

Zena Maple Sugaring

All of the students from Zena School were actively involved, using the natural resources from the nature trail behind the school to complete the project. Students learned about maple trees and followed the maple sugaring process from start to finish. Every student in the school had the opportunity to be involved. They incorporated math and science standards in a real life experience.

Curriculum/State Standard

MST 1.3, 3.3, 3.5, 4.3

ELA 1.1, 1.2, & 3.2

Overview

Rick Parisio from Department of Environmental Conservation worked with every class to identify and tap a sugar maple tree. Students from each class worked together collecting sap and transferring it to the holding tank at the Zena Sugar Shack (8 X 10 metal shed by Nature Trail), and watching the sap boil away into syrup. Students wrote poems about trees and ate French bread sticks with their maple syrup.

Objectives

- The students will identify and tap a sugar maple tree.
- The students will estimate, collect, and record data.
- The students will write reports about trees.
- The students will create poems to share.

Materials

Evaporator and arch; fire bricks/ refractory cement; shed - foundation; firewood; brace and 7/16 bit; buckets; spouts; thermometer; canning jars

Readiness Activity

Build and prepare all the equipment and dwellings needed for the process. Students are involved in this as is appropriate for their ages and skills levels.

Continued on the back...

K-5

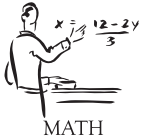
GRADE LEVEL



ARTS



LANGUAGE



MATH

Misc

MISCELLANEOUS



SCIENCE



HISTORY



SOCIAL STUDIES

5

WEEKS

\$1350

TOTAL BUDGET



Kids In Need
TEACHER GRANTS

THIS WINNING LESSON PLAN WAS SUBMITTED BY:

Joyce Luby
Zena Elementary

1700 Sawkill Road., Kingston, NY 12401

“Zena Maple Sugaring” project continued...

Strategies/Activities

Rich Parisio from Dept. of Environmental Conservation Education Dept. worked with each class to identify and tap a maple tree.

Classes collected sap and recorded data on classroom recording sheets and recording sheet in “Sugar Shack”, shed, to keep track of total sap collected. Students collected a total of 100 gallons, 2 quarts, 2 cups, which then boiled down to 2 gallons, 11/2 quarts Grade A Light Amber Maple Syrup.

Students worked in the “Zena Sugar Shack,” adding the sap they collected to the holding tank.

Adults monitored the boiling sap.

Students wrote poems about trees, and some classes had their students write reports about trees.

Students shared poems at morning announcements during Poetry Month (April).

Culminating Activity

A brunch was held. Students were each given approximately one ounce of the finished maple syrup and four french bread sticks. Students conducted a taste test between the syrup we made and the syrup the school lunch provides. Everyone chose the pure maple syrup we made.

Students read their poetry during morning announcements. Poetry and tree reports were hung in the hall. PowerPoint reports were presented at “Family Dessert Night.” A community-wide event is planned for next year.

Evaluation

Grades on poetry and reports;
PowerPoint reports; math activities