

Questions  
(think of  
questions that  
might be on the  
exam)

III. Photosynthesis

- All living things need \_\_\_\_\_

A. Sources of Energy

1. **Photosynthesis** - the process by which a cell

\_\_\_\_\_ sunlight and uses it to  
\_\_\_\_\_.

- The \_\_\_\_\_ supplies energy for most  
\_\_\_\_\_, either directly or indirectly from.

• Steps in photosynthesis

1. Sunlight strikes a \_\_\_\_\_ of a plant

2. \_\_\_\_\_ captures light energy

3. Cells use that energy to produce \_\_\_\_\_  
and \_\_\_\_\_ from H<sub>2</sub>O and \_\_\_\_\_.

2. **Autotroph** - an organism that

\_\_\_\_\_

- EX: \_\_\_\_\_

3. **Heterotroph** - an organism that

\_\_\_\_\_

- Obtains \_\_\_\_\_ from \_\_\_\_\_  
\_\_\_\_\_

B. The \_\_\_\_\_ Stages of \_\_\_\_\_

- During photosynthesis plants and other organisms use energy from  
the sun to convert \_\_\_\_\_ and \_\_\_\_\_ into \_\_\_\_\_  
and \_\_\_\_\_

1. Capturing the Sun's energy (1<sup>st</sup> stage)

- Occurs mostly in the \_\_\_\_\_

• \_\_\_\_\_ in plant cells have green  
\_\_\_\_\_ which \_\_\_\_\_ light called  
\_\_\_\_\_

- \_\_\_\_\_ captures the energy in light and uses it  
to power the \_\_\_\_\_.

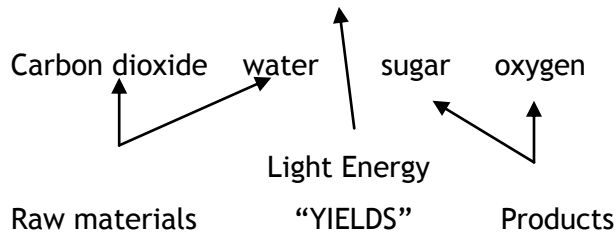
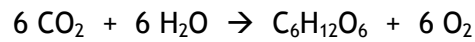
Q. What are  
autotrophs?

Q. What makes plants green?

2. Using Energy to Make Food (2<sup>nd</sup> stage)

- The chloroplasts uses the captured energy to produce \_\_\_\_\_
- The cell needs \_\_\_\_\_ and \_\_\_\_\_
- \_\_\_\_\_ enters the plant through \_\_\_\_\_ - small openings on the underside of \_\_\_\_\_
- Inputs = \_\_\_\_\_ and \_\_\_\_\_
- Products = \_\_\_\_\_ and \_\_\_\_\_
  - a. Cells use the \_\_\_\_\_
  - b. Almost all of the \_\_\_\_\_ in the air is produced through \_\_\_\_\_

C. Photosynthesis Equation - draw a line from the word to its chemical formula in the equation.



Q. In the photosynthesis equation, what does the arrow mean?

Summary (5 sentences)