



# Lilycroft Primary School

## TOPIC Knowledge Organiser



<b>Topic: Climate Emergency</b>	<b>Year: 5</b>
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What should I already know?	
<ul style="list-style-type: none"> <li>*That weather and climate are different</li> <li>*That different parts of the world have different climates</li> <li>*That most of the planet is sea</li> <li>*The stages of the water cycle</li> </ul>	
What will I know by the end of the unit?	
What climate change is and some of the main effects	
<b>What is climate change and global warming?</b>	Climate change is the process of the weather becoming more extreme and unpredictable due to human activity. Global warming is the big rise in average temperature across the Earth.
<b>What are the main effects? What is the evidence of Global Warming?</b>	<ul style="list-style-type: none"> <li>*<b>Ice caps melting</b> which affects polar animals</li> <li>*<b>Sea levels rising</b> causing damage to communities near coasts</li> <li>*<b>Floods</b> – too much rain due to more water vapour in the atmosphere</li> <li>*<b>Drought</b> – less rainfall. Rising temperatures mean ground and plants are drying out</li> <li>*<b>Hurricanes</b>/*<b>Earthquakes</b> – increasing in strength and more frequent in some areas</li> <li><b>Wildfires</b> – increased in number and severity in recent years</li> </ul>
What are the main causes of Climate Change and global warming?	
<b>How is deforestation affecting climate change?</b>	Trees absorb carbon dioxide during <b>photosynthesis</b> . If too many trees are cut down, CO <sub>2</sub> is released into the atmosphere (Greenhouse gas)
<b>What are fossil fuels? Who is burning them? How does this cause global warming?</b>	<b>Fossil fuels</b> are formed during the decomposition of remains of plants of animals and are a source of non-renewable energy. They can either come in the form of an oil, coal, or natural gas, All industrialised countries burn them and this releases CO <sub>2</sub> into the atmosphere
<b>How is farming affecting global warming?</b>	Cows produce methane as they digest grass and this is released into the atmosphere as methane – a greenhouse gas. There are almost 1.5 billion cows. Also use of fertilizers and pesticides
What areas and communities are the worst affected? Case studies (Focus on cases studies of areas worst affected by extreme climate change)	
<b>Hurricane</b>	<b>A case study of a recent hurricane – its causes and effect on community</b>

<b>Drought</b>	A case study of one of the worse affected areas and communities
What can be done to reduce or prevent the effects of climate change?	
<b>International agreements to reduce emissions</b>	<b>Paris Agreement – 197 countries pledged/signed to reduce Carbon emissions</b>
<b>Alternative energy</b>	<b>Electric cars, wind power</b>
<b>Planting Trees</b>	
Diagram	
	The Greenhouse Effect is a natural function and was essential for keeping Earth warm as heat was trapped by a layer of atmosphere. Now the atmosphere contains too many greenhouse gases due to human activity

Vocabulary	
WORD	DEFINITION
<b>Environment</b>	the surroundings or conditions in which a person, animal, or plant lives
<b>Climate</b>	the weather conditions prevailing in an area in general or over a long period
<b>Climate change</b>	the way that both weather and climate systems are becoming more extreme and unpredictable as a result of human activity across the world
<b>Global warming</b>	the increase in the overall temperature of the earth's atmosphere
<b>Greenhouse Gases</b>	a gas that contributes to the greenhouse effect
<b>Greenhouse Effect</b>	the trapping of the sun's heat in the Earth's lower atmosphere due to increased Greenhouse gases
<b>Carbon Dioxide</b>	A gas released by the burning of coal, natural gas, oil and wood that traps heat in the atmosphere
<b>Pollution</b>	the presence of a harmful or poisonous substance in an environment
<b>Fossil Fuels</b>	a natural fuel such as coal or gas, formed in the geological past from the remains of living organisms.
<b>Deforestation</b>	The action of clearing a wide area of trees
<b>Methane</b>	A powerful greenhouse gas, used widely as a fuel

INSPIRATIONAL PERSON
<b>Greta Thunberg</b> – her background and story. Speeches, actions, influences