Subject: Geography – UKS2 Unit 4 Year 6 Climate Change Enquiry Question – What is the impact of climate change?

NC/PoS:

Locational knowledge

 identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)

Human and physical geography

- describe and understand key aspects of:
- physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
- human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

Geographical skills and fieldwork

- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
- use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the wider world
- use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs

Prior Learning (what pupils already know and can do)

Children know what climate is and can name the different climate zones of the world. Children know what deforestation is and the impact it can have on a location. Children know the positive impact of people reducing, reusing and recycling.

End Points (what pupils MUST know and remember)

Know what climate change is.

Know the effects of climate change on the world.

Identify activities which create climate change.

Know the impact of climate change.

Know how climate change will affect our lives.

Know ways of managing climate change.

Know that we have a shared responsibility.

Key Vocabulary

climate change, global warming, fossil fuels, droughts, climate, greenhouse gases, carbon dioxide, methane, nitrous oxide, impact, consequence, environmental, social, economic, glaciers, carbon footprint, renewable energy, reduce reuse, recycle

Session 1:

What is climate change?

An introduction to what climate change is – weather and climate change as a result of activity around the world – electricity and heat, transportation, manufacturing and construction, agriculture – creation of greenhouse gases. Look at the possible impact – shrinking glaciers, rising sea levels, impact on plants and wildlife.

What is climate change? | WaterAid - YouTube

This session should introduce the global impacts of what climate change is and introduce the idea of shared responsibility.

PD - Shared responsibilities for protecting the environment; how everyday choices can affect the environment.

Vocabulary: climate change, global warming, fossil fuels, droughts,

Session 2: What are the causes of climate change? Look at natural causes and human causes. The greenhouse effect and the enhanced areenhouse effect. Video on the areenhouse effect - Young People's Trust For the Environment (ypte.org.uk) Investigate the human causes - generating power, manufacturing goods, cutting down forests, using transportation, producing food, powering buildings, consuming too much. Look at how these cause climate change e.g. deforestation – chopping down trees releases carbon dioxide. Vocabulary: climate, greenhouse gases, carbon dioxide, methane, nitrous oxide Session 3: What is the impact of climate change? This session introduces the impacts of climate change, what they mean for our planet and how they might change over time. How could climate change impact the way people live? How might climate change impact animals and plants? What could this lead to? What might the world look like if this happens? Interpret data about climate change - sea level rise, ocean acidification, warming oceans, shrinking ice sheets, extreme weather and effects on health - impact on different locations include Antarctica and the Arctic. Look at climate change in the UK and Warrington. Impacts of climate change | WaterAid - YouTube Vocabulary: impact, consequence, environmental, social, economic, glaciers Session 5: How do we stop climate change? What will happen if we do nothing? What can the government do? – The Committee for Climate Change. Paris agreement – International treaty on climate change – reduce greenhouse gases by at least 40% by 2030. What can we do? What is our carbon footprint and how can we improve it. Look at ways in which we can help climate change – reducing electricity, central heating, renewable energy, food choices, travel, reduce, reuse, recycle Vocabulary: carbon footprint, renewable energy, reduce reuse, recycle Session 6: Fieldwork (This could link to Forest School based learning.) Before you start field work you must decide what you want to find out. Think of questions to ask, your focus for the investigation within the above themes for the areas you are going to investigate. Children to do data collection on how people in the community support climate change. This could be done on the school playground with parents, via PING / Social Media / VLE or in the local area. Data to be presented in a graph or pie chart. Children to interpret data and use to suggests ways to improve further. Future learning this content supports: This unit will support future learning on trade, distribution of resources and the human and physical geography of locations around the world. It will support learning on the future of climate change and how this might change over time.