Name _____

REACTIONS OF PHOTOSYNTHESIS
8-3 (pp 208-214)

MULTIPLE CHOICE:
Circle the letter of the answer that best completes the statement or answers the question.

Photosystems I and II are _____
- A. found in the stroma
- B. located in the thylakoid space
- C. part of the thylakoid membrane
- D. participants in the Calvin cycle

The Calvin cycle is another name for _____
- A. photosynthesis
- B. the electron transport chain
- C. light-dependent reactions
- D. light-independent reactions

Why does the space inside the thylakoid become positively charged during the light-dependent reactions?
- A. ATP synthase pushes H^+ ions from the stroma across the membrane into the space
- B. H^+ ions build up in the space as water is split
- C. Electrons have a + charge and are released here by Photosystem II
- D. Carbon dioxide builds up in the stroma

CIRCLE ALL THAT ARE TRUE about the LIGHT DEPENDENT REACTION.
- A. High-energy electrons move through the electron transport chain.
- B. Pigments in photosystems II and I absorb light.
- C. ATP synthase helps H^+ ions in the thylakoid space to pass through the membrane to the stroma.
- D. ATP and NADPH are used to produce high-energy sugars.

CIRCLE ALL THAT ARE TRUE about the CALVIN CYCLE
- A. ATP is produced by ATP synthase and oxygen is released
- B. It is also called the light-independent reactions.
- C. ATP and NADPH from the light-dependent reactions are used here
- D. High energy sugar compounds are made from CO_2

Which step is the beginning of photosynthesis?
- A. Pigments in photosystem I absorb light.
- B. Pigments in photosystem II absorb light.
- C. High energy electrons move through the electron transport chain.
- D. ATP and NADPH produce high energy sugars.

CIRCLE ALL OF THE FOLLOWING THAT ARE PART OF THE THYLAKOID MEMBRANE.
- A. electron transport chain
- B. photosystem I
- C. photosystem II
- D. ATP synthase