Name:

Date:

Balancing Chemical Equations

Balance the following chemical equations.

1.
$$3$$
 KOH + 1 H₃PO₄ \longrightarrow 1 K₃PO₄ + 3 H₂O

2.
$$\underline{4}$$
 NH₃ + $\underline{5}$ O₂ \longrightarrow $\underline{4}$ NO + $\underline{6}$ H₂O

3.
$$\underline{4}$$
 Al $+\underline{3}$ O₂ \longrightarrow $\underline{2}$ Al₂O₃

4. 8 CO(g) + 17 H₂(g)
$$\longrightarrow$$
 1 C₈H₁₈(ℓ) + 8 H₂O

5.
$$\underline{1}$$
 Au₂S₃ + $\underline{3}$ H₂ \longrightarrow $\underline{2}$ Au + $\underline{3}$ H₂S

6.
$$3$$
 Hg(OH)₂ + 2 H₃PO₄ \longrightarrow 1 Hg₃(PO₄)₂ + 6 H₂O

7.
$$\underline{1}$$
 Ba₃N₂ + $\underline{6}$ HF \longrightarrow $\underline{3}$ SiF₄ + $\underline{2}$ H₂O

8.
$$3$$
 CaCl₂ + 2 Na₃PO₄ \longrightarrow 1 Ca₃(PO₄)₂ + 6 NaCl

9.
$$\underline{4}$$
 FeS + $\underline{7}$ O₂ \longrightarrow $\underline{2}$ Fe₂O₃ + $\underline{4}$ SO₂

10.
$$\underline{12}$$
 HClO₄ + $\underline{1}$ P₄O₁₀ \longrightarrow $\underline{4}$ H₃PO₄ + $\underline{6}$ Cl₂O₇