Bonding: Naming Molecular (Covalent) Compounds

Rules for Naming Molecular Compounds:

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# Level 1: Alkali Metals

Directions: Give the name or the symbols for the following molecular compounds:

1. carbon monoxide = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. nitrogen dioxide = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. boron trifluoride = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. carbon dioxide = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. silicon dibromide = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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# Level 2: Alkaline Earth Metals

Directions: Give the name or the symbols for the following molecular compounds:

1. HF = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. CF4 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. PCl5 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. H20 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. SiO2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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# Level 3: Transition Metals

Directions: Give the name or the symbols for the following molecular compounds:

1. H202 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. HBr = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. PO3 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. phosphorous trichloride = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. dinitrogen monoxide = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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# Level 4: Halogens

Directions: Give the name or the symbols for the following molecular compounds:

1. sulfur hexachloride = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. BCl3 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. HI = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. CH4 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. xenon tetrafluoride = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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# Level 5: Noble Gases

Directions: Give the name or the symbols for the following molecular compounds:

1. N2O3 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. selenium dichloride = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. AsO3 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. hydrogen trinitride = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. H2S = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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