

# 5<sup>TH</sup> GRADE

## **Ecosystems**

Some of your classes already saw this lesson, but it is very important to understanding ecosystems, so watch it again if you'd like.

We have learned about the 4 different Earth systems - where they are, what their parts are and why they are important to us.

### ***View attachment Earth Systems - Biosphere***

As you can see, the Biosphere is a part of ALL the other Earth Systems. There are living things found in all areas (water, land, air)

Organisms are organized into communities called Ecosystems.

### ***View attachment Ecosystems***

Ecosystems can be hundreds or thousands of living and nonliving components living together. There are thousands of ecosystems on Earth – including small areas like the ecosystem of a particular tree to a large environment of a desert, island, mountain, seas, etc. The non-living physical characteristics of the ecosystem are what provide the commonality of the living things that live there.

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Look at this photo of a coral reef ecosystem.



- What makes this an ecosystem?
- What kind of living and nonliving parts make up this ecosystem?  
–don't just say fish. Be more specific.
- How do you think all these organisms (living and non) interact with each other?
- What changes could happen in this ecosystem to make it not be in equilibrium anymore? (shortage of food, pollution, overfishing, natural disasters, etc)
- How can this be altered or fixed?

To find out how one change in an ecosystem can make a big impact, watch the following video about the reintroduction of wolves into Yellowstone after they were away for 70 years. (I love this video!!)

How Wolves Changed the River -

<https://www.yellowstonepark.com/things-to-do/wolf-reintroduction-changes-ecosystem>

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- What surprised you?
- In what ways did the ecosystem of Yellowstone park change when the wolves were not there?
- What about when they were back?
- What could be some drawbacks to re-introducing the wolves?
- Do you think Yellowstone is better now or then?

There are 3 different 'players' in every ecosystem and they interact together

View StudyJams video 'Ecosystems'.

<http://studyjams.scholastic.com/studyjams/jams/science/ecosystems/ecosystems.htm>

**Producers:** Organisms that make their own food. What organisms fall into this category? (plants, trees, berry plants, algae, etc) What do they need to produce their own food? (sun water and carbon dioxide)

**Consumers:** Organisms that do not make their own food, but eat other organisms for food. They are dependent on other organisms. Consumers can be broken down into 2 additional categories depending on what they eat. Ideas? carnivores (meat eaters) and herbivores (plant eaters) Both are consumers.

**Decomposers:** Bacteria - they break down the dead plants and animals and turn them into minerals to help things grow.

## COMING UP

What's a Food Chain and a Food Web?