

# *Plot Studies With Students*

*Under the Hemlocks*

*Under the Hardwoods*



# *Plant Inventory*

**Students count plants, shrubs, seedlings and saplings in their hemlock and hardwood plots.**





Create a class graph. What does the data tell us?

Are there differences between the hemlock and the hardwood plots?  
What do you think causes these differences?



# Arthropod Inventories – Easier than you think!

Find out what is walking across your plot by digging pit traps and taking litter samples





# Measuring Snow Depths



Every week measure the depth of the snow –in metrics of course!- in your hemlock and hardwood plots. Compare your data.

# Math



Tree Circumference



Taking soil temperatures



# *Forest Floor layer*

- Percent cover of moss, stick, rocks, grass.
- Ratios of sticks to leaves.
- Numbers of plants by type.
- Numbers of ants, spiders, and other small fauna.
- Tally leaves by color.
- Measure fallen pine cones.
- Snow depths in different locations



**4N3** Demonstrate an understanding of fractions as parts of unit wholes, as parts of a collection, and as locations on the number line.

**4N4** Select, use, and explain models to relate common fractions and mixed numbers ( $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{1}{4}$ ,  $\frac{1}{5}$ ,  $\frac{1}{6}$ ,  $\frac{1}{8}$ ,  $\frac{1}{10}$ ,  $\frac{1}{12}$ , and  $1\frac{1}{2}$ ), find equivalent fractions, mixed numbers, and decimals, and order fractions.

**5N5** Identify and determine common equivalent fractions, mixed numbers, decimals, and percents.

**4M5** Identify and use appropriate metric and English units and tools (e.g., ruler, angle ruler, graduated cylinder, thermometer) to estimate, measure, and solve problems involving length, area, volume, weight, time, angle size, and temperature.

**4D1** Collect and organize data using observations, measurements, surveys, or experiments, and identify appropriate ways to display the data.

**4D3** Construct, draw conclusions, and make predictions from various representations of data sets, including tables, bar graphs, pictographs, line graphs, line plots, and tallies.



*Let's Go Out and Do Some Math!*

