



Quarrybrook

EXPERIENTIAL EDUCATION CENTER

Program Title: **Deciduous Tree ID with Leaves**

Audience: 4th grade students

Program Theme: Students will be introduced to deciduous tree identification, by observing leaf structures, shapes, and patterns. Students will become familiar with the terms associated with leaf characteristics, which are helpful in distinguishing different species.

Program Goals: After learning a few basic terms used to describe leaves, students will be in the field making observations and practicing how to identify trees by focusing on the leaves. Students will do leaf tracings of various species, in a field journal, to keep for future reference.

Next Generation/Common Core Connections:

Topic: 4-LS1 From Molecules to Organisms: Structures and Processes

Dimensions: Structure and Function

Crosscutting Concepts: Systems and System Models

Program Outline:

Activity 1: LEAF RODEO (20-30 min.) – Students will be introduced to common leaf terminology through exploration of various leaf types. Students will work in groups to sort a pile of leaves by shape, color, pattern, edge, and structure.



Teachers and other adults will be helpful in encouraging students to work together and discuss the various ways to classify leaves.

Objectives: Students will recognize that not all leaves are the same and will be able to distinguish different leaf characteristics.

Intended Outcomes: Students will become familiar with leaf characteristics and the terms used to describe them. Students will use this knowledge in Activity 2.

Activity 2: TREE ID HIKE with LEAF TRACING (80-90 min.) – Students will use field guides to identify native tree species based on leaf characteristics. Students will complete a dendrology field journal, to keep for future reference. The journal data will be based on their observations and identifications, and will include leaf tracings of various species.



Teachers and other adults will be helpful in keeping students focused and on task while on the trail and working with their groups.

Objectives: Students will be able to identify native tree species based on leaf structures, shapes, and patterns. Students will have a traced example of each main leaf characteristic.

Intended Outcome: Students will make observations, identify tree species, and complete work in their field journals.

Conclusion/Wrap-up: (10 min.) As a group, students will share observations from their tree classification and hiking experience. We will discuss the different terminology and classification techniques that were used. We will discuss challenging versus easier tree identification.

Successful completion of this program will help support your students' proficiency in NGSS

Performance Expectations:

4-LS1.A: Structure and Function

Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction.