

Standards - Unit 3: Cell Energy

Standards are the things the State of California says you need to learn while taking a class. Living Earth has a large number of standards the state says you need to learn. This unit we will be working towards understanding some of these standards. Below are the standards you will need to understand by the end of this unit.

LS1.C: Organization for Matter and Energy Flow in Organisms

- a. The process of photosynthesis converts light energy to stored chemical energy by converting carbon dioxide plus water into sugars plus released oxygen.
- b. As matter and energy flow through different organizational levels of living systems, chemical elements are recombined in different ways to form different products.
- c. As a result of these chemical reactions, energy is transferred from one system of interacting molecules to another. Cellular respiration is a chemical process in which the bonds of food molecules and oxygen molecules are broken and new compounds are formed that can transport energy to muscles. Cellular respiration also releases the energy needed to maintain body temperature despite ongoing energy transfer to the surrounding environment.

LS2.B: Cycles of Matter and Energy Transfer in Ecosystems

- d. Photosynthesis and cellular respiration (including anaerobic processes) provide most of the energy for life processes.
- e. Photosynthesis and cellular respiration are important components of the carbon cycle, in which carbon is exchanged among the biosphere, atmosphere, oceans, and geosphere through chemical, physical, geological, and biological processes.

Sub-standard	<u>K</u> now	Don't Know <u>Y</u> et	<u>W</u> onder
a.			1. 2.
b.			1. 2.
c.			1. 2.
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e.			1. 2.