

Sample MC Item

Photosynthesis is an energy-requiring, or endergonic, reaction. Hydrogen (H_2) atoms are transferred from water (H_2O) to carbon dioxide (CO_2), forming glucose ($C_6H_{12}O_6$).



Which of the following has happened to the energy after the reaction is complete?

- A. Energy is lost in the process.
- *B. Energy is stored in the glucose molecule.
- C. Energy is given off as heat in the reaction.
- D. Energy is released when the oxygen combines with other materials.

FCAT SCIENCE

PLANNING CARDS Grade 11

BENCHMARK SC.F.1.4.4.

Item Type(s)	MC
Benchmark Clarification	The student applies the laws of conservation of mass and energy to biotic systems.
Content Limits	Items will list both the name and the symbol for chemical elements and compounds. Items will NOT require knowledge of specific biochemical pathways. Items may address conversions of materials or transfer of energy.
Stimulus Attributes	Items may use diagrams or equations of chemical reactions to illustrate biochemical reactions.
Response Attributes	None specified.