

MEASURING THE AURORA VOCABULARY

Lesson Summary:

Throughout the *Aurora Alive* Curriculum, students have been developing an understanding of historical contributions made by scientists and technology as it developed. Students learn the impact of computers and other technology on current research and that scientists conduct research using appropriate instruments to observe and measure the aurora over time.

Objectives:

The student will:

- identify instruments scientists use on the ground and in space to study the aurora;
- use technology to locate, select, and apply information;
- describe in writing the function of each instrument studied in this unit; and
- discuss science as a human endeavor.

GLEs Addressed:

Science

[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.

[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.

Reading

[7] 3.1.4 The student uses strategies to decode or comprehend the meaning of words in text by determining the meaning of words in context, including content-specific vocabulary, words with multiple meanings, or precise vocabulary (e.g., vague vs. ambiguous).

[8] 3.1.4 The student uses strategies to decode or comprehend the meaning of words in text by determining the meaning of words in context, including content-specific vocabulary, words with multiple meanings, or precise vocabulary (e.g., angry, vexed, segmented, segregation).

Writing

[5] 2.2.2 The student writes for a variety of purposes and audiences by writing in a variety of nonfiction forms using appropriate information and structure (i.e., step-by-step directions, descriptions, observations, or report writing).

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[7] 3.2.2 The student writes for a variety of purposes and audiences by writing in a variety of nonfiction forms (e.g., letter, report, biography, and/or autobiography) to inform or describe.

[8] 3.2.2 The student writes for a variety of purposes and audiences by writing in a variety of nonfiction forms (e.g., letter, report, biography, and/or autobiography) to inform, describe, or persuade.

Search Terms:

- induction magnetometer
- narrow-field camera
- meridian scanning photometer
- magnetometer
- satellite
- all-sky camera
- aurora TV camera
- spectrometer
- aurora
- Northern Lights

