Climate Change

What this topic covers

Many people call climate change the greatest challenge of our generation. The United Nations, where leaders and scientists from all countries around the world come together, has told us that unless people in every country take serious action on climate change within the next ten years, then sadly it will significantly worsen the risks of drought, floods, extreme heat and poverty for hundreds of millions of people. In this learning module, you will take a deeper look at climate change and reflect on this important global issue that effects us all.

By the end of this topic you will have prepared for dialogue with your peers by:

Critical Thinking

Investigating what climate change is and analysing what causes it.

Global Communication

Identifying personal stories in your own community to share with your peers.

Active Listening

Practicing empathy by making connections with people's stories and experiences of climate change.

Asking Questions

Constructing questions for deeper knowledge and understanding during dialogue about climate change.

This module takes on average around 20 to 30 minutes to complete

Start learning

Learning about climate change

What is climate change?

Watch this video to learn about what causes climate change and what its effects are on the world.

Environment and Climate Change Canada - What is Climate Change?: https://www.youtube.com/watch?app=desktop&v=QIQ-MEZgRGY

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Everyone's talking about climate change. But what is our climate? And why is it changing?

Our climate is the earth's normal weather over a very long time. It usually takes hundreds, or thousands of years for the climate to change.

But recently, our climate has been changing much faster. All these changes make life harder for our plants, animals, and for people around the world.

And the biggest cause of climate change, is humans. Including you and me.

When we use fuel, like oil and gasoline, or remove forests to make room for cities or farms, we release greenhouse gases into our atmosphere.

These greenhouse gases cause our climate to get warmer. Normally, when the heat from the sun warms our planet, some of the heat reflects back into space. But greenhouse gases act like a big blanket, holding some of it in.

This extra heat can cause all sorts of problems for our planet; and the plants, animals and people who live here. Our ice and snow are melting faster.

Our oceans are getting warmer, and higher. And our weather is becoming more extreme; with more heat waves, heavy rainfalls and powerful hurricanes.

Luckily, many countries around the world are working together to fight climate change. And there are lots easy ways you and I can help too.

Like reusing things instead of throwing them out; instead of driving, ride your bike or take the bus; use less electricity; and eat food grown closer to home. You and I - we can make a difference.

We can fight climate change.

Continue

Learning about climate change

What is climate change?

Is this statement true or false?

When learning and talking about climate change, it is helpful to know some of the facts. Read the statements below and select the category it belongs to. Is it true or false?

Changes in the earth's climate is a new phenomena

True

False

Learning about climate change

What is climate change?

Is this statement true or false?

When learning and talking about climate change, it is helpful to know some of the facts. Read the statements below and select the category it belongs to. Is it true or false?

Causes of 'natural climate change' include changes in the earth's orbit, volcanic eruptions and changes in the sun's energy

True

False

Learning about climate change

What is climate change?

Is this statement true or false?

When learning and talking about climate change, it is helpful to know some of the facts. Read the statements below and select the category it belongs to. Is it true or false?

Human caused climate change started in the 1900s

True

False

Learning about climate change

What is climate change?

Is this statement true or false?

When learning and talking about climate change, it is helpful to know some of the facts. Read the statements below and select the category it belongs to. Is it true or false?

The following are causes of greenhouse gas emissions: growing more rice, cutting down trees, increased fuel consumption

True

False

Learning about climate change

What is climate change?

Is this statement true or false?

When learning and talking about climate change, it is helpful to know some of the facts. Read the statements below and select the category it belongs to. Is it true or false?

A result of global warming is that the sea is getting cooler

True

False

Back

Learning about climate change

Stories of impact

Human actions such as cutting down forests, increased farming and burning greenhouse gas emitting fuels to power cities, homes, factories and cars are all causing the Earth's climate to become warmer. This is slowly affecting the temperature, climate and extreme weather events all around the world. This also affects the world's population in different ways. As you read these stories from Africa, Asia, and the Americas, choose one to use for your next task!

Aziz's Story - Africa

Image source - https://pixabay.com/photos/farmer-africa-farmland-village-2008002/

How does climate change affect us?
(Photo Pixabay)

Aziz lives in the Sahel region of Africa, where his parents work as farmers. However, there have now been three years of very little rain and it is becoming difficult to grow crops. He is worried that they will not be able to grow and sell enough produce to pay for food and water.

The past five years have been the five hottest ever recorded in human history, and scientists believe the principal reason for this is the rising levels of greenhouse gas emissions produced by human activities. Africa is warming disproportionately fast compared to other regions. This can lead to consecutive years of drought, leading to food and water shortages, wildfires and even conflict.

Show text version

Shalini's story - India

https://commons.wikimedia.org/wiki/File:Trafficjamdelhi.jpg

How does climate change affect us?
(Photo Wikimedia)

Shalini lives in Mumbai India, and every day she walks two miles to go to school. Her neighbourhood is becoming busier every year, and the road she walks along to go to school has many more cars, making the pollution very bad. Also, the last two summers have had record-breaking hot temperatures. Together this makes it hard to breathe, making her tired and struggle to concentrate in school.

Burning fossil fuels not only produces greenhouse gasses that warm the planet, but also other pollutions that can harm health or affect food and water supplies. Scientists estimate that up to 9 million deaths each year are associated with air pollution. Often it is the poorest, who cannot afford to move to cleaner areas, who are most affected.

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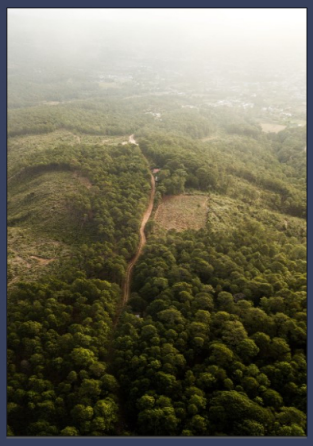
Davi's story - Brazil

Image source - https://pixabay.com/photos/young-native-amazon-2896605/

Davi lives in the Amazon rainforest, where his family has lived for hundreds of generations. Their culture is closely connected with the forest and all the wildlife within it. However, recently a road was built through the area, and now much of the forest is being cut down, making it hard to maintain their lifestyle.

Brazil lost 4 million hectares of forest cover in 2017 alone. Democratic Republic of Congo and Indonesia both lost 1 million. This deforestation not only causes emissions, it also takes away trees that usually help to reduce emissions and threatens natural wildlife and the cultures of those who live in the forest. 50% of all species are deemed at risk of extinction, while those who try to stop deforestation are often harassed or even attacked.



How does climate change affect us?

(Photo by Esteban Benites on Unsplash)

Show text version

Léonie's strory - United States

Image source - https://pixabay.com/photos/new-orleans-louisiana-81669/

How does climate change affect us?

(Photo Pixabay)

Léonie lives on the coast in the Southern USA. She loves her home but sadly last year it was damaged during a storm. She has been helping her parents to fix the house, but the seasonal floods which used to reach the end of her garden are now sometimes reaching their front door, meaning they have to do the work again.

Depending on an area's landscape, the heat from a warmer climate can also cause extreme weather events such as hurricanes, which have become more frequent in recent years. The warming is also melting ice in the polar regions causing sea levels to slowly rise. Both of these factors mean an ever-increasing risk of flooding, especially for those who live in coastal regions or on small islands.

Show text version

*Case studies are fictitious and do not represent any person.

Continue

Learning about climate change

Stories of impact

What if this was your story?

Imagine you are Aziz, Shalini, Davi or Léonie. Choose one of the stories to talk about as if it were your own. In the box below describe how you feel about the effects of climate change on your local environment, explain what you would want others to know about your situation and changes you would like to see in the near future.

Enter your thoughts here...

Continue

Learning about climate change

Stories of impact

What if this was your story?

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Enter your thoughts here...

Can you think of any ways in which climate change is connected to your life? Take your learning away from the screen and practise the skills of dialogue by talking to some of the older members of your community, family or friends, and ask them how the climate has changed during their lifetime.

Continue

Learning about climate change

Action for Climate Change

Read the following infographic about some of the latest actions proposed in 2022 by world leaders, climate experts and activists at COP27 in Sharm el-Sheikh, Egypt.

GENERATION GLOBAL

ACTIONS FOR CLIMATE CHANGE AT COP27

WHAT IS COP27?

COP stands for "Conference of the Parties".
It's an annual summit organised by the UN and it brings together countries all over the world to take decisions that will secure the future of our planet. The latest one which happened in Sharm el-Sheikh, Egypt in 2022, was the 27th annual summit.

WHO WAS THERE?

There were representatives of almost 200 countries including:

- Heads of state
- Climate experts
- Climate activists/campaigners
- Cultural leaders
- Leaders of international corporations

FOUR KEY ACTIONS FROM COP27

The final agreement is not legally binding but becomes a guide for the global agenda on climate change for the next decade.

CLIMATE JUSTICE

A historic decision was taken to establish a loss and damage fund that will aid vulnerable communities that have suffered extreme weather around the world.

TEMPERATURE AND EMISSIONS

Countries strongly committed to limit the global temperature rise to 1.5°C by decreasing carbon dioxide emissions through the use renewable energies.

YOUNG PEOPLE WERE IN THE SPOTLIGHT

At COP27, a pavilion and a youth-led climate forum were created for the first time, making the younger voices visible and heard at the event.

MONEY

An investment from US$4-6 trillion a year will go into renewable energy to allow humanity reach net-zero emissions by 2050.

Adapted from: https://www.unep.org/news-and-stories/story/cop27-ends-announcement-historic-loss-and-damage-fund
https://www.weforum.org/agenda/2022/11/10-key-takeaways-cop27-nature-critical-role/

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Learning about climate change

Action for Climate Change

Who needs to be involved in dialogue about climate change for there to be a positive impact in the next decade?

Select the checkbox next to each group of people that you think should be involved in a dialogue about climate change to make a change.

- [ ] Political leaders of the wealthiest nations
- [ ] Political leaders from economically developing nations
- [ ] Young people from all backgrounds
- [ ] Citizens from all regions
- [ ] Businesses and corporations
- [ ] Scientists and institutions
- [ ] Educators and schools
- [ ] Community leaders
- [ ] Celebrities and influencers
- [ ] Media and journalists

Continue

Learning about climate change

Dialogue for change

Now more than ever, it is important that the world collaborates to make a change for planet Earth. Watch this video from Amnesty International to learn about how young people come together to solve this global issue.

The Teenager Inspiring Others to Act on the Climate Crisis

Source: Amnesty International - The Teenager Inspiring Others to Act on the Climate Crisis - https://www.youtube.com/watch?v=Zdl8_fWAI2k

Hide transcript

What probably keeps us going is hope. That's what allows us to fight when we feel like that, nothing's happening. We still hope that we're going to be able to make a change.

You're going to be able to make a difference.

Hi, I'm Ambrose. I'm 15 years old based in Sydney and I'm part of School Strike for Climate.

School Strike is a movement of young people asking our politicians and demanding that they take action on the climate crisis.

We're trying to be heard. We're trying to have a voice. We can't vote and this is the way that we can make a difference.

In an ideal world I'd probably like to be in a future where we're not having to worry about the looming climate crisis.

I reckon the turning point for me for getting involved was seeing the first school strikes back in November 2018 and when I saw them, I realized that I could make a difference and that I could

make a positive change in the world and probably the main thing was that the people who were organizing it were my age, they were in high school. They were in the same situation as most of us in high school and they

were still able to get involved so I thought I may as well try it out.

We organize strikes and different protests but then we also do online courses for the climate in general.

There's a whole bunch of different ways that you can take action on the climate crisis and one of the simplest ways is individual change. You can go out and

join your local climate group try and speak to your local MP post about it on social media and get other people involved.

Everything you do can make a difference and I encourage you to do whatever you can in what capacity you can.

Don't sit around and wait to take action. Now we need it! The climate needs it!

Continue

Learning about climate change

Dialogue for change

What do you want to know?

Think about three questions you would like to ask your global peers about their experiences with Climate Change and the actions they will take.

- Write your questions down in the space below so that you can ask them in when you talk with your peers in the dialogue space.
- You might want to think about exploring what they have noticed about the local environment, their hopes and fears for the future or how they feel about what they are experiencing and witnessing.

Enter your thoughts here...

Continue

Learning about climate change

Dialogue for change

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Enter your thoughts here...

The effects of Climate Change are becoming ever more evident for all to see and experience. It is therefore necessary that we all get involved in taking action to save our planet. Understanding what others are doing and sharing our own contributions in the dialogue space is taking a step closer toward learning how we can all work together to save the future of our planet.

Continue

Well done!

You completed

Learning about climate change

Congratulations!

You have completed the learning module for climate change by investigating some of the facts, thinking critically about how this issue impacts both local and global communities, and constructing difficult questions to ask your peers in a dialogue. By practicing these skills, you are becoming a global citizen who is able to investigate the world's problems and cooperate with people from all over the globe.

You are now ready to enter the dialogue space to practise the core skills and talk about this important topic. When you have earned 30 XP in the space, you can then book into a live video conference to dialogue with your peers!

Enjoying the Ultimate Dialogue Adventure? Invite your friends to join you!

Invite via email - Invite via WhatsApp

Continue

Learning: Climate Change

You have earned the learning badge about Climate Change!