

Spring Trees

Synopsis

K—6th, upper



Hartley
Nature Center

MN Academic Standards

supported during HNC program.
More standards can be supported
with pre- and post lesson activities.

Science

- 0.1.1.2.1 Observation of natural world
- 0.4.1.1.1 Observe and compare plants
- 0.4.1.1.2 Parts of plants
- 1.1.1.1.1 Support answer with obs.
- 1.1.3.1.1 Living things made of parts
- 1.1.3.2.1 Scientists use tools
- 2.4.1.1.1 Sort plants into groups
- 2.4.2.1.1 Needs of plants
- 2.4.3.1.1 Plant life cycles
- 3.1.1.1.1 Support claims with evidence
- 3.1.1.2.4 Evidence based explanation
- 3.1.3.4.1 Use tools such as ruler
- 3.4.1.1.1 Growth, survive, reproduce
- 3.4.1.1.2 Common groups of plants
- 3.4.3.2.1 Inherited traits
- 3.4.3.2.2 Different traits
- 5.4.1.1.1 Plant and animal structures
- 5.4.4.1.1 Beneficial and harmful human interaction with a system

Language Arts

- 0.8.1.1 D, 0.8.3.3, 1.8.1.1 C, E, 1.8.3.3,
- 2.8.1.1 C, E, 2.8.3.3, 3.8.1.1 C, D, F,
- 3.8.3.3, 4.8.1.1 C, D, 5.8.1.1 C, D, 6.9.1.1 C, D

Math

- K.3.1.2 Sort objects
- K.3.2.1 Length or size
- 1.3.2.1 Measuring with objects
- 2.3.2.1 Measuring with objects
- 2.3.2.2 Measuring with ruler
- 3.3.2.1 Measuring with half units
- 3.3.2.3 Measure distance

Goals & Objectives

This program will:

- Identify the basic structure of the interior of trees.
- Introduce students to how trees use and move sap and nutrients up and down the tree.

Students will be able to:

- Identify the basic interior parts of a tree
- Describe the function of interior parts of a tree
- Identify the role of sap in the life of a tree

Activities

In the classroom:

- Review parts of a tree (trunk, leaves or needles, bark, roots, etc.). Create a diagram on the board.
- Introduce interior of tree (sapwood, heartwood) and the role of sap in the tree life cycle
- Examine what happens inside of trees, discuss how the inside of a tree can be useful to people

In the field:

- Visit many specimens of deciduous and coniferous trees. Seek examples of sap.
- Identify parts of a tree including sapwood and sap etc.
- Measure trees using a tape measure
- Play a game about the movement of sap in a tree.

Bad Weather Alternative

Station Rotation of:

- Explore tree parts under hand lenses (pinecone scales, leaves in stages of decay, roots, bark, etc.)
- Play games such as the Water Relay Race or Bursting buds

Authenticity

Observe tree species in their natural state/habitat.