



**How does the sun affect
everything in an
ecosystem?**

What roles could this dragon have in its ecosystem?





List some things found in a forest ecosystem.





**Explore
Here!**



Did you see any of these?

Producers

Can create their own food

Consumers


Feeds on other organisms
(first level, second level, ect.)

Decomposers

Breaks down biotic waste

Types of transfers

Food chains
Food webs
Energy pyramids



Video

While watching, think about:

1. How does the sun starts everything?
2. What are the different types of consumers?
3. How does predator and prey fit into this?





Research Time! . .



Producer

Find a producer that no one knows about.




Consumer

Find a consumer that lives in a different ecosystem and eats insects.



Decomposer

Find a decomposer that is found in many ecosystems but isn't seen by humans.





Roles in an Ecosystem

So organisms are in these set roles...

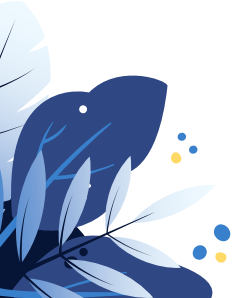
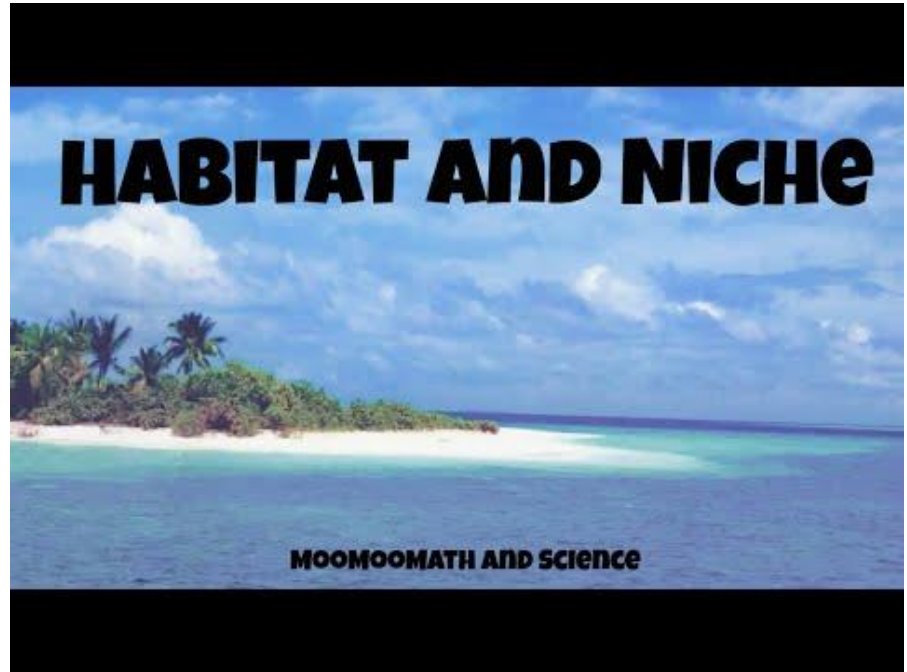
Niche - the role an organism plays within an ecosystem

This is different from a habitat.

Video

While watching, think about:

1. What is the difference?
2. How can you explain this to someone else?
3. What is YOUR habitat and niche?





Game Time!

On the next Slides, there will be pictures shown. Decide if it is an organism, a habitat, or a niche.

On your whiteboard write:

O for organism

H for habitat

N for niche

I'll wait while you grab your whiteboard (or some paper).





Game Time!

On the next Slides, there will be pictures shown. Decide if it is an organism, a habitat, or a niche.

On your whiteboard write:

O for organism

H for habitat

N for niche

As soon as you have written it down, show your board!





Organism, Habitat, or Niche?





Organism, Habitat, or Niche?





Organism, Habitat, or Niche?





Organism, Habitat, or Niche?





Organism, Habitat, or Niche?





Organism, Habitat, or Niche?





Organism, Habitat, or Niche?





Organism, Habitat, or Niche?





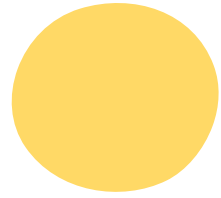
Organism, Habitat, or Niche?





Organism, Habitat, or Niche?





**How did you
do in the
game?**





●● Vocab Review

Habitat vs Niche

Roles of Organisms

Types of Consumers



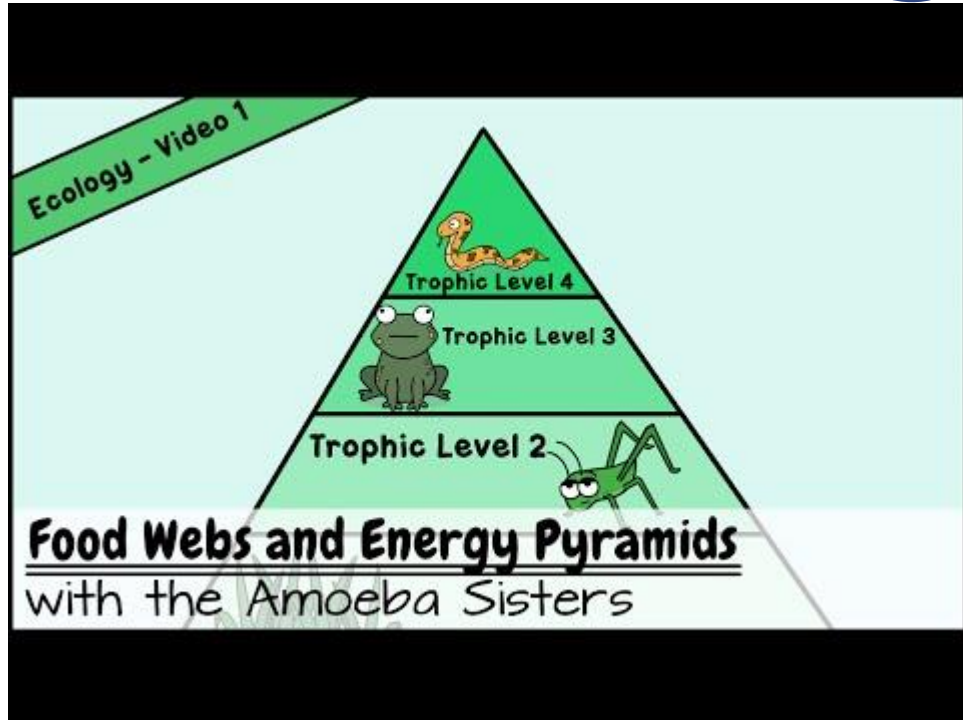
**What is more specific: a
food chain or a food web?**



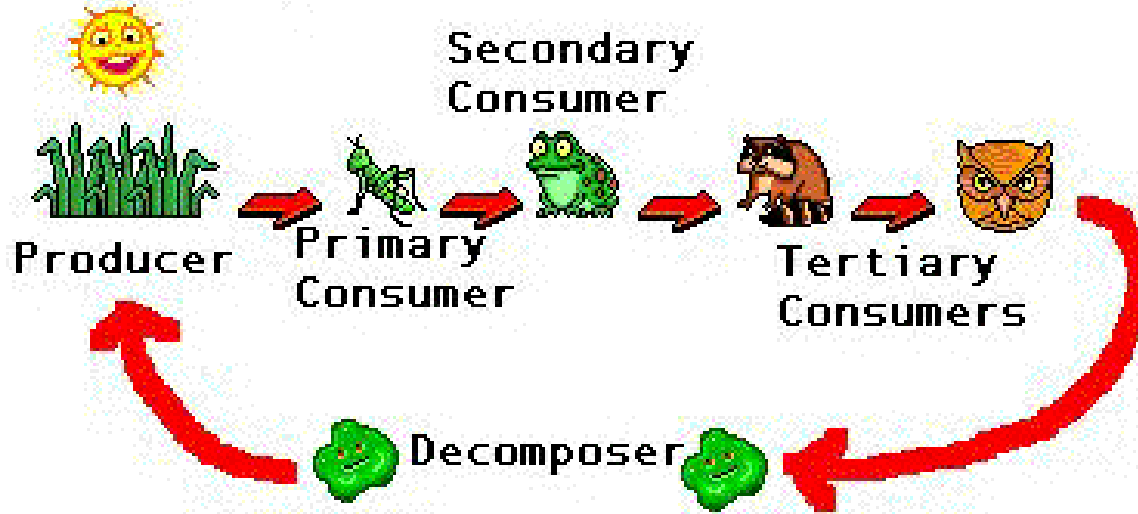
Video

While watching, think about these two questions:

1. What are the similarities and difference between the models?
1. What is accurate and not accurate about the models?

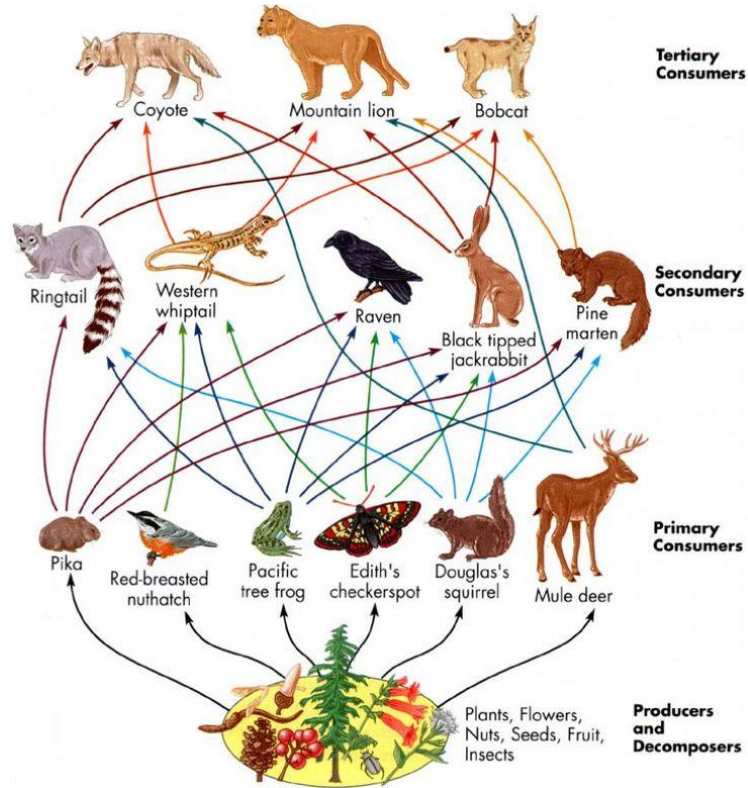


Food Chain



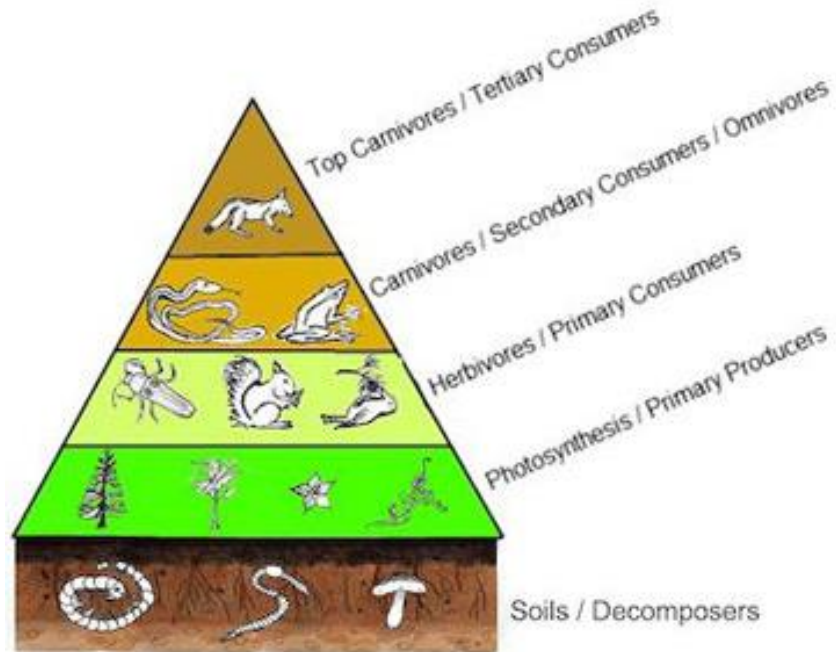



Food Web





Energy Pyramid






Modeling Energy Movement



● Movement of Energy

- Producers
- Consumers
 - primary (first level)
 - secondary (second level)
 - tertiary (third level)
- Decomposers

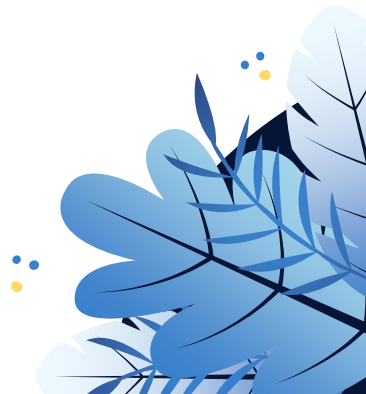
Questions:

1. How do the arrows show the movement of energy?
 2. What percentage of energy is carried up to the next level in an energy pyramid?
 3. How can these models help humans?
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In Action

While watching the next video, create a food chain, food web, or energy pyramid on your whiteboard.

I will wait while you get your whiteboard...






Assignment

Using Drawings, create a food web based on an ecosystem you enjoy.

There should be at least fifteen organisms listed and it should be a food WEB and not a food CHAIN. You should include yourself in this food web as well.

Remember, your arrows should point to what is getting the energy (AKA: what is doing the eating) and not what is being eaten.

Example: scorpion ---> grasshopper mouse




⦿: **What questions do you have?**





Done early

Done early? Check out these games about food chains and webs!

- <https://plattebasintimelapse.com/ed/chapter/activities-food-chain-food-web/>
 - <https://www.cserc.org/sierra-fun/games/build-food-chain/>
 - <https://www.edumedia-sciences.com/en/media/746-building-a-food-web>
- 

Review

In your brain, come up with definitions and pictures of each of the vocab words listed.

- food chain
- food web
- energy pyramid
- predator
- prey
- habitat
- niche
- consumer
- producer
- decomposer

