



TITLE: Emerald Ash Borer Match-Up Game

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Grade band: 4

Topic: Physical Geography

Introduction Overview

Explain to students that groups of the same kind of organism in an ecosystem are called populations. Populations are made up of the same species in an area (that can reproduce). Explain that each population in an ecosystem is adapted for that environment and each population has a specific 'role' in the community. This 'role' is called its niche.

Purpose

The purpose of this game is to teach about the Emerald Ash Borer issues in Tennessee.

Materials

Download Lesson/Game Materials Document



Instructions

Prep:

Explain that this activity affects other populations in the ecosystem. Discuss the fact that some organisms can disrupt an ecosystem. Then describe the emerald ash borer. Using the website USDA APHIS | Emerald Ash Borer (EAB) Story Map, discuss the life cycle, predators, characteristics, habitats, and diet of the emerald ash borer. Explain the importance of the ash tree in Tennessee.

Discuss the following benefits of the ash tree:

- Provide food, shelter, and habitat for wildlife and insects
- Act as windbreaks, living fences, and shade trees
- Produce wood for furniture, tools, firewood, and baskets
- Enhancing water quality and soil fertility
- Having medicinal properties for treating pain and inflammation

Explain how emerald ash borers harm ash trees in Tennessee and why it is important to make others aware of this problem:

- Not moving firewood and using insecticide helps to prevent ash emerald borer infestations.

Emerald Ash Borer Match-Up Game:

1. **Show the video:** [Emerald Ash Borer \(tn.gov\)](https://www.tn.gov/emerald-ash-borer)
2. Point out that students just saw the damage from the emerald ash borer from the video and its impact on forests and plants in Tennessee
3. Divide students in groups
4. Give each student game boards with the following categories: life cycle, predators, characteristics, habitat, and diet
5. Give each group cards with information about each category
6. Allow students to take turns placing cards in the correct category on the board. This student with the most points wins the game

Ash Tree Benefits Charade:

1. Divide students into two groups, actors and audience
2. Give cards with various benefits of the ash tree to members of the actors group
3. Allow them to act out the benefits while the audience guess

Emerald Ash Borer PSA:

1. Divide students into teams
2. Allow them to develop a script for a emerald ash borer public service announcement that must include the following information: a brief overview of the emerald ash borer, the benefits of the ash tree, and ways to stop the emerald ash borer infestation
3. Using Flipgrid, allow students to share their announcements by making a video [Flip \(flipgrid.com\)](https://flipgrid.com)
4. Allow students to share the video with parents, teachers, and others in the school community