

Title: Spheres of the Earth Greeting

Objective: Review spheres of the earth

Time: 5-10 minutes

Materials Needed: None

Greeting

Theme: Earth Spheres

Topic: Spheres of the Earth

Suggested Grade Level: 3-5

Indoors or Outdoors: Either

Directions:

1. Each student chooses one of the spheres of the earth to use as their last name. Each student chooses something that is part of that sphere as their first name.
2. The first student greets the next student using their newly made up name. *“Good morning, I am Icicle Hydrosphere.”*
3. The second student responds with their own name, *“Glad to meet you, I’m Tornado Atmosphere.”* The second student then greets the third, and so on until each student has been greeted.
4. Some possible choices:
 - Atmosphere: wind, oxygen, nitrogen, steam, tornado, hurricane, air
 - Lithosphere: rock, pebble, dirt, sand, silt, mineral, copper, coal
 - Hydrosphere: river, puddle, snow, rain, icicle, dew, lake, hail
 - Biosphere: flower (geranium, lily), monkey, ant, baby, tree (oak, pine)

Discussion Questions:

1. Which names were most surprising or unique? Explain.
2. Which first names used by your classmates were names that you wouldn’t have thought of yourself?
3. How could a change in one sphere, caused by either a natural or a manmade event, affect another sphere? Provide an example.

Science and Engineering Practices:

2. Developing and using models; 8. Obtaining, evaluating, and communicating information.

Crosscutting Concepts:

1. Patterns; 4. Systems and system models.

Disciplinary Core Ideas:

Earth and Space Sciences: ESS 2: Earth's systems.

Background Information:

Atmo-: air **Bio-:** life **Hydro-:** water **Litho-:** stone **-sphere:** relating to the earth, globe, planet

- **Atmosphere:** air, gasses (oxygen, nitrogen, carbon dioxide, water vapor)
- **Biosphere:** life (plants, animals, all organic matter including decomposing plants and animals)
- **Hydrosphere:** water (oceans, seas, ice caps, ground water, surface water, water vapor, etc.)
- **Lithosphere:** crust of the earth made up of the continental and oceanic plates (land, mountains, valleys, volcanoes, earthquakes, soil, rocks, etc.)

Additional Resources:

- NOAA-Earth's Spheres https://gml.noaa.gov/outreach/info_activities/pdfs/TBI_earth_spheres.pdf
- *The Four Spheres of Earth* by Paul Larson

Correlates with:

Activity - Observing Four Spheres (p. 61)

Interdisciplinary Lesson - Spheres of the Earth Model (p. 114)