

MEASURING EARTH'S MAGNETIC FIELD

Lesson Summary:

Students become familiar with two kinds of magnetometers used to detect the aurora and learn the locations of magnetometers in Alaska.

Objectives:

The student will:

- identify two types of magnetometers in Alaska;
- locate Magnetometer Data Sites in Alaska; and
- conclude instruments scientists use to study the aurora are improving over time.

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.
- [9] SD3.2 The student demonstrates an understanding of cycles influenced by energy from the sun and by Earth's position and motion in our solar system by explaining the phenomena of the aurora.
- [5] SE2.1 The student demonstrates an understanding that solving problems involves different ways of thinking, perspectives, and curiosity by investigating a problem or project over a specified period of time and identifying the tools and processes used in that project.

Search Terms:

- magnetometer
- Earth's magnetic field
- fluxgate
- induction
- aurora
- Northern Lights