**Ch. 20: Photosynthesis**

**Notes**

Essential Question: How does photosynthesis work?

1. Phostosynthesis: process by which a cell captures energy from the sun and uses it to make food.
   1. STAGE 1: Capturing suns energy
      1. Only in green plants (autotroph – makes its own food)
      2. Chloroplast: organelle containing chlorophyll in the leaves
         1. Chlorophyll is a chemical that acts like a solar panel
         2. Sunlight + chlorophyll split water molecules into H and O.
         3. O is released as a waste product
   2. STAGE 2: Using energy to make food
      * 1. Leaves also take in CO2 through stomata (tiny holes on underside of leaves)
        2. Energy from sun helps H combine with CO2 to make food (glucose)

Sunlight + 6 H20 + 6 CO2 C6H1206 + 6 O2

Sunlight + water + carbon glucose + water

dioxide

* + - * 1. Glucose: used to carry out important cell functions.
      1. O2 is given off through stomata
  1. Chemical Equations
     1. Reactants
        1. Ingredients
        2. On left side of equation
     2. Products
        1. Cake
        2. On right side of equation