

As a class, make a list on the board that outlines forest management activities that increase carbon sequestration and reduce carbon emissions. Note that forests in the United States sequester 10 percent of all U.S. carbon emissions. Now have your class come up with ideas to increase carbon sequestration by our forests. The following site from the American Forest Foundation will be very helpful in this task:

http://www.forestfoundation.org/ccs_carbon.html

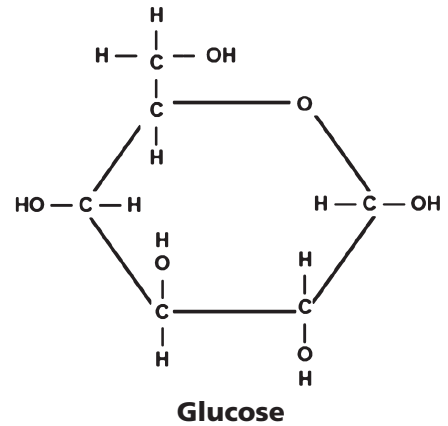
Carbon Creation Activity...

Materials: Colored Marshmallows, Toothpicks

Instructions: Choose one color of marshmallow to represent each of the following elements: carbon, oxygen, hydrogen. Use toothpicks to bond the elements together properly. A dash indicates a single bond (one toothpick) and an equal sign indicates a double bond (two toothpicks). Make one carbon dioxide molecule and one glucose molecule to show how carbon changes as a result of photosynthesis.

(During photosynthesis, water inside the leaf of the plant is stripped of its hydrogen – the two oxygen atoms

combine and are released into the atmosphere as oxygen gas. Carbon dioxide enters through the leaf stomata and goes through changes so the plant can build a large structure of carbon, hydrogen and oxygen called glucose = food and energy for the plant!)



Reinforcement Ideas:

Download the “Carbon Fingerprints” Game from The Forest Foundation Website

<http://www.calforestfoundation.org/pdf/Forests-and-the-Carbon-Cycle.pdf> (Page E1)