

Answers – Naming Chemical Compounds

Name the following chemical compounds:

- | | | |
|-----|--|------------------------|
| 1) | NaBr | sodium bromide |
| 2) | Ca(C ₂ H ₃ O ₂) ₂ | calcium acetate |
| 3) | P ₂ O ₅ | diphosphorus pentoxide |
| 4) | Ti(SO ₄) ₂ | titanium(IV) sulfate |
| 5) | FePO ₄ | iron(III) phosphate |
| 6) | K ₃ N | potassium nitride |
| 7) | SO ₂ | sulfur dioxide |
| 8) | CuOH | copper(I) hydroxide |
| 9) | Zn(NO ₂) ₂ | zinc nitrite |
| 10) | V ₂ S ₃ | vanadium(III) sulfide |

Write the formulas for the following chemical compounds:

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|-----|--------------------------------|---|
| 11) | silicon dioxide | SiO ₂ |
| 12) | nickel (III) sulfide | Ni ₂ S ₃ |
| 13) | manganese (II) phosphate | Mn ₃ (PO ₄) ₂ |
| 14) | silver acetate | AgC ₂ H ₃ O ₂ |
| 15) | diboron tetrabromide | B ₂ Br ₄ |
| 16) | magnesium sulfate heptahydrate | MgSO ₄ ·7H ₂ O |
| 17) | potassium carbonate | K ₂ CO ₃ |
| 18) | ammonium oxide | (NH ₄) ₂ O |
| 19) | tin (IV) selenide | SnSe ₂ |
| 20) | carbon tetrachloride | CCl ₄ |

(Still) More Naming Practice - Answers

Write the names of the following chemical compounds:

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|-----|-----------------------------------|--------------------------------|
| 1) | BBr ₃ | boron tribromide |
| 2) | CaSO ₄ | calcium sulfate |
| 3) | C ₂ Br ₆ | dicarbon hexabromide |
| 4) | Cr(CO ₃) ₃ | chromium (VI) carbonate |
| 5) | Ag ₃ P | silver phosphide |
| 6) | IO ₂ | iodine dioxide |
| 7) | VO ₂ | vanadium (IV) oxide |
| 8) | PbS | lead (II) sulfide |
| 9) | CH ₄ | methane |
| 10) | N ₂ O ₃ | dinitrogen trioxide |

Write the formulas of the following chemical compounds:

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|-----|-----------------------------|---|
| 11) | tetraphosphorus triselenide | P₄Se₃ |
| 12) | potassium acetate | KC₂H₃O₂ |
| 13) | iron (II) phosphide | Fe₃P₂ |
| 14) | disilicon hexabromide | Si₂Br₆ |
| 15) | titanium (IV) nitrate | Ti(NO₃)₄ |
| 16) | diselenium diiodide | Se₂I₂ |
| 17) | copper (I) phosphate | Cu₃PO₄ |
| 18) | gallium oxide | Ga₂O₃ |
| 19) | tetrasulfur dinitride | S₄N₂ |
| 20) | phosphorus | P₄ |

Ionic/Covalent Compound Naming Solutions

For each of the following questions, determine whether the compound is ionic or covalent and name it appropriately.

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|-----|---------------------------------|------------------------|
| 1) | Na ₂ CO ₃ | sodium carbonate |
| 2) | P ₂ O ₅ | diphosphorus pentoxide |
| 3) | NH ₃ | ammonia |
| 4) | FeSO ₄ | iron (II) sulfate |
| 5) | SiO ₂ | silicon dioxide |
| 6) | GaCl ₃ | gallium chloride |
| 7) | CoBr ₂ | cobalt (II) bromide |
| 8) | B ₂ H ₄ | diboron tetrahydride |
| 9) | CO | carbon monoxide |
| 10) | P ₄ | phosphorus |

For each of the following questions, determine whether the compound is ionic or covalent and write the appropriate formula for it.

- | | | |
|-----|------------------------|--|
| 11) | dinitrogen trioxide | N ₂ O ₃ |
| 12) | nitrogen | N ₂ |
| 13) | methane | CH ₄ |
| 14) | lithium acetate | LiC ₂ H ₃ O ₂ |
| 15) | phosphorus trifluoride | PF ₃ |
| 16) | vanadium (V) oxide | V ₂ O ₅ |
| 17) | aluminum hydroxide | Al(OH) ₃ |
| 18) | zinc sulfide | ZnS |
| 19) | silicon tetrafluoride | SiF ₄ |
| 20) | silver phosphate | Ag ₃ PO ₄ |