

Key

Bonding Worksheets –

You may write on all pages of the worksheets. Fill in all missing information for each table.

Part A – Molecular Names

Write names for the molecular compounds.

46. CO_2 carbon dioxide
47. N_2O dinitrogen monoxide
48. SO_3 sulfur trioxide
49. NO nitrogen monoxide
50. CS_2 carbon disulfide
51. PBr_5 phosphorous pentabromide
52. N_2O_4 dinitrogen tetroxide
53. PCl_3 phosphorous trichloride

Part A – Acid Names

Write names for the acids.

62. HNO_3 Nitric acid
63. HCl Hydrochloric acid
64. HClO_2 Chlorous acid
65. H_3PO_4 Phosphoric acid
66. H_2S Hydro sulfuric acid
67. H_2SO_3 Sulfurous acid
68. HClO_4 Perchloric acid
69. _____

Part B – MOLECULAR FORMULAS

Write formulas for the molecular compounds

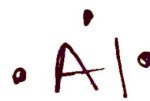
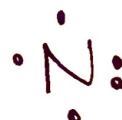
54. carbon tetrachloride CCl_4
55. nitrogen trifluoride NF_3
56. silicon dioxide SiO_2
57. arsenic pentabromide AsBr_5
58. oxygen difluoride OF_2
59. diphosphorous pentoxide P_2O_5
60. carbon monoxide CO
61. sulfur hexafluoride SF_6

Part B – ACID FORMULAS

Write formulas for the molecular compounds

70. hydrofluoric acid HF
71. sulfuric acid H_2SO_4
72. carbonic acid H_2CO_3
73. hydrobromic acid HBr
74. nitrous acid HNO_2
75. hydronitric HN
76. acetic acid $\text{HC}_2\text{H}_3\text{O}_2$
77. hydroiodic acid HI

Draw Lewis Structures for the following:



Naming Covalent (Molecular) Compounds

READ PAGES 158-9 to understand how to do this. Page 161-2 have great flow charts that can help.

Write the formulas for the following covalent compounds:

- 1) antimony tribromide SbBr₃
- 2) hexaboron silicide B₆Si
- 3) chlorine dioxide ClO₂
- 4) hydrogen iodide HI
- 5) iodine pentafluoride IF₅
- 6) dinitrogen trioxide N₂O₃
- 7) dinitrogen tetraoxide N₂O₄
- 8) phosphorus triiodide PI₃

Write the names for the following covalent compounds:

- 9) P₄S₅ tetraphosphorus pentasulfide
- 10) CO₂ Carbon dioxide
- 11) SeF₆ selenium hexafluoride
- 12) Si₂Br₆ disilicon hexabromide
- 13) SCl₄ Sulfur tetrachloride
- 14) CH₄ carbon tetrahydride (methane)
- 15) B₂Si diboron monosilicide
- 16) NF₃ nitrogen trifluoride