

# Introduction to Climate Change and Climate Justice Teacher Lesson Plan

## Introduction

In this lesson, students learn about climate justice through trivia, an intersectional issue map, and a group activity that explores real-world climate justice issues. The purpose of this lesson is to raise awareness of climate justice issues associated with fossil fuel burning and extraction, as well as climate change.

## Learning Outcomes

Students will be able to:

- Define climate justice
- Create an issue map connecting different issues to climate justice.
- Work together with other individuals to talk about climate change

## Total Time

45 min (one class period)

## Materials

- Laptop and projector
- Trivia Slips:
  - Cut the page so that there is one question per slip
  - Print as many as needed so that every student has one trivia slip (It's okay for students to have duplicate questions.)
- Climate Change Worksheet
  - Handout the worksheets to each student
  - Print as many as needed so that every student has one worksheet

## Additional Teacher Prep

- Use the articles listed in Sources & References to familiarize yourself with some climate justice issues.
- Examples of issue maps:

## Sources & References:

- ["Blacks, Hispanics breathe more pollution than they make" - AP News, 2019](#)
- ["Introduction to Gender and Climate Change" - United Nations Climate Change](#)
- ["Climate Change" - United Nations Indigenous Peoples, Department of Economics and Social Affairs](#)
- ["Climate Justice" - University of Colorado Boulder, Environmental Center](#)

# Teaching-Learning Plan

**Step 1:** Present 'Introduction to Climate Change and Climate Justice' slideshow. (20 minutes)

**Step 2:** Pick an activity. (each one is about 10 minutes)

**Step 3:** Do the climate change worksheet. (10 minutes)

Hand out the worksheet to each student. They should work with each other, or as a class, to come up with the answers.

**Step 4:** Homework (optional)

If students are highly engaged in the Trivia Mingle and Issue Mapping activity, they can create a free account and access more videos on climate change on <https://ourclimateourfuture.org/>

## Activities:

**Trivia Mingle:** Place the trivia slips on the desks before the class begins. Make sure each student has a slip. Explain the activity:

- Today we'll explore how climate change isn't just a science issue, but is also a human issue where some people are impacted more than others.
- Each student has a trivia strip with one question and its answer.
- When I tell you, walk around the classroom, partner up, and ask each other your trivia questions.
- Once you've both asked and answered, switch trivia slips and find a new partner.
- If your partner has the same question as yours, find a different partner.
- Try to talk to as many people as you can.

**Issue Mapping:** On the board, write and circle the words "Climate Change".

- Ask students to brainstorm other issues facing our world today. and write them on the board.
- Encourage students to think back to some of the questions they encountered during the trivia slip exercise.

*Expand the Conversation and Ask:* "Are there issues that aren't connected to climate change? Are they connected to other issues that ARE connected to climate change? Are there solutions that could address more than one issue?"

*Allow students to share their experiences:* Students can share what they have heard on the news, in social studies class, etc. You may be surprised how informed your students are on social issues!

*Making connections to climate change:* Ask: "What are the connections you see between one of these issues and climate change?"

- Draw lines connecting the issues that students relate to each other, creating a web of connectivity. Students can also connect other issues to each other.
- Next, write three types of connections on the board:
  1. Compounding connection: Issue A makes Issue B worse.
  2. Solution connection: Issue A and Issue B can be solved by the same thing.
  3. Root cause connection: Issue A and Issue B have the same root cause.
- As a class, go through each connection and ask which type of connection it is.
- Consider using a different color for each connection.

*If there is time:* Review all the answers as a class.

Potential responses:

- Disease (i.e. asthma, respiratory disease, malaria)
- Racial inequality (i.e. people of color more likely to suffer from asthma, or live closer to fossil fuel facilities)
- Poverty (i.e. richer countries produce more emissions while the poorer face the consequences)
- Hunger (i.e. less food production due to harsher climate)
- Gender inequality
- Immigration (i.e. displacement due to sea level rise or extreme weather)
- Animal rights

## **Possible Answers to Climate Change Worksheet**

### **What is the difference between global warming and climate change?**

“Global warming” refers to the rise in global temperatures due mainly to the increasing concentrations of greenhouse gasses in the atmosphere. “Climate change” refers to the increasing changes in the measures of climate over a long period of time – including precipitation, temperature, and wind patterns.

### **What are fossil fuels and how do they cause climate change?**

The fossil fuel is used in driving steam trains and manufacturing industries. When fossil fuels are burned to produce energy for electricity, heat and transportation, they release greenhouse gasses like carbon dioxide, which traps heat in the atmosphere.

### **Name some examples of changes in climate or extreme weather. What are some recent extreme weather events that have happened around the world?**

Tornadoes, droughts, hurricanes, floods, etc.

### **Why might people with higher incomes be responsible for more emissions?**

As people get wealthier, they spend more on transport (cars, boats, planes, vacations), which is one of the most energy intensive consumer categories. Because wealthier people turn to more energy intensive goods, the energy gap rises even faster than the income gap.

### **What are other reasons why some people may have higher emissions than others? What are some barriers people face in reducing their emissions?**

Sometimes going green is expensive and not everybody can afford it. For example, electric cars are more expensive than gas cars. The average cost of an electric car is \$66k, while the average of a gas car is \$44k.