



Queen's University Indigenous Land-Based Learning STEM
Queen's University Biological Station

Interconnected Forest Ecosystem Game

This activity can be done outside or in the classroom. Before introducing this activity, have a discussion with students about the interconnected relationships that exist within the forest ecosystem, placing a focus on the food web.

Goals of This Activity:

Through playing this game with your class, students will be able to experience and physically observe how interconnected everything in an ecosystem is as they pass the yarn around the circle and create a web. This activity also highlights the role that interdependence plays in Indigenous worldviews and the understanding that people are a part of the natural world. The Anishinaabe and Haudenosaunee hold the understanding that the natural world provides humans with many gifts and in turn it is their responsibility to give back to the natural world.

Materials You Will Need:

- A ball of yarn or thick string
- Optional: materials to make "nametags" for each student's chosen role

How to Run This Activity:

- First, have students each choose a plant, animal (try to include 1 human), the sun, the soil, or any other part of the ecosystem. For this activity to have the greatest impact, try to have students each pick a unique part of the ecosystem so that there are no repeated parts.
 - When choosing parts, encourage students to think about their insect, reptile, and amphibian relatives. While students may be more likely to overlook these beings, it is important that all aspects of the ecosystem are included in this activity so that students can develop an appreciation for the role that each part of the ecosystem plays.
 - Optional: collaboratively generate a list of roles in a forest ecosystem to aid students in the process of choosing a part.
- Have students form a large circle. Before starting the game, go around the circle to allow students to quickly share the roles that they chose.
 - It may be helpful for students if each person writes down their chosen part of the ecosystem or creates a nametag for their role. Students will be able to refer to these throughout the game and not have to focus on trying to remember what roles their peers chose.



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- Have one student volunteer to begin this activity. Hand them the ball of yarn and invite
 them to share with the class which part of the ecosystem they chose. They will then
 choose another person's ecosystem part in the circle that they can make a connection
 with.
 - For example, a student who chose a spider could make a connection with a student who chose a small insect as spiders are predators who help regulate the populations of pest species.
- After sharing this connection with the class, the first student will hold onto a piece of
 the yarn and then pass the ball to the student who they made a connection with. It is
 now this new student's turn to repeat the process of finding someone in the circle that
 they can make a connection with and passing the ball of yarn to them.
- The activity will continue until everyone in the circle is holding onto part of the yarn and a web like shape has formed within the circle.