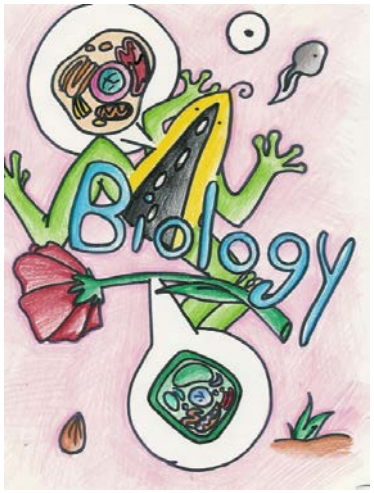
let's talk science partnership program

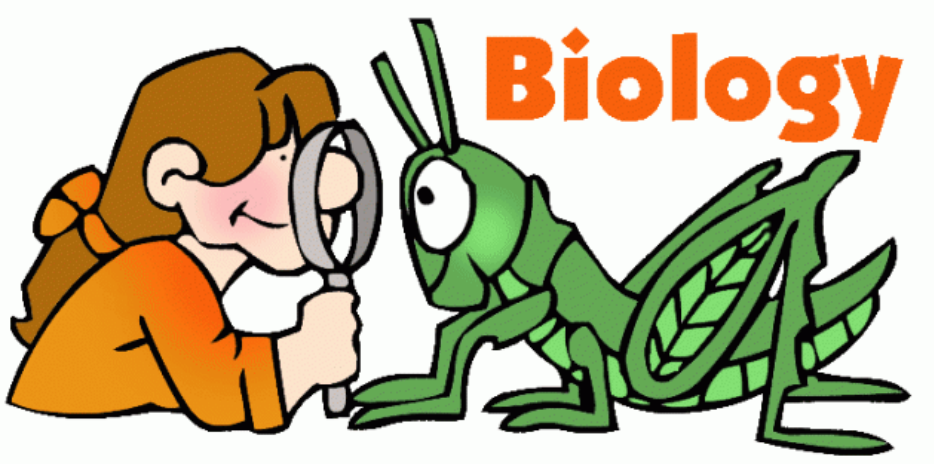
Budding Biologists

Agenda

let's talk science

- Introduction
- What is Biology?
- Hungry Birds!
- How do birds eat?
- Insect or Not an Insect Activity
- What is an Ecosystem? Why are birds and insects important in an Ecosystem?
- Ecosystem Tumble
- Conclusion

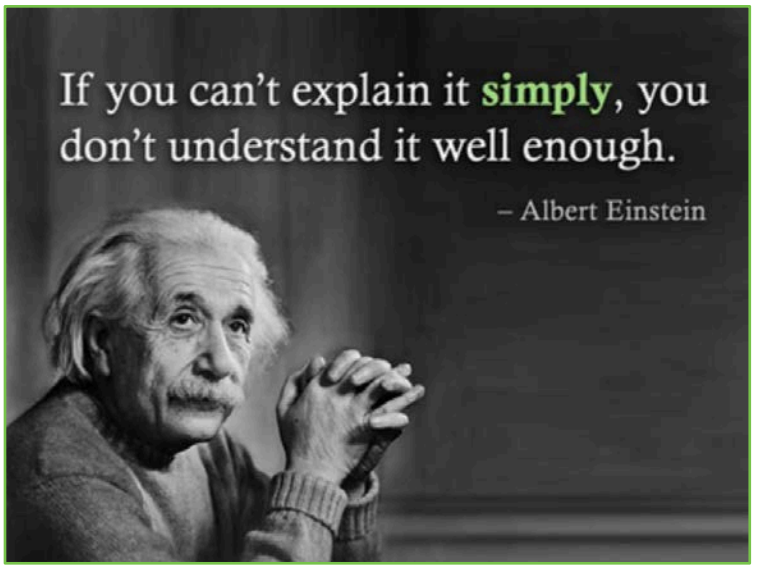




Introduction

let's talk science

- What do scientists do?
- Where are they?
- What types of scientists are we?
- How does this type of science affect you?

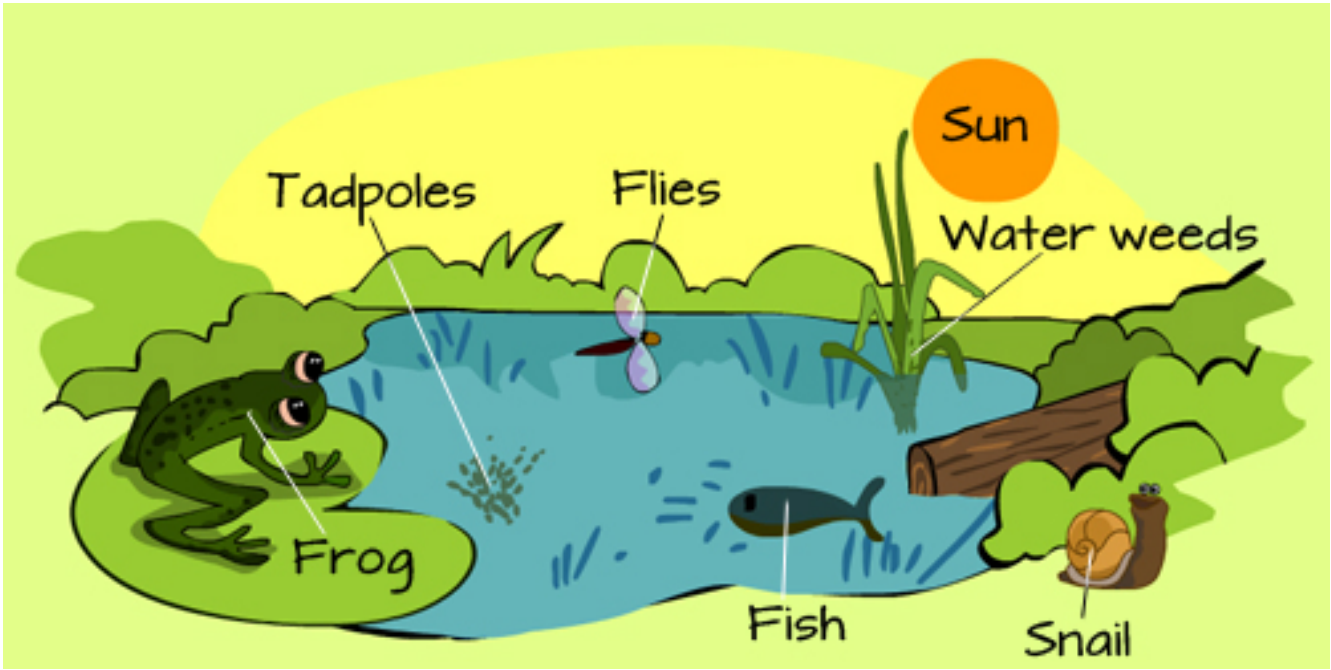


What is Biology?

- Study of LIVING things
- How can you tell something is "living"?
  - Made up of an organized **cell** system
  - Needs energy to survive
  - Able to reproduce
  - Able to grow
  - Able to move
  - Able to breathe
  - Able to respond and adapt to the environment

What is Biology?

- What do living things need to survive?
  - Food
  - Water
  - Shelter



Hungry Birds!

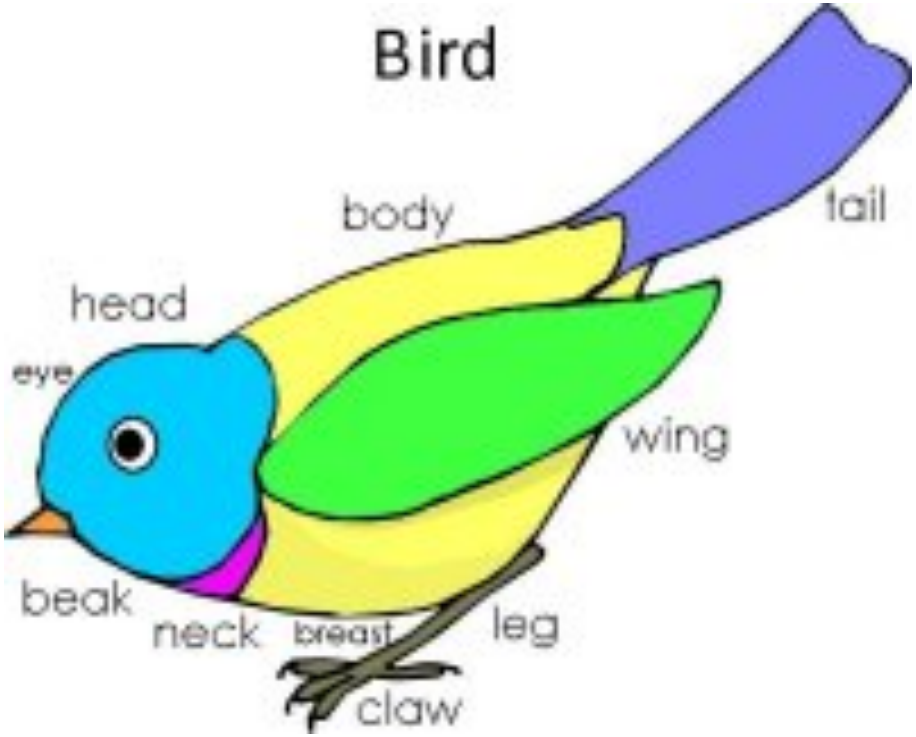
- Count off 1, 2, 3, 4
- All **1**'s will be **birds**
- 2's, 3's, and 4's are **RESOURCES** (food, water, shelter)
- Practice the signs for each resource
- Line up in 2 lines
- Observe what happens to the bird population and availability of resources

Hungry Birds!

- Review the 3 things that birds need to survive
- What caused the number of birds to grow in the beginning of the game?
- What caused them to die later on?
- Why is this important?

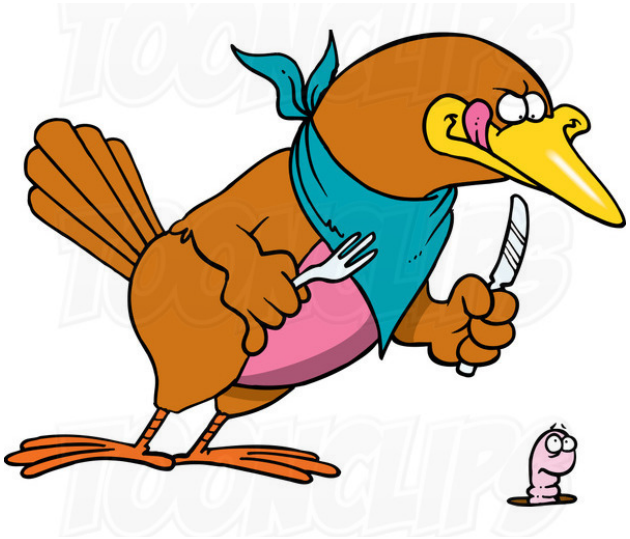
Hungry Birds!

- What are the different parts of a bird?



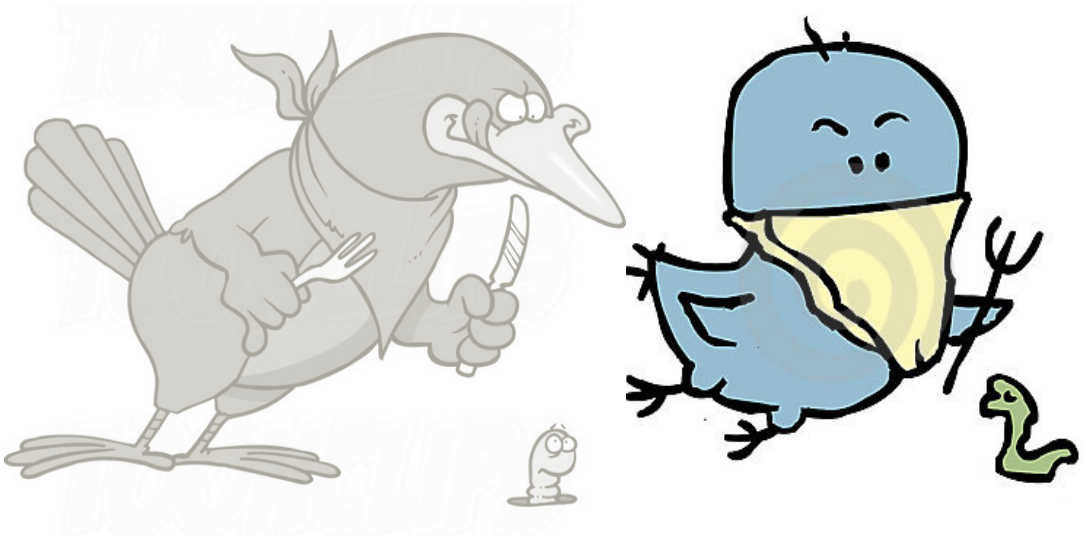
Hungry Birds!

- What part do they use to eat?



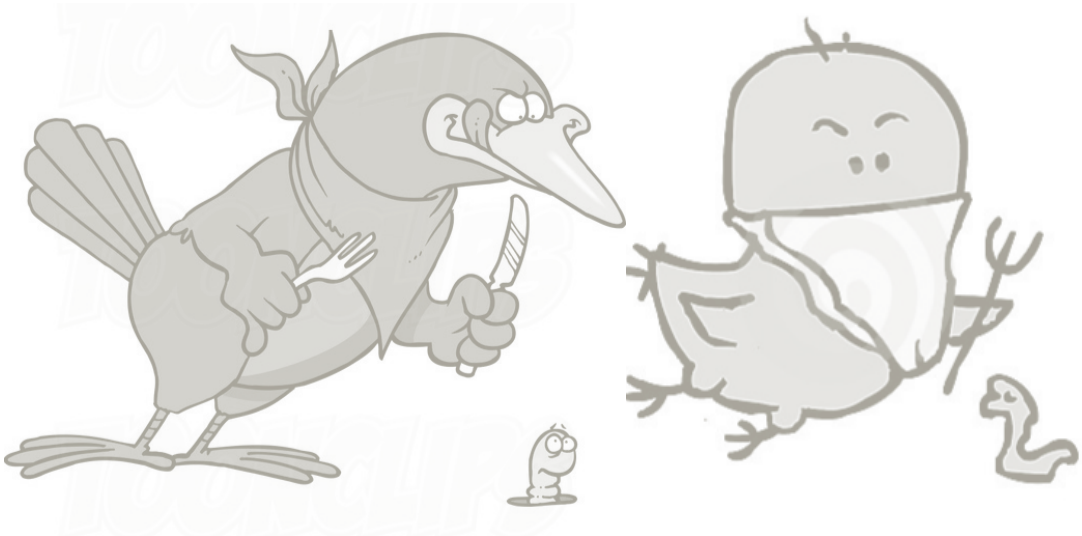
Hungry Birds!

- What part do they use to eat?



Hungry Birds!

- What part do they use to eat?



Hungry Birds!

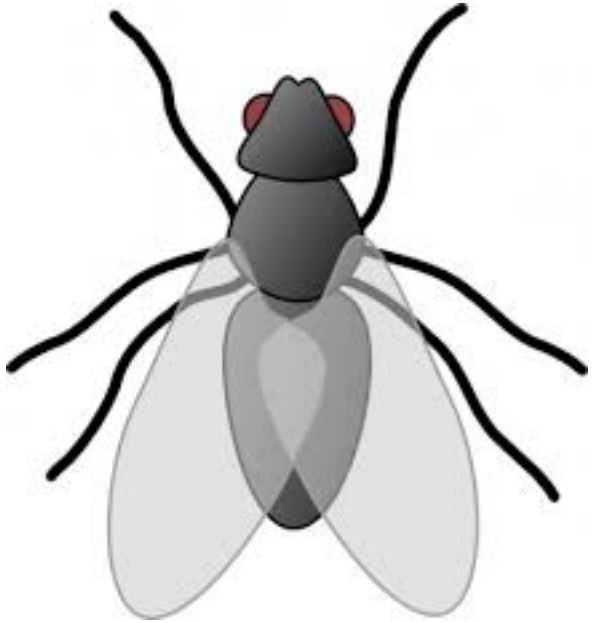
- Birds use their **beaks** to eat.

Insect or Not an Insect

- Sort the cards given.
  Insect or not?

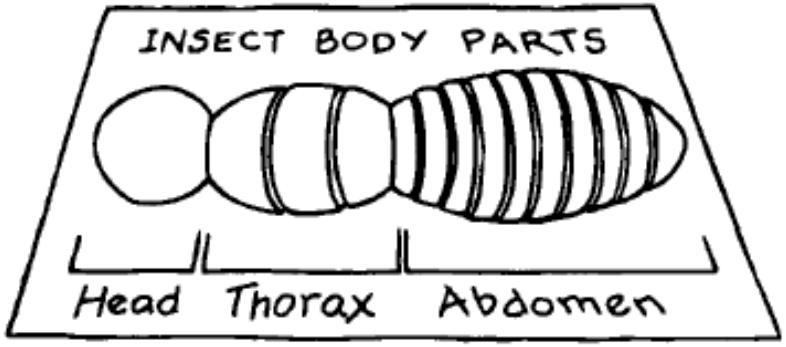
Insect or Not an Insect

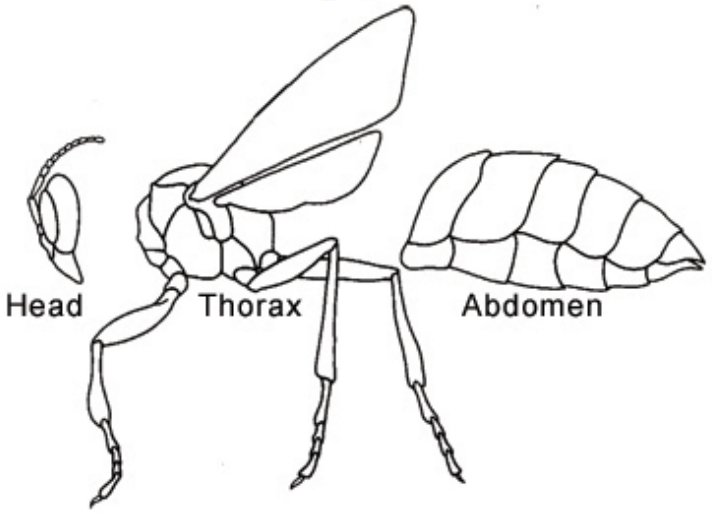
- What is an insect?
- How can you tell?
  - 3 body segments
  - 6 legs (3 pairs)
  - Antennae (mostly)
  - 1 or 2 pairs of wings (some have none)

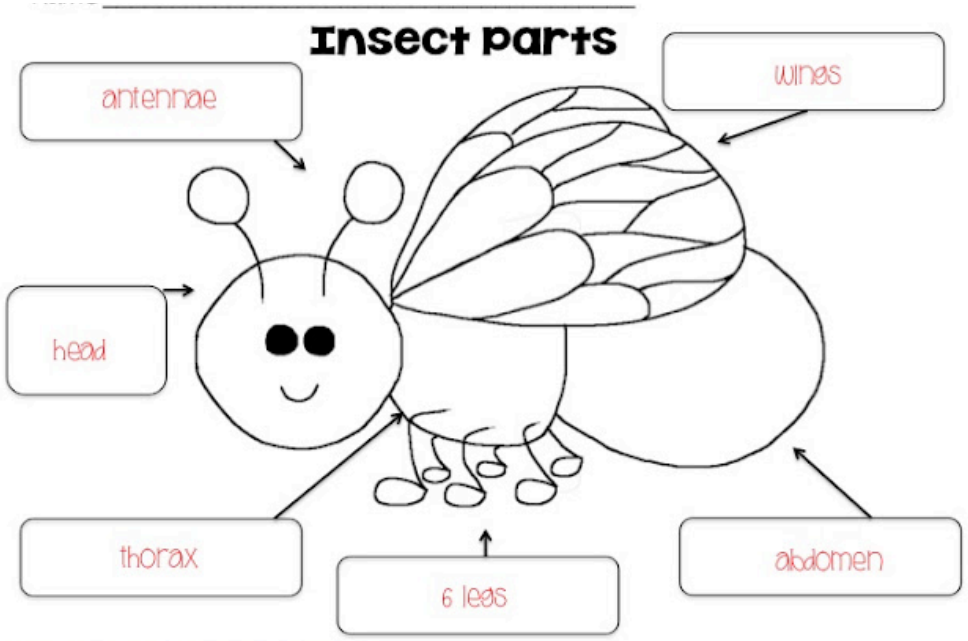


let's talk science

Parts of an Insect





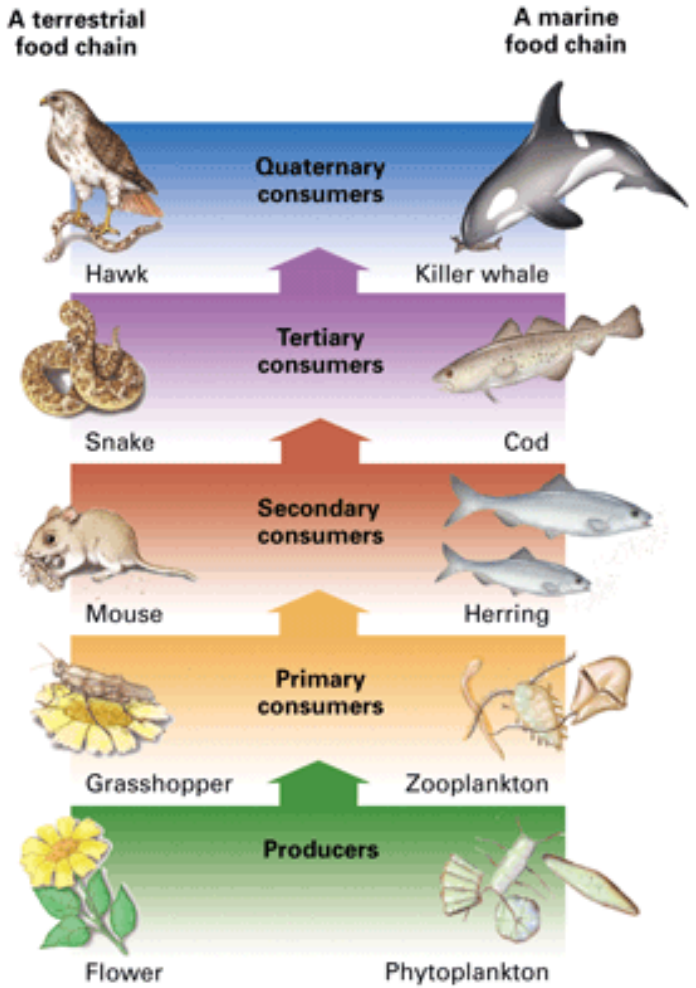


How are birds and insects connected?

let's talk science

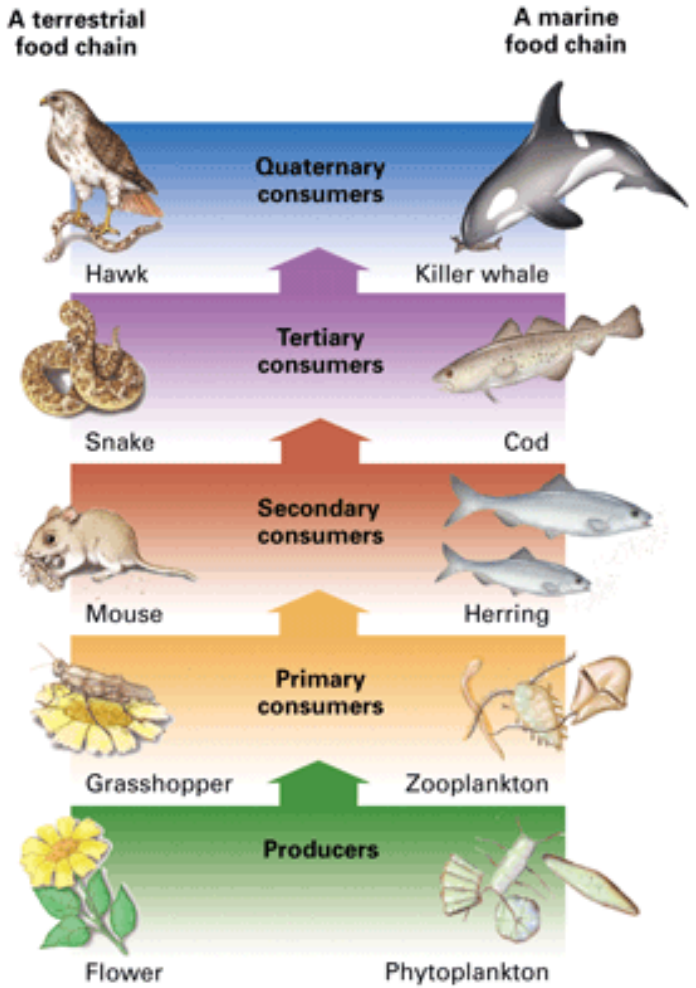
What is an Ecosystem?

- What are the different levels in an ecosystem?
- Why is it important to have birds and insects in the ecosystem?



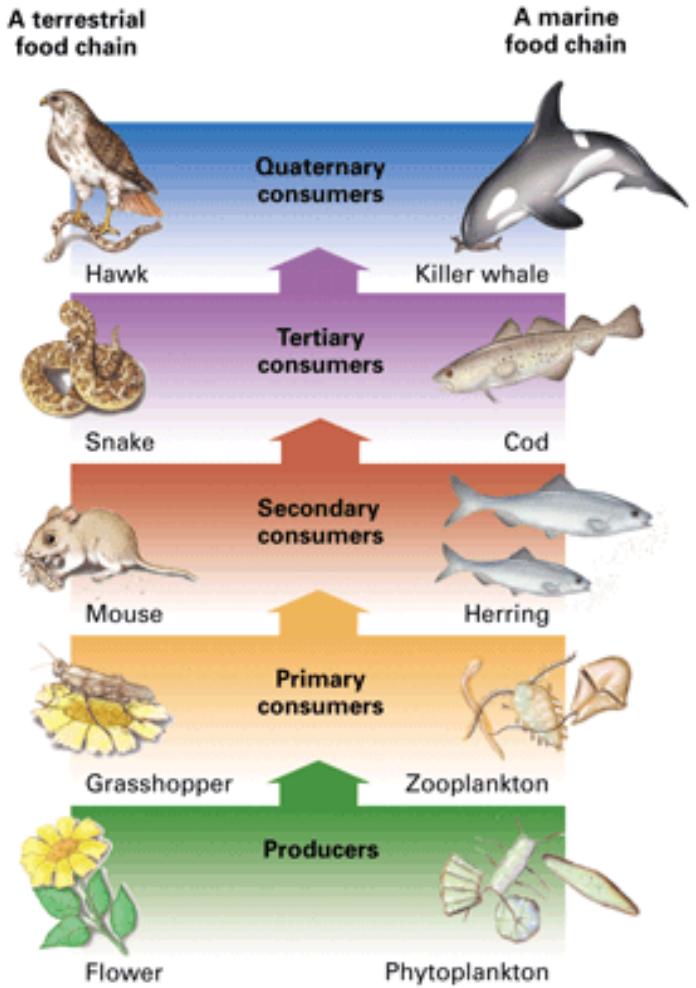
Ecosystem Tumble

- Divide into groups of:
  - Plants
  - Herbivores
  - Carnivore
- In your card, write/draw a plant/animal that you like
- Fold your cards along the lines and tape them to become rectangular prisms



Ecosystem Tumble

- What happens when a lot of plants/animals are taken away from the different levels of the tower?
- How do you compare this activity to what happens in different, actual ecosystems?
- Can you think of an example?



Conclusion

- What is Biology?
- What do Biologists do/study?
- What are the characteristics of living things? What do they need to survive?
- What are the different parts of a bird? How do they eat?
- What is an insect? What are the different parts of an insect?
- What is an ecosystem? Why is it important to keep the balance in the ecosystem?

Thanks for having us!