

# Trees and Forests

## Overview

Students learn about trees as individual plants and as part of a forest ecosystem. By examining local species, they learn to recognize the characteristics of different trees and develop skill in describing and interpreting the structural features of trees. As part of their studies, students learn about a broad range of living things found on, under and around trees and study the complex interaction between trees and the larger environment. In examining human use of forests, they become aware of a broad range of environmental issues and develop an awareness of the need for responsible use.

## General Learner Expectations

*Students will:*

**6–10 Describe characteristics of trees and the interaction of trees with other living things in the local environment.**

## Specific Learner Expectations

*Students will:*

1. Identify reasons why trees and forests are valued. Students meeting this expectation should be aware that forests serve as habitat for a variety of living things and are important to human needs for recreation, for raw materials and for a life-supporting environment.
2. Describe kinds of plants and animals found living on, under and among trees; and identify how trees affect and are affected by those living things.
3. Describe the role of trees in nutrient cycles and in the production of oxygen.
4. Identify general characteristics that distinguish trees from other plants, and characteristics that distinguish deciduous from coniferous trees.
5. Identify characteristics of at least four trees found in the local environment. Students should be familiar with at least two deciduous trees and two coniferous trees. Examples should include native species, such as spruce, birch, poplar, and pine and cultivated species, such as elm and crab apple.
6. Describe and classify leaf shapes, leaf arrangements, branching patterns and the overall form of a tree.
7. Interpret the growth pattern of a young tree, distinguishing this year's growth from that of the previous year and from the year before that. Students meeting this expectation should recognize differences in colouration and texture of new growth and old growth, and locate scars that separate old and new growth.
8. Identify human uses of forests, and compare modern and historical patterns of use.
9. Identify human actions that enhance or threaten the existence of forests.
10. Identify an issue regarding forest use, identify different perspectives on that issue, and identify actions that might be taken.