

NAVIGATIONAL METHODS

Lesson Summary:

Since ancient times people have used navigational methods to mark and find locations. A few of these methods include: using the stars as a navigational tool; using landmarks, such as trees and mountains; drawing maps; and using a compass. Students learn about some of these methods as they interview local Native Elders and use instruments similar to those used by current scientists. To infuse more Native language into the curriculum, consider teaching “Traditional Introductions” prior to this lesson.

Objectives:

The student will:

- understand that since ancient times people have used navigational methods for locating places on Earth;
- identify at least one traditional navigational method;
- understand that scientists use GPS receivers to pinpoint the location of instrument data sites;
- use a GPS receiver to mark the location of a specific site; and
- use a GPS receiver to locate a previously marked site.

GLEs Addressed:

Science

- [5-8] SA1.1 The student demonstrates an understanding of the processes of science by asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring, and communicating.
- [5] SE2.2 The student demonstrates an understanding that solving problems involves different ways of thinking, perspectives, and curiosity by comparing multiple explanations (e.g., oral traditions, folklore, scientific theory) of everyday events (e.g., weather, seasonal changes).
- [6] SE3.1 The student demonstrates an understanding of how scientific discoveries and technological innovations affect our lives and society by describing the various effects of an innovation on a global level.

Search Terms:

- navigation
- landmarks
- maps
- compass
- Native Elders
- GPS
- satellites
- aurora
- Northern Lights