

Class Summary

Quick Facts

Outside: 2 hours

Grade: 4-8th

Offered: Year-round

Physical Activity: >1 mile walk

Other: Expect students to be able to follow detailed written directions

Concepts

- Diversity • Order
- Characteristics • Conservation

[Minnesota Academic Standards >](#)

- Science • Math • Language Arts

[Classroom Activities >](#)

- Pre-Activity: *Dichotomous Key Practice*
- Post-Activity: *Age of a Tree*

STEM Components

- Examine / Investigate
- Observe / Study
- Identify
- Organize
- Classify

IB Profiles

- | | |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Inquirers | <input type="checkbox"/> Open-minded |
| <input checked="" type="checkbox"/> Knowledgeable | <input type="checkbox"/> Caring |
| <input type="checkbox"/> Thinkers | <input type="checkbox"/> Risk-takers |
| <input checked="" type="checkbox"/> Communicators | <input type="checkbox"/> Balanced |
| <input checked="" type="checkbox"/> Principled | <input type="checkbox"/> Reflective |

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Outcomes, students will:

1. Accurately use a dichotomous key to differentiate 15 Minnesota tree species.
2. Use bark, leaf, twig, and bud characteristics to sort and identify trees.
3. Learn fun and interesting facts about each of the 15 trees they identify.

Brief Synopsis:

There are 1,800 plant species in Minnesota and approximately 40 native tree species, which can seem overwhelming to learn at first. By working with a team, participants will learn to use a dichotomous key to identify distinguishing characteristics of some of Eagle Bluff's trees and discover the many uses people have for trees.

Activity Summaries:

Meet Your Match (15 minutes)

Minnesota is home to a great diversity of trees. Students match known local wood samples with an object made from that wood and find out why they are such a good match.

Dichotomous Keys (20 minutes)

Through simple examples, students are guided through various dichotomous keys to demonstrate their chief purpose of sorting and identifying. Students then go through a key without the aid of the instructor, or create their own key based upon the characteristics of six students from the class.

Tree Characteristics (10 minutes)

In order to successfully identify each tree species on the Eagle Bluff Tree Identification Course, students are introduced to examples of tree characteristics, through either illustrations or samples of leaves/buds, bark and twigs.

Identifying Trees (1 hour 45 minutes)

Students are given a clipboard, dichotomous key, and a map for use in groups of two or three. Each group is assigned a different starting points throughout the course. Groups check in with the instructor after identifying two or three trees to verify their success in using the key.

Fun Facts (20 minutes)

Using fact cards, students learn a variety of facts about each of the 15 trees on the tree course and how people use trees for food, building, paper, etc.