



Topic: Climate Change, Sustainability, Resources

Year: 6

Term: Spring

Climate Change and Sustainability

What is climate change?

Climate change is the continuous, ongoing cycle of change in the world's weather and climate. Though these can be caused by natural causes, there is substantial evidence that human activities and industry have increased the process.

What is the impact of climate change?

Some of the main issues of climate change are: rising global temperatures resulting in rising sea-levels and changes in landscape; increase in rainfall causing floods and destruction; loss of animal habitats resulting in animal extinction

Cause of Climate Change	Explanation	Solution
Generating power	Generating electricity and heat by burning fossil fuels such as coal, oil and natural gas causes a large chunk of global emissions.	Further use of additional renewable energy sources worldwide.
Manufacturing goods	This produces emissions, mostly from burning fossil fuels to produce energy for making things like cement, iron, steel, electronics, plastics, clothes and other goods.	Factories switching to renewable energy sources; upgrading equipment to more fuel-efficient machinery.
Cutting down forests	Trees absorb carbon dioxide which causes climate change. Cut down trees release carbon they have been storing. Reduces amount of carbon dioxide that is taken from Earth's atmosphere.	Campaigns to end deforestation and increase planting of trees.
Using transportation	Most cars, lorries, ships and planes run on fossil fuels and release carbon dioxide.	Transitioning vehicles to renewable energy sources will reduce emissions from cars.
Producing food	Emissions come from producing food which requires energy, as does packaging and distributing it. Fertilisers and manure also release emissions.	Eating less meat; supermarkets reducing amount of packaging on food.
Powering buildings	Residential and commercial buildings consume over half of all electricity.	Turning lights off when not in use; using energy-efficient light bulbs; switching to renewable energy sources.
Consuming too much	Overusing power, using vehicles unnecessarily, wasting resources, and buying things we do not need all result in over-consumption.	Reducing the amount of waste created; additional efforts to recycle used products; use recyclable straws.



Resources

What is meant by 'resources'?

Resources are the amount of stock or supply that someone or something needs in order to function properly.

What do we need to survive?

Humans have always needed resources to survive. Nomadic hunter-gatherers needed nothing more than the things they could carry on their back.

Over time, the way we live has changed. This has drastically increased the amount of resources that we need. This demand has a significant impact on the environment.

Essentially, humans need four things to survive: food, water, air and shelter. However, industry, amongst other things has made our way of life require much more. Things such as electricity, healthcare, transport, the internet, and even the news are all essential in developed countries.

	Renewable Energy	Non-Renewable Energy
Definition	Energy made by nature that can be replaced.	Energy that can run out once it is consumed.
Examples	Solar, water and wind power.	Natural gas, petroleum, coal.
Additional Information	Much safer and contribute less to climate change.	Made up of carbon; formed in carboniferous period

Vocabulary

Word	Explanation
Carboniferous Period	the period of time before the dinosaurs when fossil fuels formed
climate	the type of weather in a particular area
conserve	to save something
consume	use, eat, drink, ingest or completely take over something
displacement	when a person or people are forced to leave their home
fossil fuels	non-renewable fuels formed by fossilised plants and animals
import	bring something in from one place to another
industrial revolution	a period in history when humans started using machines to undertake work
produced	when something is made
settler	someone who moves from one place to another to live
solar energy	energy that comes naturally from the sun
sustainability	the amount of time that something can exist before it no longer exists