

WASTE

IS

FOOD

The HOT COMPOST process transforms waste materials, like dead leaves and grass clippings, into nutrients for plants.

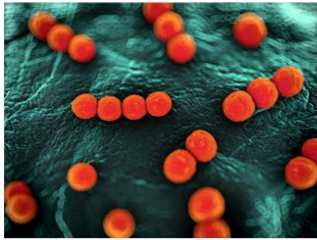
Composting = Recycling

Garden Ecosystem Energy Pyramid

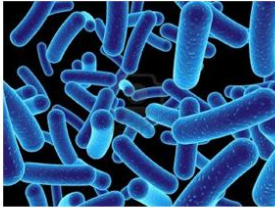
**Secondary Consumers:
Carnivores and Omnivores**



Decomposers:



**Primary Consumers:
Herbivores**



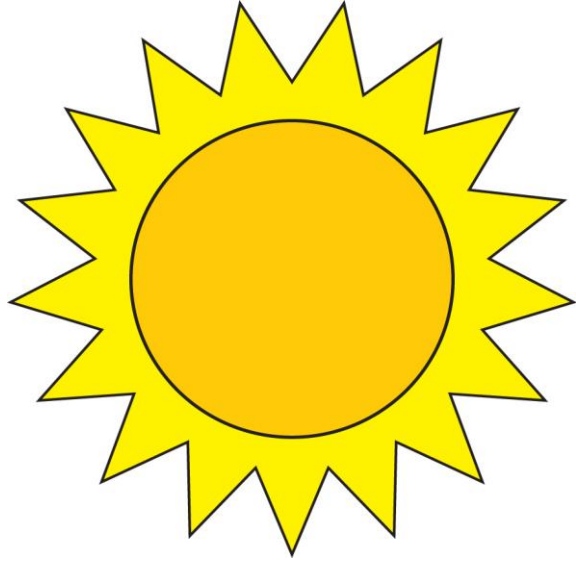
**Producers:
Plants**



SOIL

Plants are called PRODUCERS
because
plants make their own
food through

PHOTOSYNTHESIS

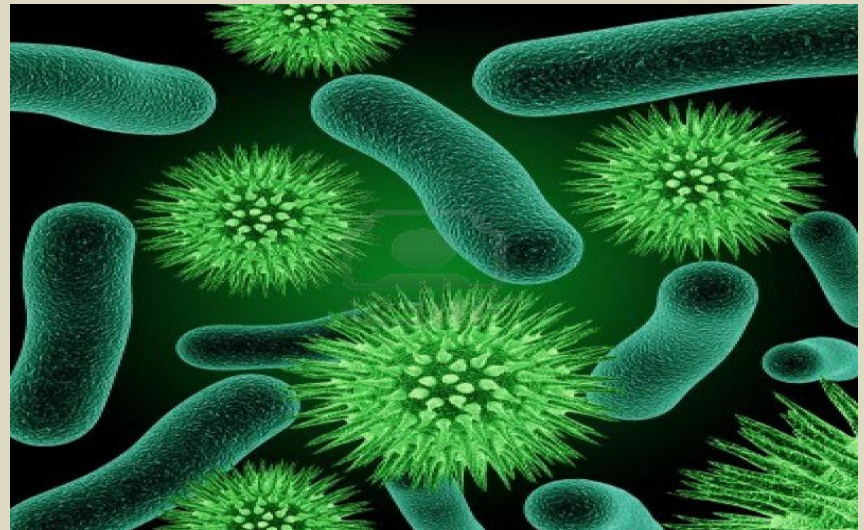
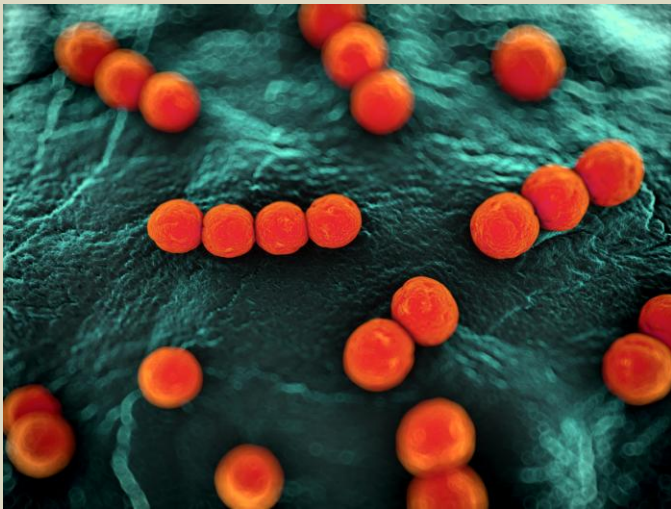


PHOTOSYNTHESIS

DECOMPOSERS recycle
nutrients from dead plants
and animals.

The waste from
DECOMPOSERS is soil
nutrients used by plants.

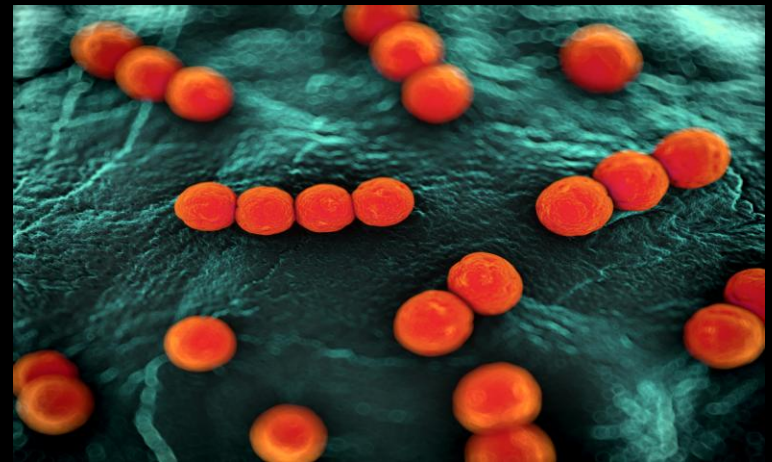
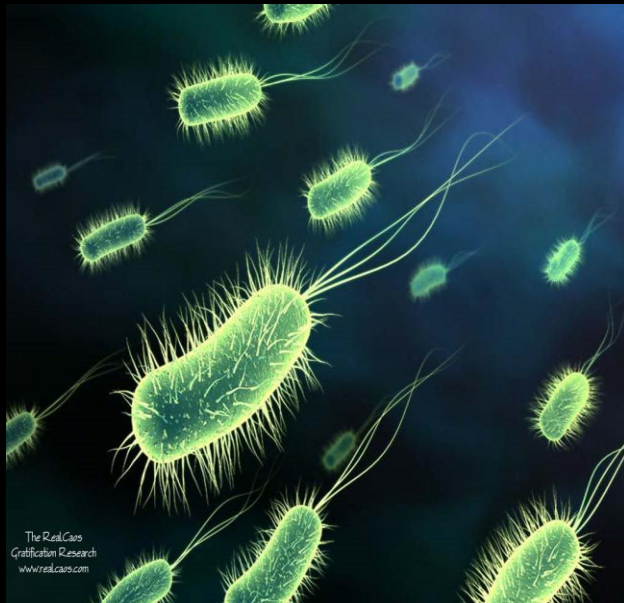
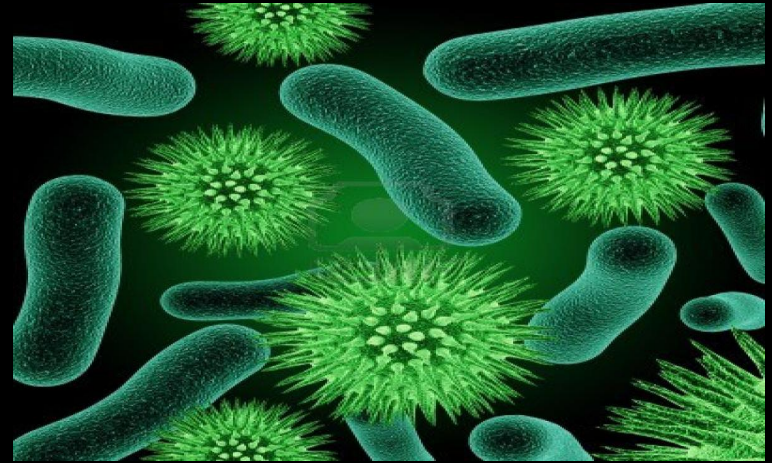
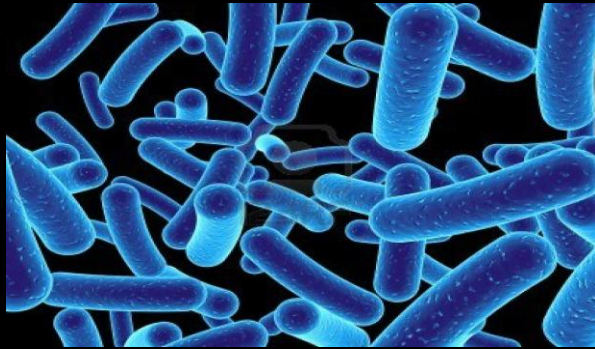
DECOMPOSERS



MICROSCOPIC DECOMPOSERS

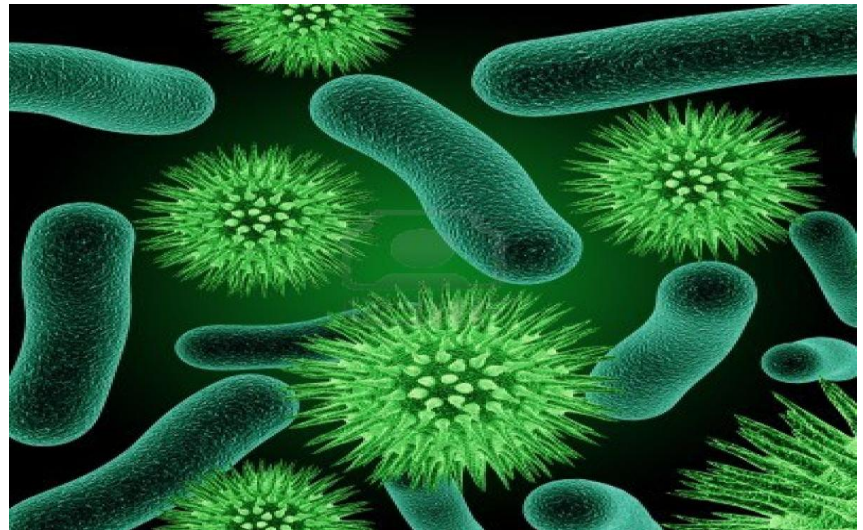
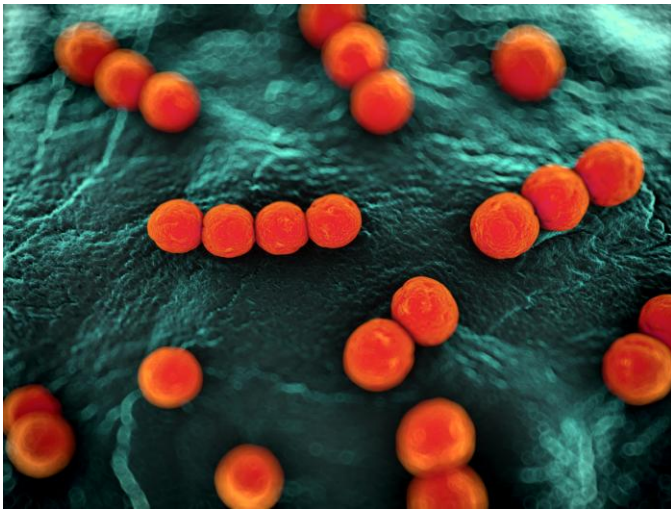


BACTERIA



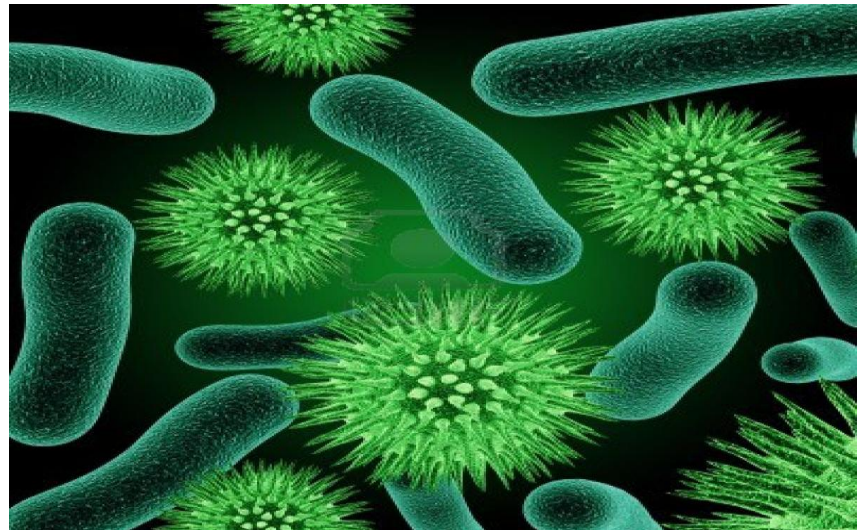
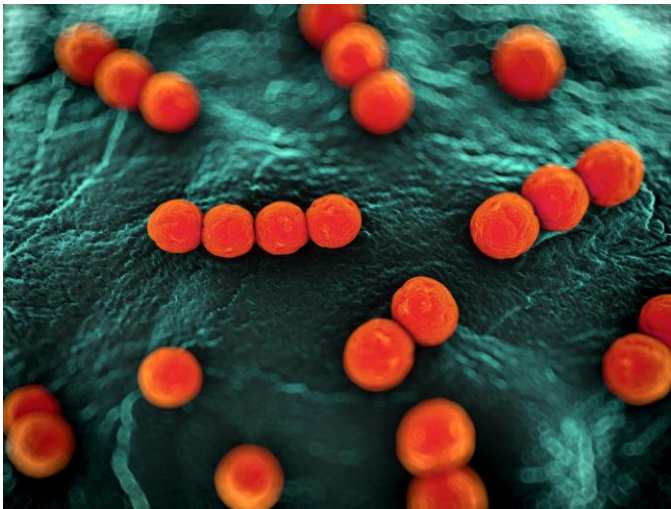
**When a plant dies and
falls to the ground, it
gets eaten by...**

DECOMPOSERS!



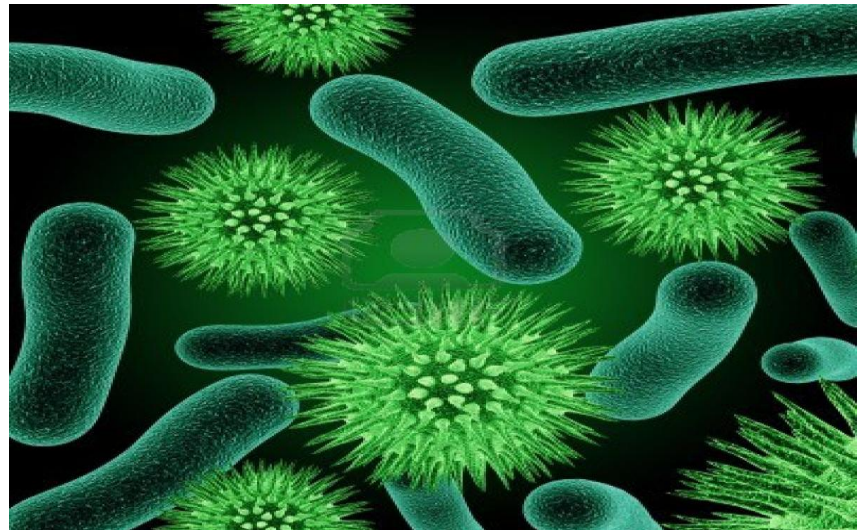
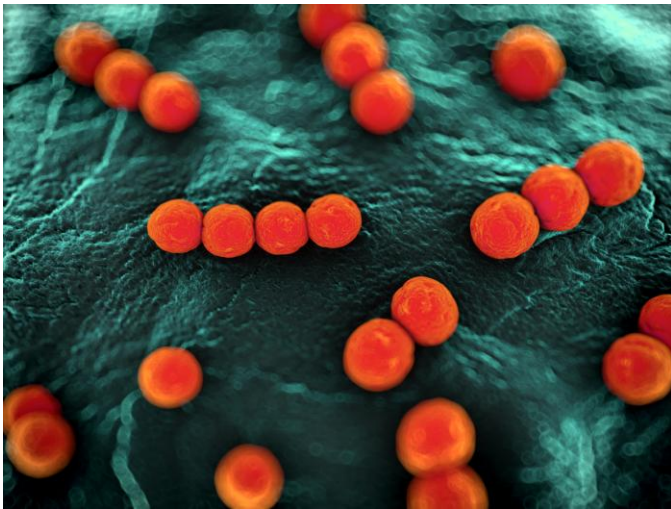
**When an animal poops,
the poop gets eaten by...**

DECOMPOSERS!



**When an animal dies
and is not eaten by
another animal, it gets
eaten by...**

DECOMPOSERS!!



Decomposers eat dead materials, digest them, and recycle the nutrients back into the soil.

HOW DO THEY DO THIS?

IF THEY EAT, THEY CREATE WASTE ...

(SOMETIMES CALLED POOP!)

THE WASTE FROM DECOMPOSERS IS
NUTRIENTS FOR PLANTS.

The waste created by decomposers is called:

-fertilizer

-compost

or

-soil nutrients

HOT COMPOSTING:
Feeding Bacteria and
Other Microscopic
Decomposers

If we cannot see the
bacteria and other
microscopic decomposers,
how do we know they are
there?

Temperature: The compost
pile heats up, sometimes
above 100 degrees
Fahrenheit!

A microscopic image showing numerous spherical bacteria, likely cocci, in shades of orange and red. They are scattered across a dark, textured background that appears to be a biological surface. Overlaid on this image is yellow text.

The heat is coming
from the bodies of the
bacteria and other
microscopic
decomposers!

Size (Volume):

The compost pile gets smaller as materials are eaten and broken down into soil nutrients

The image features a dark blue background with numerous green, rod-shaped bacteria. Each bacterium is covered in fine, hair-like flagella that radiate from its surface. The bacteria are scattered across the frame, with some appearing larger and more detailed than others. The overall effect is a dense field of microscopic life.

EATING and POOPING!

The questions we ask:

1. Did our compost piles heat up?
2. Did our compost piles get smaller from beginning to end?

Fertilizer and compost are
VITAMINS for plants!

