

Chemistry
Introduction to Chemical Reactions WS

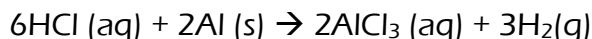
Name _____ Period _____

Part 1: Concept Questions

- The symbol Δ in a chemical equation means:
 - Heat is supplied to the reaction
 - A catalyst is needed
 - Yields
 - Precipitate
- What is a catalyst?
 - Whole number that appears before a formula
 - New substance formed in a chemical reaction
 - Substance that speeds up a reaction without being used up
 - Starting substance in a chemical reaction
- A chemical formula written above the yield sign indicates:
 - That a gas is formed
 - That the substance is used as a catalyst
 - That heat must be supplied
 - A reversible reaction
- In a chemical equation, where would you find the products?
 - Left of the arrow
 - Right of the arrow
 - Above the arrow
 - Below the arrow
- The arrow can be read in all of the following ways EXCEPT
 - Yields
 - Gives
 - Reacts to produce
 - Addition
- True or False: If you change any subscript number, the compound stays the same.
 - True
 - False
- The number placed in front of a chemical symbol or formula is called a
 - Superscript
 - Coefficient
 - Subscript
 - Catalyst
- Which of the following symbol does not match the physical state of a substance?
 - (s) for solid
 - (l) for liquid
 - (g) for gas
 - (sol) for aqueous solution

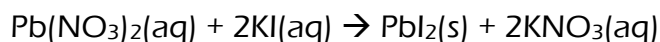
Part 2: Parts of a Chemical Equation

- Use the following equation to answer the questions below.



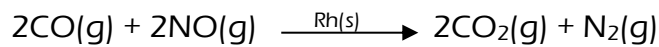
- Which substances are reactants? _____
- Which substances are products? _____
- What is the largest coefficient in this reaction? _____
- What state of matter is aluminum chloride? _____
- What state of matter is not represented in this equation? _____
- How many chlorine atoms are in hydrochloric acid in this equation? _____

2. Use the following equation to answer the questions below.



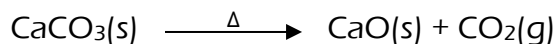
- Which substances are reactants? _____
- Which substances are products? _____
- What is the coefficient of potassium iodide? _____
- What state of matter is lead (II) nitrate? _____
- Which substance is shown as a solid? _____
- How many potassium atoms are in potassium nitrate? _____

3. Use the following equation to answer the questions below.



- How many products are in this reaction? _____
- What is the coefficient for carbon monoxide? _____
- What is the state of matter of nitrogen monoxide? _____
- What compound is the catalyst? _____
- What state of matter is the catalyst? _____
- What is the coefficient for nitrogen gas? _____
- How many oxygen atoms are in carbon dioxide in this reaction? _____

4. Use the following equation to answer the questions below.



- How many reactants are in this reaction? _____
- What is the largest coefficient in this reaction? _____
- Does this reaction have a catalyst? _____
- Does this reaction require heat? _____
- What state of matter is calcium oxide? _____
- What compounds do calcium carbonate yield? _____