Competition –Another Relationship

Engage

Watch the video with two pet rats from
https://www.youtube.com/watch?app=desktop&v=hoiHghTLCo4

What do you notice?

What do you wonder?

Explore

Who Gets the Most?

Materials: brown paper lunch bag per class, Fruit Loops cereal, paper towel, plastic zip-lock bag per group, timer

What To Do:

1. You will be conducting two tests to compare interactions in ecosystems.
2. You teacher will bring around a brown lunch bag that is filled with Fruit Loops cereal.
3. One student from each group will reach into the bag without looking and carefully remove a handful of cereal. Place the cereal on the paper towel.
4. Count the number of each color drawn from the bag and record the information in the data table below under "Inside the classroom." Do not count broken or crushed pieces.
5. Find the total number you collected.
6. Place the cereal back inside the bag.
7. Your teacher will take you outside to a grassy area and scatter all of the cereal.
8. You will be given a plastic zip-lock bag for your collection.
9. Your group will have one minute to collect the resources from the environment. Do not push or take resources from other students.
10. Return to the classroom and count your cereal.
11. Combine your numbers with your group and place them in the data table under "Outside". Find the total.

	Blue	Orange	Green	Red	Yellow	Purple	Total
Inside							
Outside							

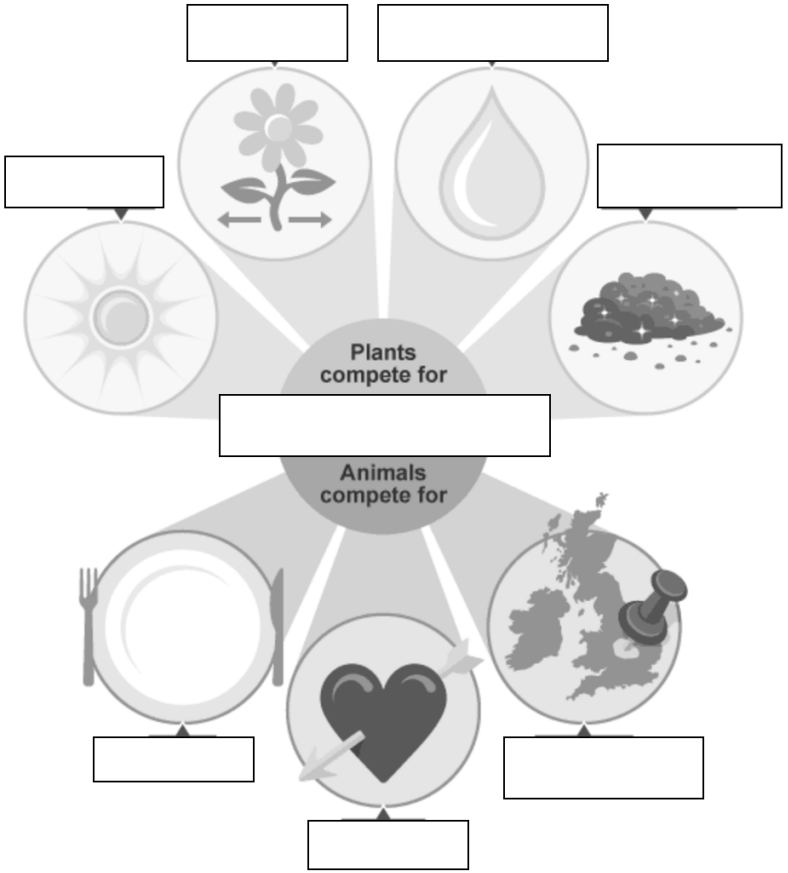
Questions:

1. What was the total for the Inside? _____
2. What was the total for the Outside? _____
3. Why do you think they are different? _____

_____

Explain

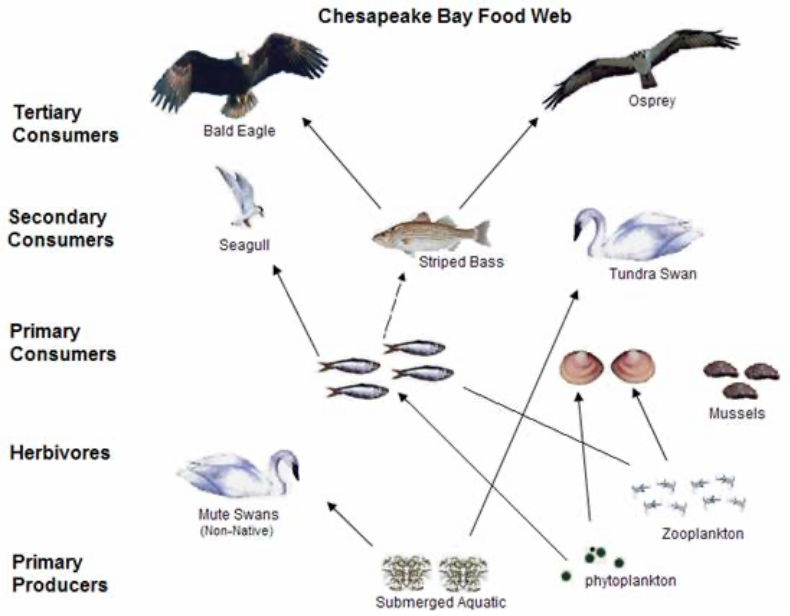
1. Place the title of the diagram below in the center. Title it Competition.
2. Work with your group to determine what each of the pictures represent.
3. Fill in the boxes.
4. Double check with your teacher for the answers.



Question:

1. What were you competing for in the previous activity? _____

Elaborate



Look at the Food Web and answer the questions below.

1. What animals are competing for Phytoplankton and

Zooplankton? _____

2. What animals are competing for submerged aquatic

plants? _____

3. What animals are competing for the striped bass?

_____

4. Mute swans are the most aggressive type of swans and tundra swans can fly the farthest. Which type of swan would survive if many of the aquatic plants were killed by pollution?

_____

Watch the video “How the Strangler Fig Got its Name” at https://www.youtube.com/watch?v=B4XoYONdtb4

On the lines below describe how the strangler fig competes for sunlight.

Name _____ period ____

EXIT TICKET

Competition

Bird	Feeding Habits	Diet
Great blue heron	Usually stands still in the water near the edge of the pond, striking quickly at prey with its sharp beak	Fish, amphibians, reptiles, insects, small mammals, small birds
Mallard	Tips upside down to feed on underwater plants and seeds; picks up small prey and bits of food near the edge of the pond	Plants, insect larvae, seeds, earthworms, snails, freshwater shrimp
Pied-billed grebe	Dives in open water to find food on the bottom of the pond	Fish, crayfish, insects
Great egret	Wades or stands still in the water near the edge of the pond to hunt	Aquatic invertebrates, small fish, insects, amphibians, reptiles

1. Which of the birds in the chart above will compete with each other?

A. The Great Blue Heron and the Mallard
B. The Great Blue Heron and the Pied-bill grebe
C. The Great Blue Heron and the Great egret

2. What resource are they in direct completion for?

A. Food
B. Space
C. Water

3. Black walnut trees produce a nontoxic chemical that becomes highly toxic when it is exposed to air or soil. How does this chemical help black walnut trees compete with plants growing nearby?

A. By attracting herbivores to the other plants
B. By suppressing the growth of the other plants.
C. By limiting the amount of water to other plants