Name: ._____ Date:

Balancing Word Equations

Write the formulas of the reactants and products. Then, balance the equations.

- A. carbon + oxygen \rightarrow carbon dioxide
- B. copper + silver nitrate \rightarrow copper (II) nitrate + silver
- c. zinc + copper (II) sulfate \rightarrow Zinc sulfate + copper
- D. mercury (II) nitrate + ammonium sulfide -> mercury (II) sulfide + ammonium nitrate
- E. iron (III) hydroxide → iron (III) oxide + water
- F. water → hydrogen + oxygen
- G. copper (II) nitrate + water → hydrogen nitrate + copper (II) hydroxide
- H. phosphorus + oxygen → diphosphorous pentoxide
- ı. iron + hydrochloric acid → iron (II) chloride + hydrogen
- J. sodium hydroxide + phosphoric acid → sodium phosphate + water

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Balancing Word Equations

Answers

A. carbon + oxygen \rightarrow carbon dioxide

$$C + O_2 \rightarrow CO_2$$

B. copper + silver nitrate \rightarrow copper (II) nitrate + silver

$$Cu + 2 AgNO_3 \rightarrow Cu(NO_3)_2 + 2 Ag$$

c. zinc + copper (II) sulfate \rightarrow Zinc sulfate + copper

$$Zn + CuSO_4 \rightarrow ZnSO_4 + Cu$$

D. mercury (II) nitrate + ammonium sulfide \rightarrow mercury (II) sulfide + ammonium nitrate

$$Hg(NO_3)_2 + (NH_4)_2S \rightarrow HgS + 2NH_4NO_3$$

E. iron (III) hydroxide \rightarrow iron (III) oxide + water

$$2 \operatorname{Fe}(OH)_3 \rightarrow \operatorname{Fe}_2O_3 + 3 \operatorname{H}_2O$$

F. water → hydrogen + oxygen

$$2 H_2 O \rightarrow 2 H_2 + O_2$$

G. copper (II) nitrate + water → hydrogen nitrate + copper (II) hydroxide

$$Cu(NO_3)_2 + 2 H_3O \rightarrow 2 HNO_3 + Cu(OH)_3$$

н. phosphorus + oxygen → diphosphorous pentoxide

$$4P + 5O_2 \rightarrow 2P_2O_5$$

ı. iron + hydrochloric acid \rightarrow iron (II) chloride + hydrogen

Fe + 2 HCl
$$\rightarrow$$
 FeCl₂ + H₂

J. sodium hydroxide + phosphoric acid → sodium phosphate + water

$$3 \text{ NaOH} + \text{H}_3 \text{PO}_4 \rightarrow \text{Na}_3 \text{PO}_4 + 3 \text{H}_2 \text{O}$$