

Name _____

The Mighty Bond: How Strength Shapes Substance

Multiple Choice Questions

1. What is the main factor that determines the strength of a chemical bond?
 - a) The number of electrons in an atom
 - b) The distance between bonded atoms
 - c) The color of the substance
 - d) The size of the atoms involved
2. Which type of chemical bond involves the sharing of electrons between atoms?
 - a) Covalent bonds
 - b) Ionic bonds
 - c) Metallic bonds
 - d) Hydrogen bonds
3. Why are substances with strong covalent bonds, like diamonds, exceptionally hard?
 - a) Because they contain a high number of protons
 - b) Because their atoms are large in size
 - c) Because their atoms are held together by the sharing of electrons
 - d) Because their atoms have a weak attraction to each other
4. Which property is influenced by the strength of chemical bonds in a substance?
 - a) Color
 - b) Taste
 - c) Flexibility
 - d) Sound
5. Why do substances with weaker covalent bonds tend to dissolve more easily in liquids?
 - a) Because their molecules are larger
 - b) Because their bonds are harder to break
 - c) Because their bonds are easier to break
 - d) Because their molecules are denser

