



Name _____

Period _____

Date _____

SECTION
4.3

PHOTOSYNTHESIS IN DETAIL

Section Quiz

Choose the letter of the best answer.

- _____ **1.** Which of the following takes place in the light-dependent reactions of photosynthesis?
- a.** Sugars are made.
 - b.** Energy is captured.
 - c.** Chlorophyll is pumped.
 - d.** CO₂ is formed.
- _____ **2.** Where do the hydrogen ions for the photosystems of the light-dependent reactions come from?
- a.** sugars
 - b.** sunlight
 - c.** acids
 - d.** water
- _____ **3.** Which phrase best describes the electron transport chain in photosynthesis?
- a.** a chain of photosynthetic proteins located in the stroma
 - b.** a collection of enzymes used to make ADP
 - c.** a series of proteins located in the thylakoid membrane
 - d.** a group of enzymes that carries energy to the Calvin cycle
- _____ **4.** In the light-independent reactions of photosynthesis,
- a.** CO₂ enters the Calvin cycle and sugars are made.
 - b.** H₂O is broken down and oxygen is released.
 - c.** NADPH is produced and transferred to photosystem I.
 - d.** electrons are energized and used to pump H⁺ ions.
- _____ **5.** What is the relationship between the photosystems and the Calvin cycle?
- a.** The photosystems produce ATP synthase for the Calvin cycle.
 - b.** The photosystems transfer hydrogen ions and carbon dioxide to the Calvin cycle.
 - c.** The photosystems transfer energy to the Calvin cycle through ATP and NADPH.
 - d.** The photosystems build sugars with the carbon dioxide produced by the Calvin cycle.