

Science On a Sphere – Educator Resource Guide

Show Title: *Earth Systems and Processes*

Recommended Grade Range: 5th, 7th

Presentation Time: 20 minutes



	SEEd Standards Focus Alignment
Standard 5.1.1	Patterns of Earth's features.
Standard 5.1.4	Interactions between Earth's systems including the geosphere, biosphere, hydrosphere, and/or atmosphere.
Standard 7.2.1	Relationship between energy flow and matter cycling.
Standard 7.2.2	Processes that change Earth's surface over varying time and special scales.
Standard 7.2.5	Patterns between plate tectonics and the occurrence of earthquakes and volcanoes, continental and ocean floor features.

Summary:

"*Earth Systems and Processes*" is designed to supplement 5th and 7th grade standards regarding the characteristics and interactions of Earth's systems and changes to Earth over time. Students will observe earthquakes found across the planet then observe Earth features to investigate geologic processes to explain these phenomena.

Data visualizations explored in this topic:

- [Earthquakes - Real-time](#)
- [Earth Topography and Bathymetry](#)
- [Age of the Seafloor \(topography\)](#)
- [Plate Movement – 200 Million Years Ago to Today](#)
- [Volcano Locations](#)
- [Volcano Eruptions: Causing Tsunamis - through 2010](#)

Science language used or introduced	convergent, divergent, earthquakes, erode, erosion, faults, geological, tectonic plates, transform uplift, volcanoes, weathering.
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