Description:

Many of us want to do something to help slow or prepare for climate change. But what exactly can we do? Students are guided through an activity to find an action or idea that fits their skills, interests, and motivations. Then, students have a conversation about climate change with a friend or family member and reflect on the process.

Skills & Objectives

SWBAT

- Identify one climate-related action or idea that fits their unique interests, skills, and personality.
- Have a conversation with a friend or family member about climate change.

Skills

- Communication
- Self-reflection

Students Should Already Know That

• Climate change is caused by human actions, such as the burning of fossil fuels, that release carbon dioxide and other gases into the atmosphere. These gases act like a blanket, trapping heat. Trapped heat is changing Earth's climate, causing extreme weather, sea level rise, and more.

Standards Alignment:

CCSS.ELA-LITERACY.SL.1 Initiate and participate effectively in a range of collaborative discussions CCSS.ELA-LITERACY.SL.6 Adapt speech to a variety of contexts and tasks

Disciplinary Core Ideas: ESS2.A Earth Materials and Systems ESS2.D Weather and Climate ESS3.C Human Impacts on Earth Systems ESS3.D Global Climate Change



How To Use These Activities:



Pages with the circular "TILclimate Guide for Educators" logo and dark band across the top are intended for educators. Simpler pages without the dark band across the top are meant for students.

Each of the included activities is designed to be used as a standalone, in sequence, or integrated within other curriculum needs. A detailed table of contents, on the next page, explains what students will do in each activity.

A Note About Printing

All student pages are designed to be printable in grayscale

The worksheets do not leave space for students to answer questions. Students may answer these questions in whatever form is the norm for your classroom – a notebook, online form, or something else. This allows you, the teacher, to define what you consider a complete answer.

Podcasts in the Classroom: Throughout these Guides for Educators, we invite students to think about how they would share their learning with family and friends. One way to do this is to encourage your students to create their own podcasts - they're shareable, creative, and have multiple options for embedded assessment. We would love to hear any podcasts or see any other projects you or your students create! Email us at <u>tilclimate@mit.edu</u>, Tweet us @tilclimate, or tag us on Facebook @climateMIT.



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Detailed Table of Contents

Page	Title	Description	Time (min)
	Podcast Episode	Students listen to TILclimate: TIL what I can do, either as pre-class work at home or in the classroom. <u>https://climate.mit.edu/podcasts/bonus-episode-til-</u> <u>what-i-can-do</u>	10-15
1-4	What Can I Do? Venn Diagrams	Based on the model of Dr. Ayana Elizabeth Johnson, students complete a three-part Venn diagram to find a climate action or activity that brings them joy, aligns with their skills and interests, and needs to be done.	30+
5-8	Talking About Climate Change	Students are given pointers on how to talk about climate change and encouraged to have a conversation with a friend or family member.	30+

Social-Emotional Learning

All climate change topics have the potential to be overwhelming or scary for students. The activities in this guide are more personal, so some students may find them more challenging from a social-emotional perspective. Consider:

- Discussion groups for both activities could be self-chosen, so that students can work with friends they trust.
- Sharing Venn diagrams should always be optional. While all students should join in the group discussions, they may make their comments more general.
- If a student is finding the Venn diagram activity challenging, they may fill out the diagram for a book or TV character or a character of their own making.
- Give enough time in the climate change conversation assignment for students to find someone they feel safer talking with it may not be possible to have a conversation that night at dinner.
- Climate change conversations do not have to happen in person or out loud. Text or chat may be just as effective if it is the student's normal style of communication.



For more information on trauma-informed climate education, see pages 6&7 "How to Use TILclimate Educator Guides" (included with this guide or accessible from http://climate.mit.edu/til-what-i-cando-educator-guide)

Climate Engagement

This Educator Guide includes two activities and discussions. Educators may pick and choose among the pieces of the Guide, as suits their class needs.

Parts of this Guide may align with the following topics:

- Life/environmental science: Climate change as a socio-environmental issue
- History/social science: Climate change in the news, social movements, climate justice
- ELA/literature: Connections to climate fiction
- ELA/nonfiction: Conversations and clear communication.

MIT Resources

We recommend the following as resources for your own better understanding of climate change or as depth for student investigations. Specific sections are listed below:

 Climate Science, Risk & Solutions, an interactive introduction to the basics of climate change. <u>https://climateprimer.mit.edu/</u>

Chapter 02 The greenhouse effect and us Chapter 04 The climate is always changing Chapter 06 Predicting climate Chapter 08 What are the risks? Chapter 10 What can we do?

 MIT Climate Portal Explainers are one-page articles describing a variety of climate topics. New Explainers are posted every month. <u>https://climate.mit.edu/explainers</u>

Climate-Resilient Infrastructure Sea Level Rise Urban Heat Islands Coastal Ecosystems and Climate Change Cities and Climate Change Greenhouse Gases Renewable Energy



Wrap-Up Discussion Questions

- Why did Dr. Johnson choose these three circles for her model? Can you think of others that would also work?
- What story in the podcast episode stuck with you? Why?
- What might you do differently next time you have a conversation about climate change?
- What would make it easier to have these conversations in the future?
- What were some of the best things that happened in people's conversations?
- Why is it important for people who are not climate experts to talk about climate change?
- What stories have you heard of people who weren't involved in climate action getting involved? What caused them to begin?

Climate Solutions

Climate solutions can be thought of as falling into four categories outlined below. Across all categories, solutions at the community, state or federal level are generally more impactful than individual actions. For example, policies that increase the nuclear, solar and wind mix in the electric grid are generally more effective at reducing climate pollution than asking homeowners to install solar panels. For more on talking about climate change in the classroom, see "How to Use This Guide".

• Energy Shift

How do decision-makers make the switch from carbon-producing energy to carbon-neutral and carbon-negative energy?

Energy Efficiency

What products and technologies exist to increase energy efficiency, especially in heating and cooling buildings?

Adaptation

How can cities and towns adapt to the impacts of climate change?

• Talk About It

Talking about climate change with friends and family can feel overwhelming. What is one thing you have learned that you could share to start a conversation?



What solutions are the most exciting in your classes? We would love to hear from you or your students! Images, video, or audio of student projects or questions are always welcome. Email us at <u>tilclimate@mit.edu</u>, Tweet us @tilclimate, or tag us on Facebook @climateMIT.