

Chemical names and formulas of covalent compounds

1. What is a covalent compound?

a chemical bond that involves the sharing of electron pairs with atoms

2. What type of bond is formed in a covalent compound?

a chemical bond

3. What is used in naming covalent compounds?

Similar method in naming ionic compounds using prefixes

4. Write the chemical formula for each of the following compounds.

(a) silicon dioxide	<u>SiO₂</u>	(i) dinitrogen pentoxide	<u>N₂O₅</u>
(b) chlorine dioxide	<u>ClO₂</u>	(j) dinitrogen monoxide	<u>N₂O₉</u>
(c) tellurium dioxide	<u>TeO₂</u>	(k) arsenic tetrabromide	<u>AsBr₄</u>
(d) selenium trioxide	<u>SeO₃</u>	(l) arsenic pentachloride	<u>AsCl₅</u>
(e) carbon disulphide	<u>CS₂</u>	(m) disulphide pentoxide	<u>S₂O₅</u>
(f) arsenic trichloride	<u>AsCl₃</u>	(n) sulphur monochloride	<u>S Cl₉</u>
(g) chlorine heptoxide	<u>ClO₇</u>	(o) phosphorus trichloride	<u>PCl₃</u>
(h) selenium difluoride	<u>SeF₂</u>	(p) diphosphorus pentoxide	<u>P₂O₅</u>