

Your Back Yard Food Chain

At this point you have probably produced a lot of different Food Chains and Food Webs -
CONGRATULATIONS!

You might start to wonder what happens to plants and animals that are not getting eaten by others? All plants and animals eventually die, but that is not where everything ends. At this point most of the energy that the plants captured from the sun has been lost on its way through the Food Chain, but there is still MATTER.

Matter is the stuff everything is made out of. In living things it is mostly Carbon. Carbon (C) is an element. It appears in Carbon-dioxide (CO_2), is the basis of all sugars ($\text{C}_6\text{H}_{12}\text{O}_6$), and is what is left after burning wood. Matter does not disappear, it is being re-used over and over again.

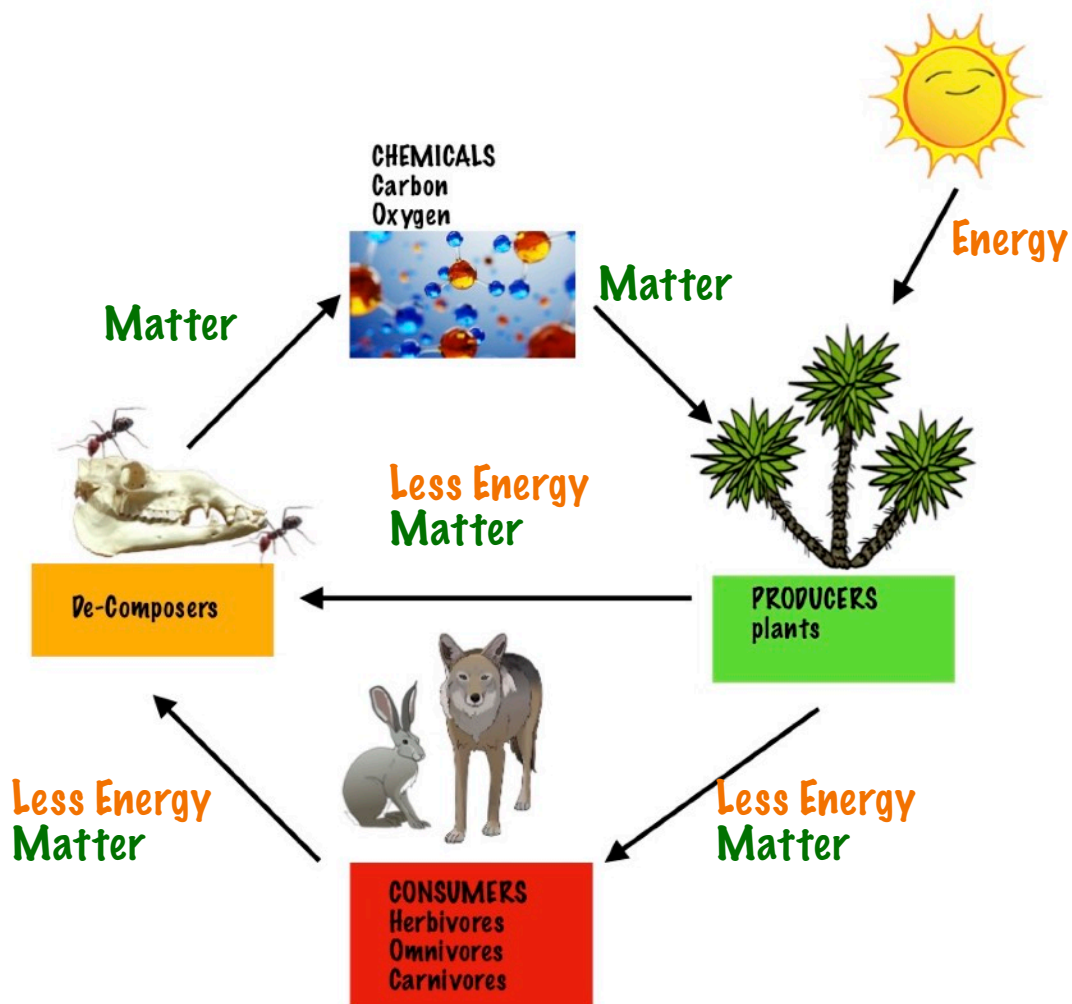
This is where we are going to meet the de-composers. De-composers are animals, fungi and bacteria that eat dead plants and animals and return the matter back to the soil. If you should have a compost bin in your yard, you will have noticed that food scraps are turning into soil for your flowers.

In the desert we have a few animal de-composers:

- some insects - Like ants, cockroaches and termites
- Pill-bugs or Roly Polys
- Earthworms (if you do have a compost bin)

On the picture below you can see, how Matter cycles.

- The PRODUCERS catch CO₂ and make it into sugar - using the energy from the sun.
- CONSUMERS eat plants and are eaten by other CONSUMERS. The Matter moves from one to another and some energy is lost.
- When PRODUCERS or CONSUMERS die they are eaten by DE-COMPOSERS.
- The carbon returns into the environment, just to be taken up by plants again.



The Carbon Cycle shows that it is possible that you have some carbon in your body that already was part of a T. Rex or a Sabertooth Cat or an ancient plant. So cool!

Can you make a Carbon Cycle?

Here are some Ideas:

- Use food from your refrigerator (meat & vegetables) and yourself.
- Use plants and animals from your backyard.
- Use ancient plants and dinosaurs.

I would love to see your Carbon Cycles. Send me an e-mail with your work.

Have Fun!

Stefanie