

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
- 0.2.1.1.1 Sort objects based on property
- 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
- 2.4.1.1.1 Sort plants into groups
- 2.4.2.1.1 Needs of a plant
- 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 Differences give advantages
- 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 of objects
- 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 functions and importance of trees
- Explore Hartley Park tree species in their natural habitat.

Students will be able to:

- Identify the roles trees play in wildlife and human communities
- Describe what a tree needs to survive
- Identify basic parts and functions of trees
- Differentiate deciduous and coniferous trees
- Describe a general lifecycle of a tree (2nd+)

Activities

In the classroom:

- What makes a tree a tree? Brainstorm the parts of a tree. Create a diagram on the board.
- Who needs trees?
- What do trees need? For younger students we will perform Trees Are Magic, which uses a student 'magician' to make a tree appear out of an empty bucket as we add the 'ingredients' of a tree.

In the field:

- Visit many specimens of deciduous and coniferous trees. Compare and contrast parts such as number of needles, shape/size of cones, silhouette of tree, habitat, etc.
- Play games such as Maple Seed Mix Up or Build a Tree.
- Compare and sort leaves based on color, shape, or size.

Bad Weather Alternative

Station Rotation of:

- Explore tree parts under microscopes
- Play games such as Build a tree or Maple Seed Mix Up.
- Compare and sort leaves.

Authenticity

Observe tree species in their natural state/habitat.