

- 1: Which of the following elements is monatomic at room temperature and pressure ?
- A: Argon.
  - B: Chlorine.
  - C: Hydrogen.
  - D: Nitrogen
  - E: Oxygen.
- 2: The elements in the periodic table are arranged in order of increasing ;
- A: Density.
  - B: Isotope number.
  - C: Atomic mass.
  - D: Neutron number.
  - E: Atomic number.
- 3: What are the forces of attraction holding helium atoms together called?
- A: Hydrogen bonds.
  - B: London dispersion forces.
  - C: Ionic interaction.
  - D: Covalent bonds.
  - E: Metallic bonds.
- 4: Which of the following elements consists of discrete covalent molecules ?
- A: Lithium
  - B: Magnesium.
  - C: Hydrogen.
  - D: Carbon.
  - E: Silicon.
- 5: Which of the following molecules consists of 2 atoms held together by a triple covalent bond ?
- A: Oxygen.
  - B: Nitrogen.
  - C: Hydrogen.
  - D: Chlorine.
  - E: Sulphur.
- 6: Which of the following molecules consists of polyatomic  $X_4$  molecules?
- A: Nitrogen.
  - B: Carbon.
  - C: Sulphur.
  - D: Magnesium.
  - E: Phosphorus.
- 7: Which of the following statements explains why diamond has such high melting and boiling points ?
- A: Diamond molecules are held together by strong London dispersion forces.
  - B: The metallic bonds in diamond are very strong.
  - C: The carbon atoms in diamond are held together by strong covalent bonds.
  - D: The carbon atoms in diamond are held together by strong hydrogen bonds.
  - E: The carbon atoms have strong triple covalent bonds holding them together.
- 8: The layers of carbon atoms in graphite are held together by ;
- A: Metallic bonds.
  - B: Covalent bonds.
  - C: Hydrogen bonds .
  - D: London dispersion forces.
  - E: Electrostatic attraction between ions of opposite charge.