

# Notes for Carbon Cycle

- **Photosynthesis** – Using light energy, plants, algae, phytoplankton, and some bacteria remove carbon dioxide from the atmosphere and combine it with water to create glucose.
- **Respiration** - animals and other organisms breathe out carbon dioxide as they break down glucose.
- **Decomposition** – decomposers breathe out carbon dioxide as they consume and break down plant and animal wastes.
- **Combustion** – Carbon dioxide is released into the atmosphere as fossil fuels are burned.
- **Fossil Fuels** – Coal, oil, natural gas are formed from organic matter that is not decomposed and is instead buried in the ground and compressed over millions of years.

- **Carbon Sinks** – Places on earth where carbon is stored for long periods of time: ocean (largest); oil, coal, natural gas, trees and forests, and permafrost (frozen groundwater).