3rd Grade – Earth Science: Weather and Climate

- Week 1
  - **Take Home Science: Observing Air Pressure (link):** Build a barometer from simple materials, then measure and record daily air pressure and weather conditions. Do you see any patterns with air pressure and weather?
  - **Hot Formula –** The average summer temperature at the North Pole is about 30°F, and the average summer temperature at the equator is about 30°C. In the United States, temperatures are typically reported in Fahrenheit, while other countries use Celsius. Using conversion formulas makes it easier to compare temperatures on the two scales. Use the scenario above as an example of how to use the conversion formulas. Then use the formulas below to convert temperatures:

    Conversion Formulas:

    °F to °C: C = (F – 32) ÷ 1.8

    °C to °F: F = (C x 1.8) + 32

- Week 2
  - **Read Literacy and Science 2A: How Can Weather Technology Be Used?** Answer the questions to help understand how meteorologists use tools to help them predict weather patterns.
  - **Read Literacy Article 2B: What Can a Weather Forecast Tell Me? (link):** Answer the questions to help understand Rachel Rainstorm's weather forecast.

- Week 3
  - **Read literacy Article 3A: Where On Earth are Extreme Climates? (link):** Answer the questions to help understand the factors that affect weather and climate in extreme cold or wet areas of the world.
  - **Biomes:** Learn more about climate zones by researching the world's biomes and the different organisms that call them home. Choose one of the following biomes: Tundra, Grassland, Forest, Desert, or Taiga. Create a visual that showcases the plants and animals that are found there and the environmental factors such as temperature and rainfall that make each biome unique. List any environmental problems that are occurring in the biome you researched.

- Week 4
  - **Read Literacy Article 4A: How Can Spinning Air Be Dangerous? (link):** Answer the questions to help understand the characteristics of tornadoes, and ways to stay safe during a tornado.
  - **Owlie Skywarn:** Visit **Owlie Skywarn™** https://www.weather.gov/owlie/ to learn about weather using games, activities, and lessons related to weather and weather safety.

- Week 5
  - **Weather Safety Drills:** Review safety procedures for different types of weather on the Owlie Skywarn safety tab. Think of a family safety drill that would help to keep your family safe during dangerous weather such as a thunderstorm.
  - **Emergency Hazards and Preparedness Kit:** Prepare a poster or public service announcement that shows how to prepare for severe weather and what to include in an emergency preparedness kit.

Innovators in Science – Pick a person below, research and write about why they can be called an "innovator in science."

- Deepika Kurup - http://www.rsc.org/diversity/175-faces/all-faces/deepika-kurup/
- Shawn Urbanski - https://www.fs.usda.gov/rmrs/people/surbanski