

## NITROGEN CYCLE

## NITROGEN FIXING BACTERIA

Bacteria who live in the soil use Nitrogen from the air  $(N_2)$  and turn it into ("fix it") a form of Nitrogen that Plants can use.



## **PLANTS**

Plants absorb the nitrogen from their roots. Plants use the nitrogen to make their structure.



### **ANIMALS**

Animals eat plant structures. Some Nitrogen gets used in animals as part of their structure. Some Nitrogen gets released as waste (as urine in mammals)



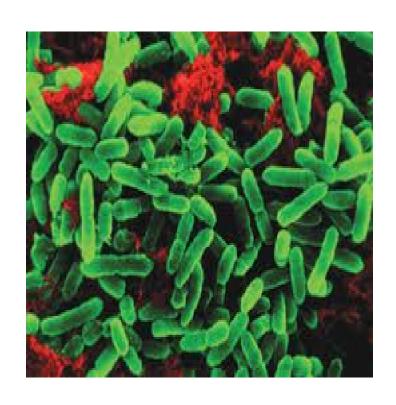
## **DECOMPOSERS**

Fungi and Bacteria break down dead plants and animals and put the Nitrogen back into the soil.



### NITROGEN RELEASING BACTERIA

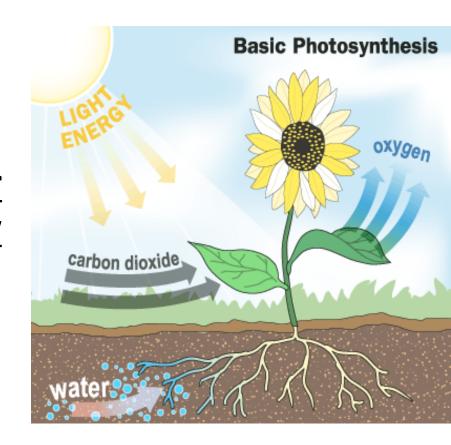
Other bacteria who live in soil will use the nitrogen and release N<sub>2</sub> back into the atmosphere



#### Cycles in Nature – Carbon Cycle Notes

#### The Carbon Cycle.

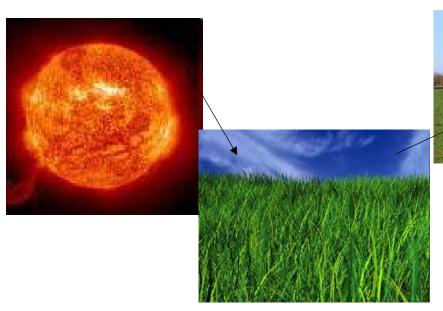
- All life on earth is based on carbon molecules.
- 1. During photosynthesis, plants use sunlight energy and water to turn CO<sub>2</sub> into stored energy (Sugar)



# 2. Humans/Animals eat plants and use the glucose/carbon for energy.



- 3. <u>Humans/Animals store some carbon in their structure</u>. (remember all life has Carbon)
- 4. <u>Humans/Animals release CO2 to the atmosphere as a product of respiration!</u> (remember all life does respiration)



## CARBON DIO



## 5. All living things die and decay, being broken down to Carbon!

If they are broken by another organism such as bacteria or fungi, some Carbon will be released back into the atmosphere as CO<sub>2</sub> due to the respiration process of those organisms.

But some carbon may remain in the soil and...

- 6. Over millions of years soil Carbon turns into fossil fuels (oil, coal)
- 7. Combustion (burning) of trees & fossil fuels releases carbon back into the atmosphere!













#### Talk about it..

 Why is burning Fossil Fuels a problem if it'll just go through the cycle?

Write your answer on the bottom of Carbon Cycle page

