

Drawdown

How can we meet the challenge of climate change?
Is there a solution to climate change? What is it?
Who do I need to talk to in order to solve climate change?

Objective

Students have heard so much about the **threat** of climate change and the dire circumstances of their future. There are studies about the affect climate change has on mental health. Drawdown changes the mindset from threat to challenge. Students read about a multitude of different solutions to climate change. They will understand what they can do and they will encourage their local decision makers to do the same.

Preparation

Drawdown is the point at which humans are no longer putting any more carbon into the air—but rather drawing it out of the atmosphere. This organization wants to reach drawdown by reducing emission sources, supporting nature's carbon sinks, and fostering equality for all. <https://drawdown.org/> The home page shows the nine different sectors. Within each sector there are solutions. Calculated for each solution is the amount of carbon sequestered, the first cost to implement the solution, and the overall savings. The numbers are hard to understand so...

For student reference:

1 gigaton equals 1 billion or 1,000,000,000 **metric tons**; 1 metric ton = 2204.6 pounds

1 gigaton is equal to 500 cargo ships that you see in the Bay

1 trillion seconds of time is equal to 31,546 years!

This article has some good tips for writing to your representatives: <https://www.aclu.org/writing-your-elected-representatives>

Delivery

Tell students they're going to learn how to meet the challenge of climate change. Explain what drawdown is and go through one sector and one solution of your choice. Transportation—Bicycle Infrastructure is a good example. It's something students may have already experienced and you can use the framing above to explain the large numbers. Tell students they are going to choose a sector that interests them. Then they will read the sector summary and scroll down and scan the solutions. They will choose two solutions to delve deeper into with the intention that they will be writing to their representatives about these solutions. They should take notes on how much GHG's sequestered, net cost, and net savings. Students should be encouraged to explore as many sectors and solutions as they want. When they have chosen two solutions then they can start drafting their letter.

<https://www.house.gov/representatives/find-your-representative> - enter your zip code, then click on the envelope underneath the congressperson's name for contact

<https://www.senate.gov/senators/contact> - choose your state from the drop down menu

When writing your letter:

- Keep it brief: 1 page
- State who you are and what you want up front
- Personalize your letter: Why do you care?
- Hit your three most important points
- Remember this person represents you. Be courteous, but don't be afraid to be firm on your point and your beliefs



Theme

Human Impact & Climate change

Age

6-12th

Duration

45-60 mins

Materials

Links and writing utensils

Standards

NGSS: MS-ESS3-4; HS-ESS3-2; HS-ESS3-4

Vocab

Drawdown: When green house gases no longer are emitted but taken out of the atmosphere instead.