



Curriculum Units by Fellows of the National Initiative  
2021 Volume IV: The Sun and Us

---

## **The Sun & Chicago: Its Weather, Climate, and Climate Change**

Guide for Curriculum Unit 21.04.03, published September 2021

by Alexandra Wagner

Climate change is a term that has become politicized and confuddled over the past few years. But climate change is a reality that all of us are facing and a topic that our students need to explore if they are to understand how to help our planet. This six-week unit, designed for third grade or upper elementary students, will deeply engage students with the science behind climate and climate change. They will complete experiments to learn why different parts of the Earth have different climates and learn the details of their local climate. Students will learn how climate differs from weather and use meteorological data and mathematical reasoning to see how the climate in their region has changed over time. Students will compare historic and present temperature trends to see, tangibly, what the term “climate change” means. From here, students will research the causes and effects of climate change in the Great Lakes region to deeply understand the connection between the temperature graphs they have created and what is happening in their local community. Students will have the opportunity to choose a climate change intervention tool and evaluate its usefulness. They will also make recommendations about how the item/intervention could be improved to help protect the Great Lakes region from the damaging effects of climate change.

(Developed for Science, Social Studies, and Literacy, grade 3; recommended for Science, Social Studies, and Literacy, grade 3)

---

<https://teachers.yale.edu>

©2023 by the Yale-New Haven Teachers Institute, Yale University, All Rights Reserved. Yale National Initiative®, Yale-New Haven Teachers Institute®, On Common Ground®, and League of Teachers Institutes® are registered trademarks of Yale University.

For terms of use visit [https://teachers.yale.edu/terms\\_of\\_use](https://teachers.yale.edu/terms_of_use)