

Quiz 3

Date: _____

Name: _____



A multiple choice quiz. Tick the boxes to record the answer

1. Which compound is formed by transferring electrons?

Select 3 answers

- A ☒ Potassium sulfide, K_2S
B ☐ Carbon monoxide, CO
C ☒ Sodium oxide, Na_2O
D ☐ Sulphur trioxide, SO_3
E ☒ Magnesium bromide, $MgBr_2$

2. Element X reacts sulphur to form a compound with formula X_2S . What is the correct electron arrangement of X? [Proton number :S=16]

- A ☐ 2.8.3
B ☒ 2.8.1
C ☐ 2.8.2
D ☐ 2.8.4

3. Which molecule has a double covalent bond between its atom?
[Proton number: H=1, N=7, O=8, F=9]

- A ☐ Hydrogen
B ☐ Nitrogen
C ☐ Fluorine
D ☒ Oxygen

4. How can dative bond be formed in hydroxonium ion H_3O^+ ?

- A ☒ The pair of electrons not involved in covalent bond in water molecule, H_2O will be shared with hydrogen ion H^+
B ☐ Water molecule, H_2O and hydrogen ion, H^+ will each share one electron
C ☐ Water molecule, H_2O and hydrogen ion, H^+ will each share two electrons

5. How can dative bond be formed between ammonia, NH_3 and hydrogen ion, H^+ to form ammonium ion, NH_4^+ ?

- A ☐ Ammonia, NH_3 and hydrogen ion, H^+ will each share one electron
- B ☒ The pair of electrons not involved in covalent bond in ammonia, NH_3 will be shared with hydrogen ion, H^+
- C ☐ Ammonia, NH_3 and hydrogen ion, H^+ will each share two electron

6. Which of the following has the highest boiling point?

- A ☐ H_2
- B ☒ NH_3
- C ☐ N_2
- D ☐ O_2

7. Xylene is an organic solvent. Which substance is soluble in xylene?

- A ☐ zinc sulphide
- B ☐ magnesium chloride
- C ☒ sulphur dioxide
- D ☐ ammonium nitrate

8. Material Y is soluble in water and can be electrolysed in molten state. What is material Y?

- A ☒ KCl
- B ☐ C_2H_6
- C ☐ naphthalene
- D ☒ CaCO_3

9. Ethanol can dissolved in water because its molecule can form hydrogen bond with water molecules.

- A ☒ True
- B ☐ False

10. Metals are able to conduct electricity because of

- A ☒ sea of delocalised electrons
- B ☐ strong electrostatic force
- C ☐ strong hydrogen bond
- D ☐ weak van der waals forces within the molecule