



Read Lesson 1.1 to find the information to complete this section.

1. What do we call any living thing? ORGANISM
2. What do we call the place where an organism lives? HABITAT
- ★3. What 4 things does it provide?
FOOD WATER SHELTER SPACE
4. Give a definition and at least 3 examples for each.

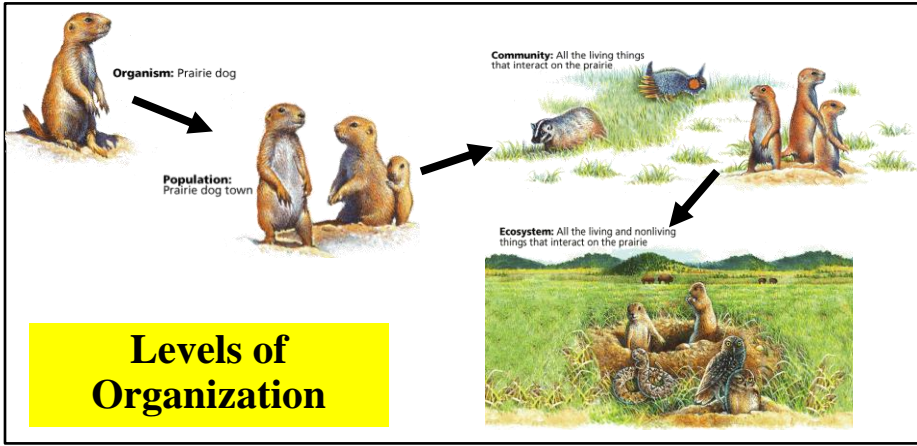
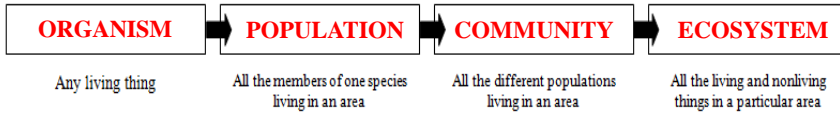
Definition

Examples

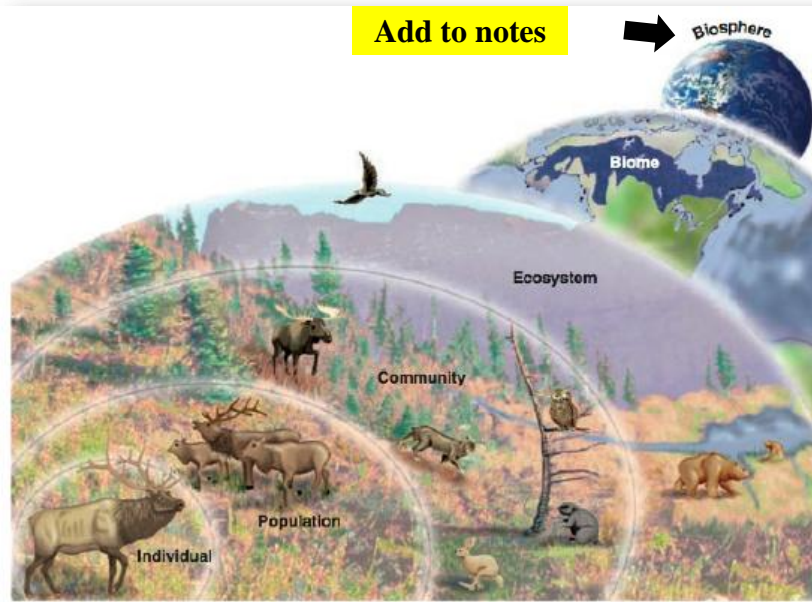
Biotic	Parts of a habitat that are living or were once living	Plants, animals, worms, & bacteria
Abiotic	The nonliving parts of a habitat	Sunlight, soil, temperature, oxygen, & water

5. How are ecosystems organized? List the groups from smallest to largest.

BIOSPHERE



Another version of the levels of organization. How does this compare to the previous one?



Read Lesson 1.2 to find the information to complete this section.

1. Explain how the birth rate and death rate can change the size of a population in each situation.

Birth rate > Death rate = Population size would increase.

Birth rate < Death rate = Population size would decrease

Birth rate = Death rate = Population size would stay the same.

2. What is the difference between immigration and emigration?

Immigration means moving into a population, while emigration means leaving a population.

Think About It ... Give an example for each.

Think About It: Use the graph to answer these questions.

1 – In what year was the rabbit population the largest?

YEAR 4

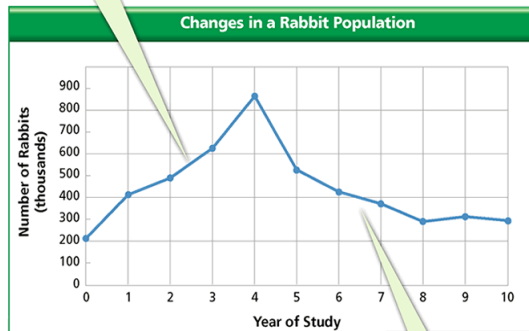
2 – In what year was the rabbit population the smallest?

YEAR 0

3 – From year 6 to year 9, did the population increase or decrease?

**DECREASED
OVERALL**

From Year 0 to Year 4, more rabbits joined the population than left it, so the population increased.



From Year 4 to Year 8, more rabbits left the population than joined it, so the population decreased.



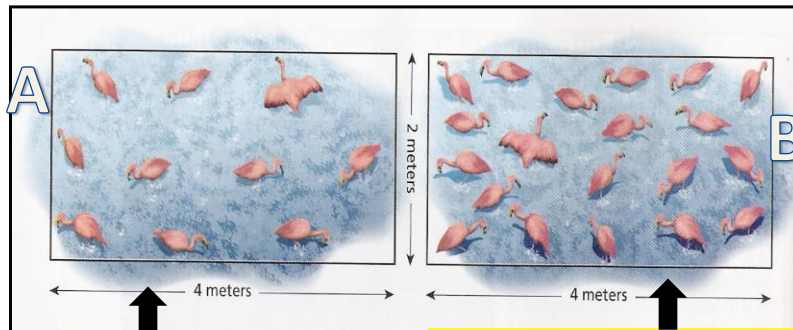
Population Dynamics

3. What is population density?

The number of individuals in an area of specific size

Think About It: What is the population density of the flamingoes in each section?

$$\text{Population Density} = \frac{\text{Number of Individuals}}{\text{Unit Area}}$$



$$10/8 = 1.25 \text{ flamingoes/m}^2$$

$$20/8 = 2.5 \text{ flamingoes/m}^2$$

4. Explain how limiting factors can affect population growth using a specific example.

Climate

- Not enough rain will limit the types of plant life in an area and affect the types of animal life that can survive.
- Temperatures that are too warm or too cold will affect the survival of plants and animals.
- Severe weather (flood, tornado, etc.) may destroy habitats and/or kill organisms

Space

- Not enough space for nesting sites or raising young will limit animal populations
- Not enough space for plants to grow properly will limit plant life, which limits the amount of food for the animals.

5. What is carrying capacity?

It is the largest population an area can support.

What did you add to your notes as you watched the videos?

Generalist vs. specialist species

What does this mean? Give examples.

Pigs would be generalist species since they eat a lot of different things. A panda would be a specialist species since it eats only bamboo.

Which ones do we know?

Write a definition and add examples (words or drawings) for all the ones with stars.

For Monday ...

Read pages 12-18 in the textbook and add to your notes.

(Bottom page #s are 8-14)

Ecology Unit Vocabulary

★ <u>ABIOTIC</u>	<u>DECOMPOSER</u>	★ <u>NICHE</u>
<u>ADAPTATIONS</u>	★ <u>ECOLOGY</u>	★ <u>ORGANISM</u>
<u>BIODIVERSITY</u>	★ <u>ECOSYSTEM</u>	<u>PARASITISM</u>
★ <u>BIOTIC</u>	★ <u>EMIGRATION</u>	★ <u>POPULATION</u>
★ <u>CARRYING CAPACITY</u>	<u>FOOD WEB</u>	<u>POPULATION DENSITY</u>
<u>CLIMATOGRAM</u>	★ <u>HABITAT</u>	<u>PREDATION</u>
<u>COMMENSALISM</u>	★ <u>IMMIGRATION</u>	<u>PRODUCER</u>
★ <u>COMMUNITY</u>	★ <u>LIMITING FACTOR</u>	<u>SUCCESSION</u>
<u>CONSUMER</u>	<u>MUTUALISM</u>	<u>SYMBIOSIS</u>

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Ecology Unit Vocabulary

<u>ABIOTIC</u> ★	<u>DECOMPOSER</u>	<u>NICHE</u> ★
<u>ADAPTATIONS</u>	<u>ECOLOGY</u> ★	<u>ORGANISM</u> ★
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For Monday ...

Read pages 12-18 in the textbook and add to your notes.

(Bottom page #s are 8-14)

Which vocab words have we discussed in class?		

Read Lesson 1.3 (pages 18-27) to find the information to complete this section.

Process by which an individual organism becomes better suited to a specific environment.

1. What is natural selection?
2. The behaviors and physical characteristics that allow organisms to survive are called ADAPTATIONS.
3. The role an organism plays in its environment is called its NICHE.
4. COMPETITION is the struggle between organisms to survive as they share space and resources.

Owl & Mouse

5. Give an example of a predator and its prey. **Coyote & Rabbit**
Flycatcher & Insects

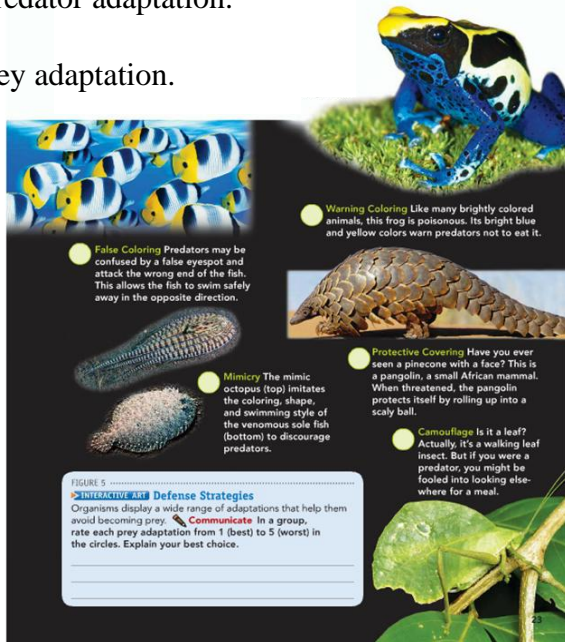
6. Give an example of a predator adaptation.
7. Give an example of a prey adaptation.

What adaptations did we discuss during the arthropod unit or Corwin video that would answer these questions?

Are there adaptations that could be used for both questions?

**Crypsis =
Prey uses this to hide from predators and avoid being a meal**

Predators use it to hide from prey to catch them.



8. **SYMBIOSIS** is any relationship in which two species live closely together and at least one of the species benefits.

9. Identify each symbiotic relationship. **Add smiley faces to notes**

😊😊 **MUTUALISM** - Both species benefit.

😊😞 **PARASITISM** - One species benefits and the other is harmed.

😊😐 **COMMENSALISM** - One species benefits and the other is not helped nor harmed.



1. Glue the chart on page 18 FAF Bottom (you may want to glue it sideways to see the list on the back).
2. Organize the list of Good Buddies into the correct columns based on the descriptions provided.
3. We will do the first few together.



Barnacles create home sites by attaching themselves to **whales**, but it does not hurt them.

Good Buddies

Use the class notes to help you fill in the boxes with pairs of organisms that match each type of symbiosis.

You must list the names for BOTH organisms and use faces to indicate how it is affected.

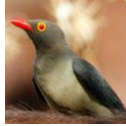
- 😊 = Benefited
- 😐 = Not Affected
- 😞 = Harmed

	Commensalism	Mutualism	Parasitism





Mistletoe extracts water and nutrients from a **spruce tree** and may kill it.



Oxpeckers feed on the ticks found on a **rhinoceros**. The oxpeckers get a meal and the rhinoceros has the ticks removed.



Remoras attach themselves to a **shark's** body. They then travel with the shark and feed on the leftover food scraps from the shark's meals. The remoras help the shark by eating the parasites on the shark.

Go to mrstomm.com → 8th Science to find the rest of the examples you need to complete the chart. [Good Buddies Examples](#)