

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Worksheet 9B Describing Chemical Reactions (Nelson p.214-215)**

1) When you read a **word equation**, what do the symbols “+” and “→” mean?

“+” means \_\_\_\_\_

“→” means \_\_\_\_\_

2) When **carbon dioxide** reacts with **water**, it produces **carbonic acid**.

**Word equation:** \_\_\_\_\_

a) Name the **reactant(s)** \_\_\_\_\_

b) Name the **product(s)** \_\_\_\_\_

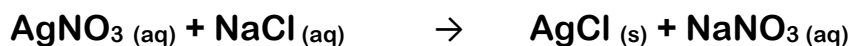
3) **Carbonic acid** breaks apart to form **carbon dioxide gas** and **water**.

**Word equation:** \_\_\_\_\_

a) Name the **reactant(s)** \_\_\_\_\_

b) Name the **product(s)** \_\_\_\_\_

4) Consider the reaction below:



(a) Name the **reactants** and **products** in this reaction.

(b) Name the chemicals that are **dissolved in water**.

(c) Name **white solid**.

(d) What **physical property** do both reactants have in common?

5) Write **word equations** for these reactions:

a) **Sugar** breaks down into **carbon** and **water**.

b) **Iron**, **water**, and **oxygen** produce **iron oxide** (rust).

## Word Equations

Write the **word equations** for the following chemical reactions.

- 1) When lithium nitrate reacts with sodium chloride, the products are lithium chloride and sodium nitrate.
- 2) When sodium hydroxide combines with calcium sulfate, sodium sulfate and calcium hydroxide are made.
- 3) When sodium and oxygen gas react, sodium oxide is produced.
- 4) When water is broken down, hydrogen gas and oxygen gas are formed.
- 5) Magnesium reacts with nitric acid to produce magnesium nitrate and hydrogen gas.
- 6) Hydrosulfuric acid breaks down to produce hydrogen gas and sulfur.
- 7) Calcium chloride reacts with sodium sulfide to produce calcium sulfide and sodium chloride.