

Name _____

Worksheet #2 – Balancing Chemical Equations

Directions: Write balanced chemical equations with appropriate symbols for the following chemical reactions.

- a. Hydrogen peroxide (H_2O_2) in an aqueous solution decomposes to produce oxygen and water.

- b. Solid copper metal reacts with aqueous silver nitrate to produce solid silver metal and aqueous copper(II) nitrate.

- c. Solid zinc metal reacts with aqueous copper (II) sulfate to produce solid copper metal and aqueous zinc sulfate.

- d. Solid calcium metal reacts with water to form aqueous calcium hydroxide and hydrogen gas.

- e. Nitrogen dioxide gas reacts with water to form aqueous nitric acid and nitrogen monoxide gas.

- f. Solid potassium chlorate decomposes to form solid potassium chloride and oxygen gas.

- g. The white paste on lifeguard's noses contains zinc oxide. Reacting solid zinc sulfide with oxygen gas makes zinc oxide and sulfur dioxide gas.

- h. Solid calcium phosphate is reacted with aqueous sulfuric acid to form phosphoric acid and solid calcium sulfate.