

NGSS Transition Support Guide

FOSS	Beyond Weather and Climate (previously Water)
	Grade 3 – Weather and Climate

IMPORTANT INFORMATION ABOUT CHANGES TO YOUR KIT!

Beyond Weather and Climate has replaced the FOSS ‘Water’ kit to support NGSS implementation of 3-ESS2-1; 3-ESS2-2; 3-ESS3-1. Teachers should consult the included guide for activities that support these Performance Expectations alongside 3-Dimensional teaching.

Two activities from the previous ‘Water’ kit have been included in your materials:

- **Investigation 2, Part 1** – ‘Build a Thermometer’
This activity has been included to support the extensions for learning described in Lesson 1 Weather. Students can use their self-made data collection tools and compare their data to the Vernier probes to compare the reliability of each tool.
- **Investigation 4, Part 2** – ‘Water Wheels’
This activity has been included as a supplemental engineering design challenge for the task ‘Design and Construct a Water Wheel that can use the energy of moving water to do work.’ This activity is ideal to emphasize both the full engineering design process ([Appendix I](#)) as well as to reinforce or create an anticipatory set for core ideas of energy that will be explored in Models and Designs. *Teachers may opt to keep the materials for this activity beyond the length of their kit, and return materials to the SMC when it is convenient.*

Learning Progression for this Kit

Patterns of weather across different times and areas can be used to make predictions about what kinds of weather may happen next.

Weather is a short-term description of an area's atmosphere; climate is a description of the long-term pattern in an area.

Natural hazards can include weather-related hazards. Humans can take steps to reduce their impacts through design and engineering.

Common Student preconceptions to be aware of include:

- Weather and climate are the same thing.
- Climate is simply long-term weather and therefore cannot be predicted.
- Patterns and characteristics of weather are the same around the world.

For More Information

If you have questions about this guide or its content, please direct your inquiry to your science materials center, or [Regional Science Coordinator](#).