



<b>Title:</b>	<b>Understanding Climate Change</b>
<b>Objective:</b>	Students will be able to understand what climate change is, its causes and consequences, and how we can help mitigate its effects.
<b>Materials Needed:</b>	<ul style="list-style-type: none"><li>• Whiteboard or chalkboard</li><li>• Markers or chalk</li><li>• Printed handouts with simple definitions of key terms related to climate change (they need to be cut ✂)</li><li>• Interactive online tools or videos on climate change</li></ul>
<b>Lesson Plan:</b>	
<b>Introduction</b> (5 minutes):	Greet the students and introduce the topic of climate change. Ask the students if they have heard of climate change before and what they know about it.
<b>Lesson Content</b> (25 minutes):	Define climate change and explain the greenhouse effect and how it contributes to climate change.  Explain the natural and human causes of climate change, including the use of fossil fuels, deforestation, and agriculture.  Discuss the effects of climate change, including rising sea levels, melting glaciers, extreme weather events, and impacts on wildlife and ecosystems.  Discuss possible solutions to mitigate the effects of climate change, such as reducing greenhouse gas emissions, using renewable energy, and protecting forests and wildlife.
<b>Activities</b> (10 minutes):	Divide the students into small groups and provide them with printed handouts with simple definitions of key terms related to climate change.  Ask each group to work together to match the terms to the definitions. After the groups have completed the activity, go over the answers together as a class.
<b>Conclusion</b> (5 minutes):	Review the main points of the lesson and ask students if they have any questions.  Emphasize the importance of taking action to address climate change and encourage students to think about ways they can help reduce their carbon footprint.
<b>Assessment:</b>	You can assess the students' understanding of climate change by asking them to create a poster or infographic about climate change, its causes and consequences, and possible solutions. Alternatively, you could ask them to write a short essay about what they have learned in the lesson.
<b>Online tools and videos on climate Change:</b>	<ul style="list-style-type: none"><li>• Climate Interactive's En-ROADS simulator (<a href="https://www.climateinteractive.org/tools/en-roads/">https://www.climateinteractive.org/tools/en-roads/</a>)</li><li>• NASA's Climate Kids website (<a href="https://climatekids.nasa.gov/">https://climatekids.nasa.gov/</a>)</li><li>• National Geographic's "Before the Flood" documentary (<a href="https://www.nationalgeographic.com/environment/global-warming/before-the-flood/">https://www.nationalgeographic.com/environment/global-warming/before-the-flood/</a>)</li></ul>

✂ *Handout – simple definitions of key terms related to climate change.* ✂

<b>Carbon Footprint</b>	The amount of greenhouse gases (such as carbon dioxide) that are emitted into the atmosphere by an individual, organization, or product.
<b>Climate</b>	The average weather conditions of a particular region over a long period of time, usually 30 years or more.
<b>Climate Adaptation</b>	Actions taken to adapt to the changing climate and its impacts, such as building sea walls to protect against rising sea levels, or developing drought-resistant crops.
<b>Climate Change</b>	A long-term change in the average weather conditions that have come to define Earth's local, regional and global climates.
<b>Climate Mitigation</b>	Actions taken to reduce or prevent the emission of greenhouse gases, such as reducing energy use, promoting renewable energy, and improving energy efficiency.
<b>Deforestation</b>	The process of clearing forests for agriculture, urbanization, and other human activities, leading to a decrease in the amount of trees that absorb carbon dioxide from the atmosphere.
<b>Fossil Fuels</b>	Non-renewable energy sources that are formed from the remains of plants and animals that died millions of years ago, including coal, oil, and natural gas.
<b>Global Warming</b>	The gradual increase in the Earth's average surface temperature due to the increase in greenhouse gases (such as carbon dioxide, methane and nitrous oxide) in the atmosphere, caused primarily by human activities.
<b>Greenhouse Effect</b>	The natural process by which the Earth's atmosphere traps heat from the sun, which keeps the planet's temperature within a range that is suitable for life.
<b>Renewable Energy</b>	Energy sources that can be replenished naturally in a relatively short period of time, including solar, wind, hydro and geothermal energy.