

# WHAT ARE SOME TYPES OF PLANTS?

## Unit 2: Changing Landscapes (Plants)

Lesson 5 — Grade 6

INSTRUCTIONS



### Overview

In this lesson students will mark the location of useful plants found in and around their village. The maps will also include the traditional uses of the plants.

### Objectives

On successful completion of this unit, students will be able to:

- name edible and useful plants found locally;
- describe how the plants are used; and
- mark the location of plants on a map.

### Alaska Standards

#### Alaska Science Standards / Grade Level Expectations

[6] SA3.1 The student demonstrates an understanding that interactions with the environment provide an opportunity for understanding scientific concepts by gathering data to build a knowledge base that contributes to the development of questions about the local environment (e.g., moose browsing, trail usage, river erosion).

[6] SF1.1-SF3.1 The student demonstrates an understanding of the dynamic relationships among scientific, cultural, social, and personal perspectives by telling a local or traditional story that explains a natural event (e.g., animal adaptation, weather, rapid changes to Earth's surface) and relating it to a scientific explanation.

#### Alaska Cultural Standards

[A] Culturally knowledgeable students are well grounded in the cultural heritage and traditions of their community. Students who meet this cultural standard are able to:

[A.3] acquire and pass on the traditions of their community through oral and written history.

[A.4] practice their traditional responsibilities to the surrounding environment.

[D] Culturally knowledgeable students are able to engage effectively in learning activities that are based on traditional ways of knowing and learning. Students who meet this cultural standard are able to:

[D.4] gather oral and written history information from the local community and provide an appropriate interpretation of its cultural meaning and significance.

[E] Culturally knowledgeable students demonstrate an awareness and appreciation of the relationships and processes of interaction of all elements in the world around them.

Students who meet this cultural standard are able to:

[E.2] understand the ecology and geography of the bioregion they inhabit.



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### Bering Strait School District Scope & Sequence

M.S. Sequence 6.8: Plant Structure, Function, and Life Cycles

M.S. Sequence 7.1: Earth's Structure

B. Understand the scale, legend, symbols, and contour lines of a topographic map.

### Materials

- The resource book "*Medicinal Flora of the Alaska Natives*" by Ann Garibaldi is available in PDF format at: <http://aknhp.uaa.alaska.edu/botany/medicinal-flora-of-the-alaska-natives/>
- Paper and colored pencils
- Copies of a map of the village and the surrounding area.

### Additional Resources

Glencoe Life Science Ch 9-10

Glencoe Earth Science Ch 1

The Kawerak Eskimo Heritage Program produced a calendar for 2011 – 2012 that featured traditional plants. Contact them at 907.443.5231 for a copy of the calendar.

### Activity Preparations

1. Obtain or make copies of a map of the village and surrounding area.

### Whole Picture

Gathering plants is an integral part of a subsistence lifestyle. In addition to fish and meat, berries rank at the top of the list of foods harvested each year. Besides berries, other edible plants can be found around villages as well. Other useful plants include wood for burning in stoves, smoking fish and building. Certain plants also used for traditional medical and healing purposes.

### Activity Procedure

1. Ask students to name 5 – 10 edible plants that grow around their community. Write the names of the plants on the board.
2. In addition to edible plants, ask students what other plants can be found around their village that are useful. For example, are some used for medicinal purposes, heating, building, art, or other uses? Think about the uses of the roots, stems and leaves. Add the names to the list of plants on the board.
3. Invite a person with knowledge of local plants to the classroom to talk about the traditional uses of local plants. Students should take notes about the plants, their uses



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and where they are located. Allow additional time for students to ask their parents, relatives, or other community members about local plants and to do additional research about plants.

4. Explain to students that they are going to make a field guide that will include a map of the village and surrounding area. Students could draw a map, or use a map from an online source as a base map. Once students have their map they should add the location where the plants can be found. The common name, native language name, and scientific name should be included on the map. Information regarding the traditional use of the plant, the time of year when the plant is used or harvested, how it is prepared or stored, why that plant is used (such as the type of wood used for smoking fish, or making a cabin) should be included.
5. The field guide could be done as a trifold, or as a single page. It should include a title and scale.
6. Display completed field guides in the classroom. Ask students where different plants are found. For example, if they were looking for blueberries would they look for a south facing slope, wetland, etc., or if they were along a river, what types of edible plants could be found.

### Answers

The field guide and map should include the location of a variety of plants, the common, scientific and Native names, along with information on the traditional use of the plants.

