

Nomenclature Worksheet 6: Binary Covalent Compounds

Please complete the following table:

| Name of Covalent Compound | Formula of Covalent Compound |
|----------------------------|------------------------------------|
| 1. carbon dioxide | CO ₂ |
| 2. phosphorus triiodide | PI ₃ |
| 3. sulfur dichloride | S Cl ₂ |
| 4. nitrogen trifluoride | NF ₃ |
| 5. dioxygen difluoride | O ₂ F ₂ |
| dinitrogen tetrafluoride | 6. N ₂ F ₄ |
| Sulfur tetra Chloride | 7. SCl ₄ |
| Chlorine trifluoride | 8. ClF ₃ |
| Silicon dioxide | 9. SiO ₂ |
| tetra phosphorus Decaoxide | 10. P ₄ O ₁₀ |

Determine whether the following compounds are **covalent** or **ionic** and give them their proper names.

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|--------------------------------------|----------|------------------------|
| 1. Ba(NO ₃) ₂ | Ionic | Barium Nitrate |
| 2. CO | Covalent | Carbon monoxide |
| 3. PCl ₃ | Covalent | Phosphorus Trichloride |
| 4. KI | Ionic | Potassium Iodide |
| 5. CF ₄ | covalent | Carbon tetrafluoride |
| 6. MgO | Ionic | Magnesium oxide |
| 7. Cu ₂ S | Ionic | Copper (I) Sulfide |
| 8. SO ₂ | Covalent | Sulfur dioxide |
| 9. NCl ₃ | Covalent | Nitrogen trichloride |
| 10. XeF ₆ | Xenon | Xenon Hexafluoride |