

**Teacher's Guide** 



# Mitigation vs. Adaptation

This activity is an introduction to the concepts of climate change mitigation and adaptation. If you want to learn more about these concepts and potential climate solutions, check out our "<u>Adaptation</u>" course.

### Instructions

Students are provided with background information, including the definitions of **mitigation** and **adaptation**, as well as pointers on why these concepts are important. Students are then asked to sort various **climate solutions** into their respective category: mitigation or adaptation.

Once students have completed the activity, we recommend discussing the **impact** of the solutions that are listed and brainstorming others!

Answers are on the next page.

**Mitigation** is any action which helps to reverse or slow climate change either by: decreasing greenhouse gas emissions or by removing greenhouse gases from the atmosphere

Adaptation is any action that allows us to continue to meet our basic needs (food, water, health, shelter) by adjusting to climatic changes.





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## **Answer Key**

### Mitigation

- Solar power
  - Produces energy in a way that doesn't release nasty gases (greenhouse gas emissions) that cause climate change
- Plant-based diet
  - Produces lower amounts of nasty gases than a diet that includes meat
- Electric vehicles
  - Produce lower amounts of nasty gases than a vehicle that runs on petrol
- Replanting forests
  - Trees suck up nasty gases that cause climate change from the air
- Recycling
  - Prevents excess waste, which, if thrown away, can end up in landfills and release nasty gases





## Adaptation

- Flood protection
  - Protects communities from excessive flooding that can destroy homes, buildings, and crops
- Better access to healthcare
  - Ensures that people who are exposed to diseases (that are becoming more widespread due to climate change) or who are injured because of climate change can be treated
- Stronger, safer buildings
  - Ensures that buildings are less likely to be damaged by the effects of climate change, such as extreme weather events
- Fixing leaky water pipes
  - Hotter temperatures will make drinkable water more scarce. Fixing leaky pipes ensures that we don't lose any of our water
- Better emergency response
  - Ensures that people who are severely affected by climate change (because of extreme weather events, for example) will still have access to food, water, shelter and healthcare

We welcome feedback and would be delighted to hear your thoughts on this activity. Feel free to send an email to <u>schools@climatescience.org</u> and we'll be sure to get back to you soon :)