



“I Have, Who Has?”

An Interactive Vocabulary Game

Eco-Comparisons Vocabulary
Grades 4th-8th

Introduction:

Below is a collection of cards that connect to the Eco-Comparisons Program for 4th-8th grade students. Each set of Cards incorporates the vocabulary and applies it within a different ecosystem in The Morton Arboretum.

Activity Goal: Students will become familiar with the relationships between organisms in an ecosystem and how their interactions are interconnected. Students will practice active listening skills in order to correctly identify and match their cards within their group.

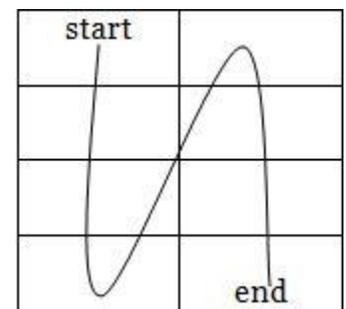
Grade Level Suggestion: Grades 4th-8th

Time Frame: 5-8 minutes per set of cards. If utilizing all 3 sets of cards- 20-25 minutes.

Materials: 1 set of each ecosystem’s cards, a teacher key, Vocabulary list is also available online below the corresponding program, or use a glossary

Set-Up (10-15 minutes):

1. Organize students into 3 groups of 8 students. For this activity if you have more than 8 students in a group they will need to share cards. Do not make “extra cards” for a group of 9 or 10.
2. Make 2 copies of pages 2-4
3. 1 copy of pages 2-4 will serve as your key. The other copy of pages 2-4 will serve as your sets of cards
4. Cut apart 1 copy of page 2, 3 and 4 to create 3 sets of different cards. (1 Meadow, 1 Woodland, 1 Wetland).
5. Shuffle each set of cards individually. (DO NOT intermix the sets).
6. To set up your teacher’s key draw an arrow down the right hand column and back up to the top of the left hand column. Then continue the arrow back down to the bottom of the left hand column. See Figure 1.
7. This arrow will dictate the order that the cards should be read by each students. Students will use the clues on the card to determine when to read their card.



(Figure 1)

Directions

1. Introduce today’s goal, “Today we are going to identify how organisms within a ecosystem are connected by playing a game. This will also help us to learn some of the vocabulary that you will use on your field trip to The Morton Arboretum. ”
2. Divide Students into 3 groups (Prairie, Wetland and Woodland)
3. Each group (prairie, wetland and woodland) should receive a set of cards.



4. Instruct the students to distribute the cards so that each student gets one 1 card. *Note: If you have less than 8 students in a group, students can have more than 1 card. If you have more than 8 in a group pair up the students.*
5. Ask students to read their card silently to themselves.
6. Next, inform students that they will be listening for someone to describe the bolded word on their card.
7. *Optional: Encourage students to utilize the glossary of their text book, or the vocabulary list located on line, below the corresponding program, to help them understand the meaning of their bolded word so they know what to listen for.*
8. The person with the first card goes first and reads, "I have the first card, who has the....". Students should not read the hint at first.
9. Students listen for the clues and when they think their card has been called they read their card. "I have _____, who has..."
10. If no one knows if their card has been called the student whose turn it is can read the "hint"
11. Teacher or Aide follows along to ensure that the students are going in the correct order by correctly identifying the clues for each vocabulary word.
12. Once you have completed 1 round try it again and time the group to see how fast they can go.
13. After each group has successfully completed 1 loop, switch card sets so that each group can apply the vocabulary to each of the ecosystems.



Set #1- Woodland

<p style="text-align: center;">I have the first card. </p> <p>Who has a non-living element in an environment? In the woodland an example of this would be the amount of light that reaches the forest floor.</p> <p>(Hint: other examples of this would be water, heat, rocks and air)</p>	<p style="text-align: center;">I have adaptations.</p> <p>Who has a community of living and non-living factors working together as a unit?</p> <p>(Hint: Trees-producers, squirrels-consumers, slugs-decomposers all live in the same space and interact with each other because they are all a part of the same _____?)</p>
<p style="text-align: center;">I have abiotic factors</p> <p>Who has an explanation for educated guess that needs to be tested and is connected to a observation?</p> <p>(Hint: An example that a field scientist could create is: "I think that trees in the woods near my house are dying is due to salt run-off from the new road that was just put in next to the forest". This statement is a example of a _____. (Or educated guess that would need to be tested)</p>	<p style="text-align: center;">I have ecosystem.</p> <p>Who has the type of vegetation they would predict to find in the woodland ecosystem?</p> <p>(Hint: vegetation refers to the plant life)</p>
<p style="text-align: center;">I have hypothesis</p> <p>Who has an environmental factor related to or produced by living organisms?</p> <p>(Hint: Bio means "life").</p>	<p style="text-align: center;">I have trees and shrubs</p> <p>Who has the large predators you would predict to find in the woodland ecosystem?</p> <p>(Hint: These are some of the carnivores of this ecosystem)</p>
<p style="text-align: center;">I have biotic.</p> <p>Who has the slow process of change in a plant or animal's characteristics (traits) that help it survive in its ecosystem?</p> <p>Hint: An example of this would be the colors of the Great Horned Owl's feathers to blend in with its nest of leaves, high in a tree.</p>	<p style="text-align: center;">I have the owls and coyotes.</p> <p style="text-align: center;">Who has the first card?</p>



Set #2- Meadow

<p>I have the first card. </p> <p>Who has an environmental factor related to or produced by living organisms?</p> <p>(Hint: “Bio” means “life”)</p>	<p>I have abiotics.</p> <p>Who has a community of living and non-living factors working together as a unit?</p> <p>(Hint: grasses-producers, rabbits-consumers, worms-decomposers all live in the same space and interact with each other because they are all a part of the same _____?)</p>
<p>I have biotics.</p> <p>Who has the slow process of change in a plant or animal’s characteristics (traits) that help it survive in its ecosystem?</p> <p>(Hint: prairie plants have changed over time to have roots that reach deep into the ground and allow them to tap into water below the surface while also surviving prairie fires. This is known as a _____ because they have a special structure that allows them to survive in the their unique ecosystem.)</p>	<p>I have ecosystem.</p> <p>Who has the type of vegetation that you would likely find in the meadow/prairie?</p> <p>(Hint: vegetation refers to the plant life)</p>
<p>I have an adaptation.</p> <p>Who has an explanation for educated guess that needs to be tested and is connected to a observation?</p> <p>(Hint: An example that a field scientist could create is: “I think that trees in the woods near my house are dying is due to salt run-off from the new road that was just put in next to the forest”. This statement is a example of a _____. (Or educated guess that would need to be tested)</p>	<p>I have grasses and forbs.</p> <p>Who has the large predators you would predict to find in the woodland ecosystem?</p> <p>(Hint: These are some of the carnivores of this ecosystem)</p>
<p>I have a hypothesis.</p> <p>Who has a non-living element in an environment? In the meadow an example of this would be the amount of wind that carries seeds for dispersal.</p> <p>(Hint: other examples of this would be water, heat, rocks and air)</p>	<p>I have foxes and hawks.</p> <p>Who has the first card?</p>



Set #3- Wetland

<p>I have the first card. </p> <p>Who has an explanation for educated guess that needs to be tested and is connected to an observation?</p> <p>(Hint: An example that a field scientist could create is: "I think that trees in the woods near my house are dying is due to salt run-off from the new road that was just put in next to the forest". This statement is a example of a _____. (Or educated guess that would need to be tested)</p>	<p>I have adaptations.</p> <p>Who has an environmental factor related to or produced by living organisms?</p> <p>(Hint: "Bio" means "life")</p>
<p>I have a hypothesis.</p> <p>Who has a community of living and non-living factors working together as a unit?</p> <p>(Hint: algae, macro-invertebrates, fish, turtles, insects, the great blue heron, ducks and frogs all live in the same space and interact with each other because they are all a part of the same _____?)</p>	<p>I have biotics.</p> <p>Who has the large predators you would predict to find in the woodland ecosystem?</p> <p>(Hint: These are some of the carnivores of this ecosystem)</p>
<p>I have an ecosystem.</p> <p>Who has a non-living element in an environment?</p> <p>(Hint: other examples of this would be water, heat, rocks and air)</p>	<p>I have the great blue heron.</p> <p>Who has the type of vegetation that you would likely find in the meadow/prairie?</p> <p>(Hint: vegetation refers to the plant life)</p>
<p>I have abiotics.</p> <p>Who has the slow process of change in a plant or animal's characteristics (traits) that help it survive in its ecosystem?</p> <p>Hint: (The structure on turtle's feet contain webbed flesh between their toes in order to help them to swim better. This structure is known as a _____ because they have a special structure that allows them to survive in the their unique ecosystem.)</p>	<p>I have lily pads and cattail grasses</p> <p>Who has the first card?</p>



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