**The Carbon Cycle**

All living things are made of **carbon**.

This important element cycles through **living** and **nonliving** things on earth, constantly being reused.

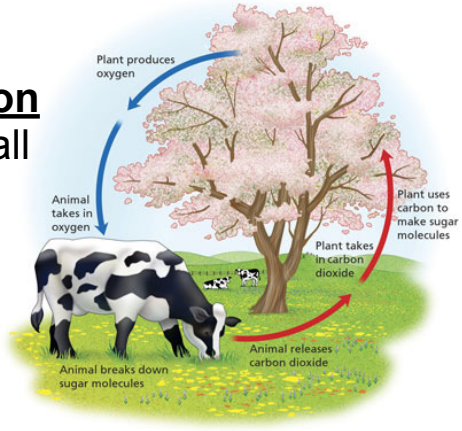
Carbon is found in:

| *Living Things* | *Nonliving Things* |
|---|---|
| - glucose in cells | - carbon dioxide (air) |
| - DNA/RNA | - rocks and minerals |
| - body tissue | - dissolved in seawater |
| - remains of dead organisms | |

We have already learned two important process that cycle carbon from one form to another:

1) **Photosynthesis** is a process used by plants to remove carbon dioxide from the **atmosphere** and convert it into **organic matter** (glucose).

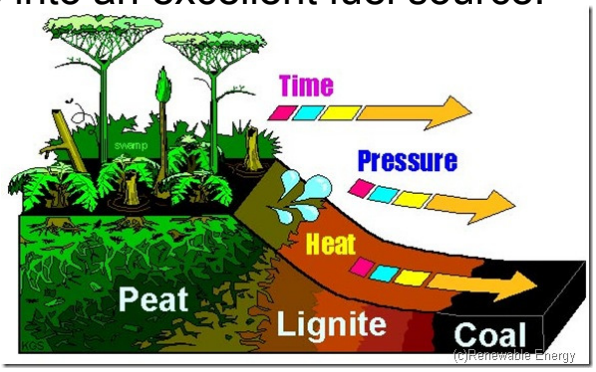
2) **Cellular Respiration** is a process used by all living things to break down **glucose**; it releases carbon dioxide back into the **atmosphere**.



**The Carbon Cycle**

One of the biggest concerns about the carbon cycle today is the **increased rate** of fossil fuel use.

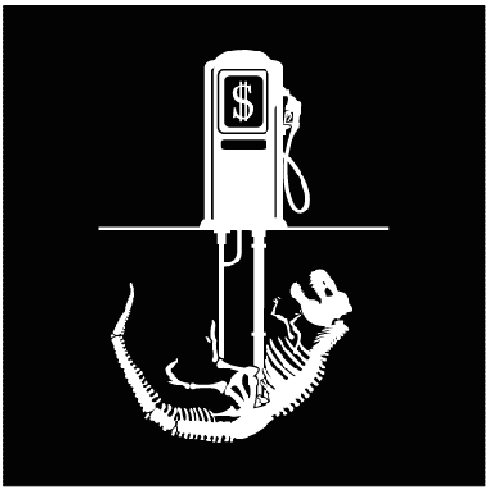
**Fossil fuels** form when ancient plants and animals die and get buried before they can decompose. Over **millions of years**, the chemical reactions that take place turn these remains into an excellent fuel source.




What are fossil fuels?

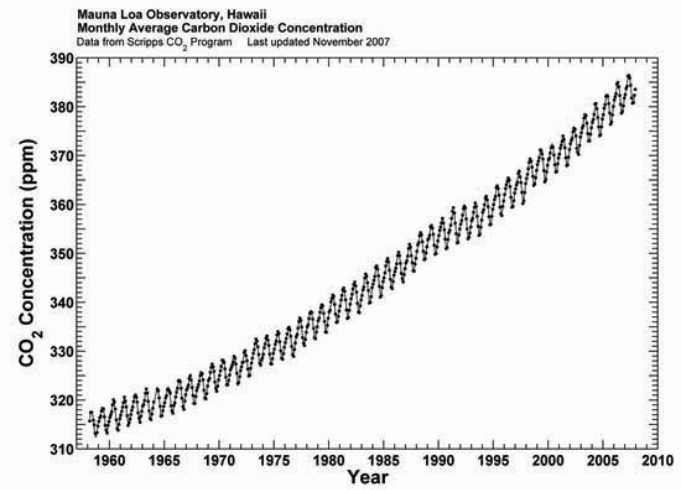
Fossil fuels include any type of fuel made from the remains of ancient plants and animals, such as:

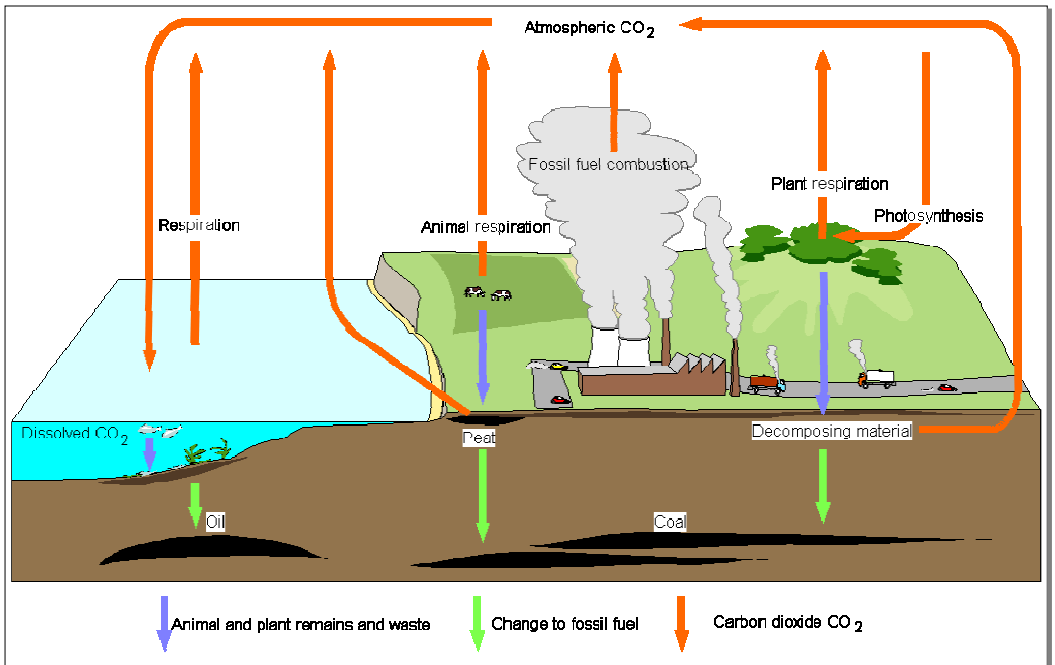
- coal
- oil/petroleum
- gasoline
- natural gas



**The Carbon Cycle**

When fossil fuels are burned, **carbon dioxide** is added back to the **atmosphere**. When scientists measure the concentration of carbon dioxide in today's atmosphere, it is much **higher** than in the past.




Summary of the Carbon Cycle.
Label your note sheet.