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.