

STYRO-PLANETS

Lesson Summary:

Students learn that Earth acts like a giant magnet. Students find the magnetic poles of Styrofoam™ planets (with magnet cores) and describe the location of each pole using latitude and longitude.

Objectives:

The student will:

- use a compass to find the magnetic North and South Poles of a Styrofoam™ planet;
- describe a location using latitude and longitude; and
- understand that Earth's geographic and magnetic poles are not in the same place.

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.

Math

[7] MEA-1 The student demonstrates understanding of measurable attributes by estimating length to the nearest sixteenth of an inch or millimeter, volume to the nearest cubic centimeter or milliliter, or angle to the nearest 30 degrees (L) (M2.3.1).

[7] PS-5 The student demonstrates the ability to apply mathematical skills and processes across the content strands by using real-world contexts such as science, humanities, peers, and community (M10.3.1 & M10.3.2).

[8] PS-5 The student demonstrates the ability to apply mathematical skills and processes across the content strands by using real-world contexts such as science, humanities, peers, community, and careers (M10.3.1 & M10.4.2).

Search Terms:

- Earth
- magnet
- poles
- latitude
- longitude
- geographic North Pole
- geomagnetic North Pole
- cow magnet
- aurora
- Northern Lights