

- 1 Which is a property shared by most molecular compounds?
- A high boiling point
 - B high melting point
 - C low melting point
 - D nonpolar bonds
- 2 When an atom loses an electron, it becomes a
- A positive ion.
 - B negative ion.
 - C neutral ion.
 - D neutral atom.
- 3 In the chemical formula for an ionic compound, which item is written first?
- A the name of the positive ion
 - B the name of the negative ion
 - C the subscripts
 - D the charges
- 4 The chemical name for the compound with the formula Na_2S is
- A sodium fluoride.
 - B magnesium sulfide.
 - C lithium oxide.
 - D sodium sulfide.
- 5 What is a double bond?
- A a bond between two atoms
 - B one pair of electrons shared between two atoms
 - C two pairs of electrons shared between two atoms
 - D two pairs of electrons shared between four atoms

- 6 Electrons involved in bonding between atoms are
- A valence electrons.
 - B inside the nucleus.
 - C closest to the nucleus.
 - D positively charged.
- 7 A mixture made of two or more elements, at least one of which is a metal is called a(n)
- A superconductor.
 - B metallic bond.
 - C complex metal.
 - D alloy.
- 8 Which of the following terms means that metals can be rolled into thin sheets, as in aluminum foil, or beaten into complex shapes?
- A polar
 - B alloy
 - C ductile
 - D malleable
- 9 Which of the following groups contains the most reactive elements?
- A the alkali metals
 - B the alkaline earth metals
 - C the carbon family
 - D the noble gases
- 10 Which of the following is a property of ionic compounds?
- A They have low melting points.
 - B They have low boiling points.
 - C They form hard, brittle crystals.
 - D They contain no charged particles.

- 11 Water is polar and oil is nonpolar. What happens when the two liquids are poured into the same container?
- A Both liquids become nonpolar.
 - B A gas is produced.
 - C The liquids mix well.
 - D The liquids do not mix.
- 12 Which of the following best describes a metal solid?
- A metal atoms held together by covalent bonds
 - B metal atoms held together by ionic bonds
 - C positive metal ions surrounded by freely moving valence electrons
 - D neutral metal atoms surrounded by freely moving valence electrons