

# Science On a Sphere – Educator Resource Guide

**Show Title:** *Energy and Weather*

**Recommended Grade Range:** 5<sup>th</sup>, 6<sup>th</sup>

**Presentation Time:** 20 minutes



|                | SEEd Standards Focus Alignment                                                                                                                                 |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard 5.1.4 | Interactions between Earth’s systems including the geosphere, biosphere, hydrosphere, and/or atmosphere.                                                       |
| Standard 6.3.2 | Interactions between air masses that cause changes in weather conditions.                                                                                      |
| Standard 6.3.3 | Models used to show the effects of unequal heating of Earth’s systems, including causes of patterns of atmospheric and oceanic circulation. Regional climates. |

## Summary:

“Energy and Weather” is designed to supplement 5<sup>th</sup> and 6<sup>th</sup> grade standards on the sections regarding the characteristics and interactions of Earth’s systems, and Earth’s weather patterns and climate. Students will observe variations and changes in Earth’s biosphere then investigate each of Earth’s major systems to explain their initial observation. Additionally, basic knowledge of regional climates will be gained.

## Data visualizations explored in this topic:

- [Solar Insolation](#)
- [Earth and Earth’s Clouds](#)
- [Global Vegetation](#)
- [Climate Classifications](#)
- [Average Rainfall](#)
- [Earth’s Topography](#)
- [Sea Surface Temperatures](#)
- [Land Surface Temperatures](#)

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| Science language used or introduced | absorption, atmospheric circulation, climate, climate classification, clouds, condensation, conduction, continental, convection, elevation, latitude, longitude, model, ocean current, polar, vapor, precipitation, reflection, temperate, temperature, topography, tropical, vegetation, water cycle. |
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