

Covalent Bonds Practice

I. Beside each element listed below, write the number of covalent bonds it can form.

- 1) 2 O 3) 1 Br 5) 4 C 7) 1 I 9) 2 S
 2) 1 Cl 4) 1 H 6) 3 P 8) 3 N 10) 1 F

II. Write the correct formula on the line beside each covalent molecule listed below.

- 11) N₂O₃ dinitrogen trioxide
 12) HCl hydrogen monochloride
 13) P₂O₅ diphosphorus pentoxide
 14) SBr₂ sulfur dibromide
 15) PCl₃ phosphorus trichloride

III. Write the correct name on the line beside each covalent molecule listed below.

- 16) CF₄ CARBON TETRAFLUORIDE
 17) P₂S₃ DIPHOSPHORUS TRISULFIDE
 18) SiO₂ SILICON DIOXIDE
 19) CO CARBON MONOXIDE
 20) H₂O DIHYDROGEN MONOXIDE

IV. Based on the elements involved, decide whether each of the listed compounds is most likely ionic or covalent. Write your answer on the line provided.

- 21) CaI₂ IONIC 26) Mg₃P₂ IONIC
 22) CO₂ COVALENT 27) SeO COVALENT
 23) Li₂O IONIC 28) SrCl IONIC
 24) KBr IONIC 29) PF₃ COVALENT
 25) Si₂O₄ COVALENT 30) NaCl IONIC