

Annie Kinogak

LCM Lesson Plan: Using science to understand local environment.

Grades:5/6

Standards: **Science-A15; B1**

Math-A2

Cul St-B2

Science Concept: Use science to understand and describe the local environment.

Materials: pencil, paper, plastic bag, leaves, grid sheet, colors, colored pencils, and ruler

GEAR-UP:

Teacher poses questions. What are leaves? Why do leaves hang on trees? When and why do you think leaves die? What happens to the dead leaves? Record answers on the board or on the KWL chart.

Process skills: observation; communication; questioning

EXPLORE:

Go on a field trip to locate where there are various types of trees. Students predict the number of trees by kind. Students observe different trees grown in that area and predict why leaves have fallen. Students will use inference to answer how and why leaves fall at a certain season. Collect leaves.

Process skills: observation, prediction, communication, inference

GENERALIZE:

Why do you think several types of trees grew in that small area? What and why do you think some trees take more space to grow? Which trees are smoke wood for salmon in our area? What happens to the fallen leaves? How can we describe one leaf from another?

Process skills: written and oral communication, inference, observation, classification

EXPLORE:

Go back to field trip area and measure where various types of trees grew. Make an inference why birch trees take more space than alder or willow? Back in the classroom predict how many leaves are in the collected bag of leaves as well as predict how many types of leaves there are. Count and record data on a graph.

Process skills: predicting, collecting data, written and oral communication, classification

GENERALIZE:

Why do you think alder leaves appear larger than birch and willow leaves? We have observed that birch trees appear to take more space yet their leaves are smaller. Why do you think so?

Process skills: written and oral communication, inference, observation, collecting data
APPLY/ASSESS:

Make a Venn Diagram. In the Venn Diagram compare and contrast willow leaves and alder/birch leaves. Use descriptive words when describing the leaves. Why do you think leaves are important to trees and the environment?

Process skills: observation, collect data, predictions, written and oral communication

EXTENSION:

Study and tell how we can continue to save our environment. Interview community elders and find reasons why certain trees are used for smoking salmon and not others. Do leaf rubbings. Continue to review the properties of leaves. Before the Fall season, predict how many leaves a willow, alder, or a birch has.

Process skills: observation, inference, collects data, communication

SCORING GUIDE

Why are leaves important to trees and the environment?

OUTSTANDING

5

Student sorts leaves by kind independently.

Student graph is done orderly and neatly.

Has knowledge why various trees can grow in an area and why leaves fall.

Student applied new knowledge on properties and descriptions of leaves.

Student understands the local environment and makes connections with certain trees that are useful to their culture.

5/20-25=O
Outstanding

SATISFACTORY

3

Student can sort leaves with or without teacher/peer guidance.

Graph is completed with peer or teacher assistance.

Background knowledge appear to be limited why various trees grow in an area and why leaves fall.

New knowledge on properties and descriptions of leaves continues to develop but application done with a peer or teacher assistance.

With teacher guidance student knows the local environment and connections the cultural uses of certain trees.

2-4/18-19=S **2-4/15-17=S-**
Satisfactory

NEEDS PRACTICE

1

Student needs help at all times.

1/0-14=RT
Reteaching