

CHAPTER 5	Thought Lab 5.1: Modelling the Source of Oxygen in the Light-Dependant Reactions Answer Key	BLM 5.2.6A
ANSWER KEY		

Answers to Analysis Questions

- The radioactive isotope form of an atom can be differentiated from its non-radioactive form. This allows the tracing or “following” of that atom through a chemical reaction, from reactant to product. Products can be analyzed for the isotope in order to identify the source of a particular atom in it.
- Based on your model and the chemical equation given, you should predict that oxygen atoms that originate from carbon dioxide end up in $\text{CH}_2\text{O}(\text{s})$ and $\text{H}_2\text{O}(\ell)$.
 - Based on your model and the chemical equation given, you should predict that all carbon atoms from carbon dioxide end up in $\text{CH}_2\text{O}(\text{s})$.
 - Based on your model and the chemical equation given, you should predict that all hydrogen molecules from water end up in $\text{CH}_2\text{O}(\text{s})$ and $\text{H}_2\text{O}(\ell)$.