



Review Sheet for Photosynthesis

Words to Know:

Autotroph
Heterotroph
Absorption
Reflection
Electromagnetic spectrum
Visible spectrum
White light
Pigment
Chlorophyll
Chloroplast
Thylakoid
Light-dependant
Light-independent
Ion
Gradient
ATP
ADP

Important Concepts:

- ✓ What is known as the "ultimate source of energy for all living things"?
- ✓ List the five pigments we've talked about in class. Why are each important?
- ✓ What does it mean when we say an electron is "excited"?
- ✓ Why is water split, and where is water split (*which part of photosynthesis*), what products are formed when water is split?
- ✓ How are Photosystem II, Electron Transport Chain, ATP Synthesis, Photosystem I, and Calvin Cycle are interrelated
 - What happens in each?
 - What order do they occur?
 - What goes into and out of each?
 - What moves on to the next part of photosynthesis?
- ✓ What are the roles enzymes (proteins) play in the Electron Transport Chain?
- ✓ What is the role of hydrogen ions (H^+) in Electron Transport Chain (and ATP Synthesis)?
- ✓ What is the difference between ATP and ADP? Which holds more energy?
- ✓ Explain how the source of most plant mass comes from CO_2 (not minerals from the soil!!!) → see "The Amazing Growing Tree" worksheet
- ✓ Know the equation for photosynthesis
 - What are the reactants? (*what goes in*)
 - What are the products? (*what comes out*)

