

WEB OF LIFE

Objective: Students will demonstrate how plants, animals, and the sun interconnect.

Illinois State Goals: 12. B.

Top Book Hits:

Food Chains and Webs a Delta Science Reader; **ISBN-13:** 978-1592422579

This is Your Life Cycle by Heather Lynn Miller; **ISBN-13:** 978-0618724857

The Web at Dragonfly Pond by Brian “Fox” Ellis; **ISBN-13:** 978-1584690795

Materials Needed:

- Ball of yarn
- 3 x 5 index card for each student
- Large area of classroom or outside area



Procedure:

1. Share the following quote with the students: “When you try to remove one single thing, you find it’s hitched to everything else in the universe.” – John Muir.
2. Tell the students that after this activity you are going to ask the students what John Muir might have meant by this statement.
3. Ask students for names of living and nonliving components of an urban ecosystem. As each student names a component, have them print the name in large letters on an index card. Help direct the students to mention plants and animals. Collect all the cards. (*You can find already made up cards on line at: www.agclassroom.org.)
4. Divide into groups of 8 – 10 students. Each group is now an “urban ecosystem” Hand out one index card to each group member, but try to keep cards as diverse as possible in each group. Instruct students to lay their card in front of them face up so that they can easily be read by other group members.
5. Give a ball of yarn to one student and ask how they are related to another card within their ecosystem (group of students).
6. As each student chooses a connection, he/she should wrap a piece of yarn around their wrist a couple of times and hand the yarn to the next connection. The process continues till all the components are spoken for.
7. To demonstrate the connections, ask the students to be completely still. Make sure the yarn is tight and ask the first student to gently tug on the yarn. As each student feels a tug, they should gently tug in response. Eventually the whole web will be shaking, demonstrating the total connection.
8. At this point, you could ask one of the students to let go of the yarn to show how their leaving the web would affect it. Discuss different scenarios that would have affects upon the web, i.e. drought, disease, etc.
9. Disassemble the web and have students exchange cards in preparation to do the activity again. This time the teacher will represent the sun. Wrap the yarn around your wrist and pass the yarn to a connection. Continue to build a web like before.
10. After the web is woven, ask students what will happen if the sun were to be taken out of the web. Discuss these impacts. To demonstrate this, as students prepare to tug on yarn, the sun will let go of the original piece. Once students tug on their yarn, they will see all animals and plants are impacted and the web will collapse. Discuss how the sun is the source of energy and the base for all ecosystems.
11. Ask the students what John Muir meant by his statement, “When you try to remove one single thing, you find it’s hitched to everything else in the universe”?

Give credit where credit is due...adapted from Project LEAP, Cornell University, Ithaca, NY.