds?
 - a) Elements are pure substances, while compounds are impure.
 - b) Elements cannot be found in nature, while compounds are abundant.
 - c) Elements are made up of two or more substances, while compounds consist of a single substance.
 - d) Elements are the simplest form of matter, while compounds are combinations of elements.

3. What does the atomic number of an element represent?
 - a) The number of neutrons in the nucleus.
 - b) The number of protons in the nucleus.
 - c) The number of electrons in the outermost energy level.
 - d) The total number of subatomic particles in the atom.

4. How are compounds formed?
 - a) By mixing elements together without any chemical changes.
 - b) By melting elements together at high temperatures.
 - c) By atoms of different elements chemically bonding together.
 - d) By breaking down elements into smaller particles.

5. What is the role of the periodic table in organizing elements?
 - a) It arranges elements in random order.
 - b) It groups elements based on their color.
 - c) It organizes elements by increasing atomic number and properties.
 - d) It lists elements alphabetically.

