

Ionic Compounds: Names and Formulas Worksheet

1. Write the formulas for the following compounds.

(a) magnesium oxide	<u>MgO₂</u>	(k) copper(I) bromide	<u>CuBr</u>
(b) sodium fluoride	<u>NaF</u>	(l) tin(II) iodide	<u>SnI₂</u>
(c) aluminum nitride	<u>AlN</u>	(m) iron(III) chloride	<u>FeCl₃</u>
(d) potassium sulfide	<u>K₂S</u>	(n) calcium phosphide	<u>Ca₃P₂</u>
(e) lithium iodide	<u>LiI</u>	(o) lead(II) oxide	<u>PbO</u>
(f) calcium bromide	<u>CaBr₂</u>	(p) lead(IV) fluoride	<u>PbF₄</u>
(g) beryllium oxide	<u>BeO</u>	(q) tin(IV) bromide	<u>SnBr₄</u>
(h) nickel ^(III) chloride	<u>NiCl₂ OR NiCl₃</u>	(r) copper(II) sulfide	<u>CuS</u>
(i) magnesium nitride	<u>Mg₃N₂</u>	(s) iron(II) oxide	<u>FeO</u>
(j) aluminum sulfide	<u>Al₂S₃</u>	(t) calcium nitride	<u>Ca₃N₂</u>

2. Write the names for the following compounds.

(a) Li ₂ O	<u>lithium oxide</u>	(k) PbS	<u>lead (II) sulphide</u>
(b) AlCl ₃	<u>aluminum chloride</u>	(l) SnO ₂	<u>Tin (IV) oxide</u>
(c) MgS	<u>magnesium sulphide</u>	(m) Na ₂ S	<u>sodium sulphide</u>
(d) CaO	<u>calcium oxide</u>	(n) Mg ₃ P ₂	<u>magnesium phosphide</u>
(e) KBr	<u>potassium bromide</u>	(o) NiO	<u>nickel (II) oxide</u>
(f) BeF	<u>beryllium fluoride</u>	(p) CuI	<u>copper (I) iodide</u>
(g) Na ₃ N	<u>sodium nitride</u>	(q) PbCl ₄	<u>lead (IV) chloride</u>
(h) Al ₂ O ₃	<u>aluminum oxide</u>	(r) FeP	<u>iron (III) phosphide</u>
(i) CuCl ₂	<u>copper (II) chloride</u>	(s) CaF ₂	<u>calcium fluoride</u>
(j) FeBr ₃	<u>iron (III) bromide</u>	(t) K ₃ P	<u>potassium phosphide</u>

KEY

Blackline Master 5.9

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(½ mark each)Polyatomic Compounds:
Names and Formulas Worksheet

1. Write the formulas for the following compounds.

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|-------------------------|---------------------------------------|--------------------------|---|
| (a) magnesium sulfate | <u>MgSO₄</u> | (k) copper(I) chlorate | <u>CuClO₂</u> |
| (b) sodium chlorate | <u>NaClO₃</u> | (l) calcium sulfate | <u>CaSO₄</u> |
| (c) aluminum nitrate | <u>Al(NO₃)₃</u> | (m) nitric acid | <u> </u> |
| (d) potassium hydroxide | <u>KOH</u> | (n) carbonic acid | <u> </u> |
| (e) lithium phosphate | <u>Li₃PO₄</u> | (o) sulfuric acid | <u> </u> |
| (f) calcium carbonate | <u>CaCO₃</u> | (p) lead(II) nitrate | <u>Pb(NO₃)₂</u> |
| (g) beryllium sulfate | <u>BeSO₄</u> | (q) phosphoric acid | <u> </u> |
| (h) sodium bicarbonate | <u>NaHCO₃</u> | (r) copper(II) hydroxide | <u>Cu(OH)₂</u> |
| (i) magnesium hydroxide | <u>Mg(OH)₂</u> | (s) iron(II) phosphate | <u>Fe₃(PO₄)₂</u> |
| (j) aluminum phosphate | <u>AlPO₄</u> | (t) calcium chlorate | <u>Ca(ClO₃)₂</u> |

2. Write the names for the following compounds.

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|---|--------------------------------|---|----------------------------|
| (a) Li ₂ CO ₃ | <u>lithium carbonate</u> | (k) Pb ₃ (PO ₄) ₂ | <u>lead (II) phosphate</u> |
| (b) AlHCO ₃ | <u>aluminum bicarbonate</u> | (l) Sn(ClO ₃) ₂ | <u>tin (II) chlorate</u> |
| (c) Mg ₃ (PO ₄) ₂ | <u>magnesium phosphate</u> | (m) NaOH | <u>sodium hydroxide</u> |
| (d) Ca(NO ₃) ₂ | <u>calcium nitrate</u> | (n) H ₃ PO _{4(aq)} | <u>hydrogen phosphate</u> |
| (e) K ₂ SO ₄ | <u>potassium sulphate</u> | (o) H ₂ CO _{3(aq)} | <u>hydrogen carbonate</u> |
| (f) HNO _{3(aq)} | <u>hydrogen nitrate</u> | (p) CuNO ₃ | <u>copper (I) nitrate</u> |
| (g) NaNO ₃ | <u>sodium nitrate</u> | (q) H ₂ SO _{4(aq)} | <u>hydrogen sulphate</u> |
| (h) Al(OH) ₃ | <u>aluminum hydroxide</u> | (r) FeSO ₄ | <u>iron (II) sulphate</u> |
| (i) CuSO ₄ | <u>copper (II) sulphate</u> | (s) Ca(HCO ₃) ₂ | <u>calcium bicarbonate</u> |
| (j) Fe(ClO ₃) ₃ | <u>iron (III) hypochlorite</u> | (t) K ₃ PO ₄ | <u>potassium phosphate</u> |

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