Spring Trees
Synopsis
K—6th, upper

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
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.