The Carbon Cycle

- carbon atoms on our planet have been here for4.5 billion years
- carbon is recycled into many different forms
- a "carbon repository" is any location or form that stores carbon
 - carbon dioxide in the air
 - carbon found in plants
 - carbon found in animals
 - carbon found in soil
 - carbon found in fossil fuels!!!
 - carbon found in rocks
 - carbon dioxide found dissolved in sea water
- many processes convert carbon to different forms (repositories)

Photosynethesis: occurs in plants (and some bacteria)
carbon + water + sunlight → glucose + oxygen
dioxide

 CO_2 + H_2O + sunlight \rightarrow $C_6H_{12}O_6$ + O_2

 $C_6H_{12}O_6 + O_2 \rightarrow CO_2 + H_2O + useable energy$