

Name: _____

Date: _____

Notes: Writing and Balancing Chemical Equations

How would you describe a chemical reaction? _____

Define *skeleton equation*. _____

Describe **reactants**: _____

Where are the reactants found in a chemical equation? _____

Describe **products**: _____

Where are the products found in a chemical equation? _____

What words are used to show the *reactants* interacting in a chemical reaction?

What words are used to show the creation of *products* in a chemical reaction?

For each chemical reaction below, select the correct chemical equation, and then balance it.

1. Hydrogen gas reacts with oxygen gas to yield water.



2. Ammonia is produced when nitrogen gas reacts with hydrogen gas.



3. Methane combusts in the presence of oxygen to produce carbon dioxide and water.



4. Carbon dioxide reacts with water to yield carbonic acid.



5. Iron (III) oxide is formed when iron is corroded by oxygen.

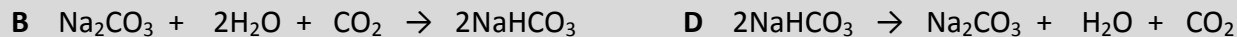


6. Magnesium carbonate decomposes into magnesium oxide and carbon dioxide.



Select the correct, balanced equation for each of the chemical reactions described below.

1. In the presence of heat, sodium hydrogen carbonate decomposes into sodium carbonate, water and carbon dioxide.



2. Water and carbon dioxide are produced when propane burns in the presence of oxygen.



3. Sodium metal reacts with water to produce sodium hydroxide and hydrogen gas.



4. Solutions of calcium chloride and sodium carbonate are mixed forming a precipitate of calcium carbonate and aqueous sodium chloride.



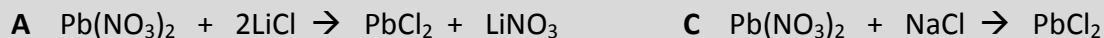
5. Solid carbon and hydrogen gas react to form butane.



6. Ammonia neutralizes hydrochloric acid producing ammonium chloride.



7. The white precipitate lead (II) chloride is formed when table salt is added to a solution of lead (II) nitrate.



8. Dinitrogen pentoxide is produced when nitrogen gas reacts with oxygen gas.



9. Aluminum reacts with copper (II) sulfate to produce aluminum sulfate and copper metal.

