



Mendell Primary School

Aspire Challenge Achieve

Medium Term Plan Geography – Spring Term



Year Group: 6	Term: Summer #2 2022	Teacher: Dionne Sanati / Sarah Wearing	Subject lead: Amy Harris	Overview: Climate Change	Key End Points: By the end of this unit children will be able to: - Explain what is meant by climate change on a global scale - Know the key factors which influence climate change - Identify things which are being done locally to combat climate change	
Links to other learning:	Relevant Prior Learning: Y5 – Climate zones and biomes Y5 – Land use	Relevant Future Learning: Y7 -	High Quality Text:	Risk Assessment Risk assessment for local area trip.:	Misconceptions: Climate change does not have to be a warming of the earth's atmosphere (although currently it is)	Teacher CPD: - CPD notes found in resources folder

<u>Learning Intention</u>	<u>Lesson Outline (key questions in colour)</u>	<u>Resources</u>	<u>Vocabulary</u>	<u>Lowest 20% Adaptations</u>
1 I can explain what Climate Change is and why it's happening.	<p>This is a Geography lesson. Geography is the study of places and relationships between people and their environments. Explain to the pupils that today we are going to learn about the impact we have on our planet.</p> <p>In talking partners, ask the children to explain what is meant by the word 'climate'. Discuss as a group and agree that climate means the long term weather patterns for a given area (not to be confused with weather which is the current weather conditions). So what is meant by climate change then? The word change means when something becomes different. Therefore Climate Change means when the long term weather patterns for a given area become different.</p> <p>Recap: Where are the warmest areas of the Earth and why? Areas nearest to the Equator as this is the closest part of Earth to the sun. Where are the coldest areas of the Earth and why? Areas closest to the North and South Poles (furthest from the sun).</p> <p>Climate scientists have been measuring the Earth's climate directly for over 100 years now (temperature and rainfall). They also use evidence in the Earth's rock layers, fossil record and ice cores to study the Earth's climate back into geological history, 100,000s of years ago! What do you think the change in the Earth's temperature has been over the last 100 years? Our planet has warmed by an average of 1deg C over the past 100 years. This doesn't sound like a big change. Can you suggest why this could be important? One degree change can mean the difference between ice melting and staying frozen (Recap the freezing</p>	Laptops / Ipads	Climate change Global warming Greenhouse gasses Fossil fuels Polar ice caps Temperature	Additional adult to pre-teach skills needed to use an Digimaps

		<p>point of water – science ‘changes of state’). The temperature at the North and South Pole is much colder than -1deg C but at the edges of the Polar ice caps the temperature is around zero deg and a change of 1deg makes a big difference. What could happen to the ice caps ?</p> <p>Scientists believe that if things don’t change, this global warming will continue, if not increase in rate, over the next 100 years. What other effects do we see from global warming? In pairs, children are to use the ipads / laptops to research the impact of global warming. Answers should include: Melting of arctic sea ice, more severe weather events such as heatwaves, floods and hurricanes, rising sea levels, spread of disease and the acidification of the oceans.</p> <p>Ask the children to make suggestions as to why the Earth is slowly getting warmer. Discuss as a group and then explain that Global Warming is caused by human activities. When we burn fossil fuels (recap Yr Science – what are fossil fuels?) for energy in our homes, to power our cars and factories we release carbon dioxide (a type of greenhouse gas) into the Earth’s atmosphere. We also release a lot of carbon dioxide from our farming practices, making cement and by cutting down forests which would naturally ‘suck up’ carbon dioxide.</p> <p>These greenhouse gases absorb heat from the sun and radiate it back down to Earth. The higher the concentrations of greenhouse gases we have, the warmer our planet gets. 16 of the 17 warmest years on record have all occurred since 2001.</p> <p>In their books, children are to write a paragraph explaining what climate change is, the impact it is having on our planet and the main reasons why it is happening. They should include a diagram to explain the effects of greenhouse gasses.</p>			
2	<p>I can explain the impact of Global Warming on different parts of the World.</p>	<p>This is a Geography lesson. Geography is the study of places and relationships between people and their environments. Explain to the pupils that today we are going to investigate the impact of global warming on different areas around the world.</p> <p>Recap the previous lesson: What is ‘Climate Change’? What causes global warming?</p> <p>Does Global Warming impact everyone in the World in the same way? Children to discuss in talk partners. Share their thoughts and ideas as a class.</p> <p>Work through slides 3-9 with the children to introduce the Global Risk Index and discuss each of the risks in terms of severe weather that Global Warming can cause. Can the children remember any of these happening in the United Kingdom (recap – what four countries make up the United Kingdom?). In the UK we are starting to see more extreme weather events such as flooding over recent years.</p> <p>Provide the children with the ‘Climate Change Information Sheet’. Ask the children to read through the sheets and to discuss the key points in small groups (three or four in a group). Show the children the question: ‘How are climate change and extreme weather affecting people’s lives around the world?’</p> <p>Provide the children with large pieces of paper and in their groups they are to prepare an answer to the question. Ask them to consider which countries or areas of the world are creating the most greenhouse gasses and which countries are most at risk from its effects. Consider which countries are most able to cope / react to such severe weather events.</p> <p>Each group to present its answer to the class and as a class agree on a statement to answer the question.</p>	<p>i-pads Global Risk Index Presentation (as part of main PowerPoint) Climate Change Information Sheet</p>		
3	<p>I can use fieldwork skills to identify factors of global warming</p>	<p>This is a Geography lesson. Geography is the study of places and relationships between people and their environments. Explain to the pupils that today we are going to use our geography fieldwork skills to explore the impact of global warming on our local area.</p> <p>Recap the previous lesson: What is ‘Climate Change’? What causes global warming?</p> <p>Ensure all children have been to toilet prior to leaving, lead teacher has inhalers and mobile phone (to contact school if required). All adults must have read Local Area Risk Assessment.</p>	<p>- Set of black ipads - Inhalers - Local area trip RA</p>	<p>Impact Locality Global warming Insulation Congestion Vehicles Double glazing recycling</p>	

		<p>Explain to the class that today we are going to complete a Geography fieldtrip in the local area. The focus of the trip is to identify things in our local area which either help to reduce our impact on global warming or potentially increase our impact. Discuss with the children that we are going to take the ipads with us so that we can take photographs of things of interest to help us write a report when we return to school. Explain that when taking photographs in public places we need to ensure we do not take any of people we haven't asked permission of.</p> <p>Route:</p> <ul style="list-style-type: none"> - Turn right out of Mendell Primary School onto Allport Lane - Follow Allport Lane until it branches right and runs through the middle of Bromborough Village. - At the end of the road, turn left onto The Rake. - Walk to the mini roundabout and turn left onto Allport Lane - Walk along Allport Lane until you return to school. - Total distance approx. 1mile. <p>Things to focus on as you walk with the children:</p> <ul style="list-style-type: none"> - Traffic calming / reducing initiatives (speed humps, signage etc). The slower vehicles travel then the less pollution. - Bus stops with regular service – attempting to reduce the number of vehicles on the road. - Consider the housing as you walk along Allport Lane (insulation, double glazing, heating systems etc) - Have front gardens been removed and replaced with driveways . . . what impact will this have on the environment especially if more people do the same. - Discuss household waste. Do the children understand why there are three different colour wheelie bins? - Although it is a built up area – discuss the amount of trees (even along the pavement). Green space opposite the library. - Consider the types of shops in the Village (lots of charity shops and recycling to reduce waste, phone repair shop, fresh food suppliers to reduce the miles that food travels . . . could ask the butchers where their meat is sourced from) - Waste bins in village – do they provide the option to recycle at all? - When on The Rake, stop and consider the Village Church (and it's surrounding buildings). Are they impacting global warming . . . lack of modern insulation, no double glazing, very high ceilings therefore expensive to heat. - Large recycling point in Co-op car park. - Allotments on right hand side of Allport Lane (opposite Co-op) <p>When children return to school in their books, they are to choose how to display their results to record things they think help us reduce our impact on global warming and things which impact in a negative way. For example they could simple write two lists, create a table etc.</p>			
4	I can express and explain my opinions on environmental issues and recognise why other people may think differently.	<p>This is a Geography lesson. Geography is the study of places and relationships between people and their environments.</p> <p>Explain to the pupils that today we are going to use our skills as geographers to provide suggestions of how the local area can reduce the impact it has on global warming.</p> <p>Share some of the ideas that the children identified from the previous lesson. Demonstrate how to distinguish if they help reduce global warming or add to it.</p> <p>Explain that first we are going to consider the things we identified which had a negative impact on global warming (made it worse). For each one we want to come up with at least suggestion that would help reduce the impact. For example, if we noticed that the bins in Bromborough Village were not designed to encourage recycling then we could suggest that the council should replace the bins with more modern ones which do.</p>	Ipads		



There are currently three Wirral Councillors who are responsible for the area of Bromborough, use this website to show the children <https://democracy.wirral.gov.uk/mgMemberIndex.aspx?FN=WARD&VW=LIST&PIC=0> We are going to write a letter to each councillor asking them to consider a number of proposals to either reduce the impact we have on global warming in our area or to improve what we already do to combat global warming. Split the class into three groups and choose a councillor for each group to write to.