

Chemistry Chapter 11  
Wkst 11 G

1. 35.5 g of hydrochloric acid (HCl) reacts completely with Zinc.
  - a. How many grams of hydrogen gas are produced?
  - b. What type of reaction is this?
  - c. How many moles of Zinc are required?
  - d. How many grams of zinc chloride will be produced?
  - e. If a lab has a percent yield of 98.5%. What will be the actual yield of zinc chloride be?  $\text{percent yield} = (\text{actual yield}/\text{theoretical yield}) * 100\%$

## Stoichiometry

### Reviewing Vocabulary

Use the following terms to complete the statements. Some terms will be used more than once.

actual yield	percent yield	stoichiometry
excess reactant	mole ratio	theoretical yield
limiting reactant		

1. The reactant that limits the extent of the reaction is called the \_\_\_\_\_.
2. The amount of product actually produced by a chemical reaction is called the \_\_\_\_\_.
3. A(n) \_\_\_\_\_ is a ratio between the number of moles of any two substances in a balanced chemical equation.
4. A(n) \_\_\_\_\_ is a reactant that has a portion remaining after the reaction has stopped.
5. The \_\_\_\_\_ is the maximum amount of product that can be produced from a given amount of reactant.
6. The study of the quantitative relationships among the amounts of reactants used and the amounts of products formed by a chemical reaction is called \_\_\_\_\_.
7. The ratio of the actual yield to the theoretical yield expressed as a percent is called the \_\_\_\_\_.
8. The amount of product formed during a reaction depends on the \_\_\_\_\_.
9. A chemical reaction rarely produces the \_\_\_\_\_ of the product.
10. Chemists sometimes use \_\_\_\_\_ to speed up a chemical reaction.