Unit 7 Notes

(Stoichiometry)

Stoichiometry

* Relationships between substances in a chemical reaction
* Use mole relationships (Mole Map from Unit 6)

Stoichiometry problems require a multi-step t-bar.

1. Write the given.
2. Convert the given into moles.

* Use conversion factor from the mole map

1. Find the mole ratio between the given substance and unknown substance.

* Use the balance equation

1. Convert moles of the unknown substance into the units asked for.

* Use the conversion factor from the mole map

Mass-Mass Problems

C6H12O6 + 6O2 --------------------> 6CO2 + 6H2O

12.5 g of glucose = \_\_?\_\_ grams of water

Mass-Volume Problems

9.65 g of oxygen = \_\_?\_\_ liters of carbon dioxide

Mass-Molecule Problems

9.23 g of aluminum react with hydrochloric acid. How many molecules of hydrogen will be produced?