

The Climate Change 101 Explorer Backpack contains the resources and lessons needed for educators to help students gain a better understanding of the science of climate change and its impacts to earth. The hands-on science, storytelling, and art activities in this backpack specifically focus on students from 2nd through 4th grade based on Next Generation Science Standards, and can be used in either classroom or field settings. Using real data that is regionally-specific, the activities in this backpack will bring to life climate change, help students investigate its causes, and help them understand the impacts. Most importantly, students will work to develop their own solutions to help reduce the impacts of climate change in their communities.

## overview

## Grade Level: Lower Elementary

Subject Areas: Science, Fine Arts, Language Arts

Duration:

- <u>Preparation time</u>: Part I (Science): 10 minutes; Part II (Art): 10 minutes; Part III (Storytelling): 5 minutes
- Activity time: Part I (Science): 45 min; Part II (Art): 30 min; Part III (Storytelling): 45 min

**Setting:** Classroom, Field Trip Site (reach out to info@climatesciencealliance for our list of recommended field trips!)

**Essential Question:** What is climate change, why is it happening, and how will it affect the earth?

**Summary:** While participating in the Climate Kids activities of art, science, and storytelling, students will gain a better understanding of climate change and what they can do to help.

## **Objectives:**

Students will:

- Learn about the carbon cycle, greenhouse effect, ocean acidification, and fossil fuels
- Think about the effects of climate change on their community
- Build vocabulary to talk about geological processes
- Engage with actions they can take to mitigate climate change

## what's inside

- Lesson Binder with background information, presentation slides, and talking points
- USB with digital presentation
- Storybooks: My Friend Earth, We Are Water Protectors, This Class Can Save The Planet
- Inflatable globe with air pump, heat-trapping blanket
- 10 Things You Can Do to Help the Earth poster

You will need:

- Paper
- Colored pencils
- Markers