

Rose Wood Academy: Enquiry Driven Learning Overview

Prior Knowledge (Direct Pathway)

Children have studied David Attenborough and climate change in KS1

Building on knowledge of natural disasters to compare the impact of these compared to the impact of human activity and the devastating effect of climate change. This will include the role the industrial revolution has had on pollution and climate change.

Prior Knowledge (Indirect Pathway)

In Art, the children have learnt how to sketch and paint – they will use these skills in this topic.

In Year 4, the children have learnt about people we share the world with – this will aid the children in understanding the effect natural disasters and climate change have on people.

As artists, children will perfect their sketching skills through studying Hokusai and through inspiration; children will imitate 'The Great Wave' using mixed media on their final product.

Through science, children will study 'Living Things and their Habitats'. Children will look at, and compare, the life cycles of mammals, amphibians, birds, insects, fish and reptiles. They will be able to revisit the reproductive system, which was learnt in Year 4. During Spring 1, the children will be learning about properties and changes of materials.

In PSHE, children will be valuing differences and our unit in RE will be looking at the question 'What would Jesus do? Can we live by the values of Jesus in the 21st century? During Spring 1, the children will be learning about keeping themselves safe in PSHE and in RE exploring why people go to places of worship.

Content on Direct Pathway

Our project this term is Humans Vs Nature: Which is more disastrous? This project will be split into two parts. The first being taught in Autumn 2 and having a focus on Natural Disasters. The second part, in Spring 1, the focus will be directed towards the impact humans have on the world with a particular emphasis on climate change.

This whole topic is mostly Geography driven. There is some comparison to current volcanoes and earthquakes and there will be comparisons with the historic events when natural disasters have occurred. Where possible, we will cover current affairs - Australian Bush Fires 2019/20. Children will visit historical factors for climate change as well as comparison to the impact of natural disasters on the world.

As well as this, children will work as Geographers and will gain an understanding of deforestation, The Greenhouse Effect, fossil fuels and the impact of their own carbon footprint. Children will be recapping their previous knowledge on human and physical changes and will study the similarities and differences.

Using a book, called Escape from Pompeii by Christina Balit, children will write diaries in the role of a character taken from the book in Autumn 2. In Spring 1, the children will use The Last Bear by Hannah Gold to write character descriptions.

We will also read a variety of non-fiction texts to gain a further understanding of natural disasters, such as Earthquakes/Volcanoes/Tsunamis. We will watch a range of videos to look at historical disasters from around the world. Through this, children will be able to verbally describe the impact this has had on our Earth.

In the Spring 1, children will be writing persuasive speeches about an aspect of climate change. Through the study of significant leaders of change from the past, children will become inspired to then write a persuasive speech on a topic they feel most passionate about. Children will also have the opportunity to work collaboratively when we do a class debate.

Enquiry Question:

Humans Vs Nature: Which is more disastrous?

Enquiry Outcomes:

Invite parents in for an exhibition of beautiful work and have a ballot box to answer the enquiry question. Children hold a year group debate

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<u>Year Group:</u> Year 5	<u>Term:</u> Autumn 2/Spring 1
Title: Humans Vs Nature: Who is more disastrous?	Key Focus : Art
Project Enhancements: <i>Diaries</i> <i>Non-chronological reports</i> <i>Persuasive speeches</i> <i>Character descriptions</i> <i>Debates</i>	
<u>How can you help?</u> At home, please could you: <ul style="list-style-type: none">• continue to listen to your child read a minimum of three times a week,• help your child to learn to spell the Year 5 graphemes,• help your child to learn all their times tables. If you wish to do additional homework with your child, you could: <ul style="list-style-type: none">• Explore a range of natural disasters and locate these around the world's continents/countries.• Create a leaflet/information booklet about natural disasters/climate change.• Recycle plastics at home and show your child(ren) how to look at the packets to check if it is recyclable (as not all plastic is!).• Talk about climate change and how it is changing.• Come up with your own solutions and make some changes as a family.	

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Subject Specific Vocabulary		Key Knowledge
Word	Definition	<i>Key knowledge that you want the children to know by the end of the topic (linked to the national curriculum:</i>
Natural Disaster	An event caused by nature such as floods, volcanic eruptions, tropical storm, tornado, landslides, wildfires and many more. These events cause great financial hardship for the people and communities in the locations where they occur, and they can sometimes even result in loss of life.	<ul style="list-style-type: none"> ▪ Children to have a firm understanding of a range of natural disasters and will be able to discuss how some of them are formed along with describing the aftermath these cause ▪ To know that The Himalayas is a mountain range in Asia separating the plains of the Indian subcontinent. It is the Earth's highest peaks and they include over fifty mountains. They developed in the collision of two tectonic plates called the Eurasian and Indo-Australian plates ▪ Children will be able to name and locate geographical regions along with identifying their human and physical characteristics, key topographical features (including mountains, volcanoes, natural landforms), and land-use patterns; and understand how some of these aspects have changed over time ▪ Children will be able to orally describe natural hazards (these are natural processes, which cause damage, injury and death. They pose a major risk to people and property. Different factors affect hazard risk including the severity of the natural hazard, the ability of a place to cope with the hazard and the likelihood that a hazard will occur) ▪ Layers of the Earth – the Earth is made up of 4 layers and each of these has different properties. The Inner Core (Iron and nickel, hottest layer), Outer Core (Iron and nickel, mostly liquid with some rocky parts), The Mantle (extremely hot rock that flows) and The Crust (thin outer layer, hard rock) ▪ Plate tectonics - Most of the Earth is covered by seven major plates and another eight or so minor plates. The seven major plates include the African, Antarctic, Eurasian, North American, South American, India-Australian, and the Pacific plates. Some of the minor plates include the Arabian, Caribbean, Nazca, and Scotia plates. ▪ Pangea was a supercontinent that existed between 270 to 200 million years ago. 200 million years ago, the movement of the Earth's tectonic plates caused Pangea to break apart, forming the Earth that we recognize today.
Earthquake	A sudden violent shaking of the ground, typically causing great destruction, because of movements within the earth's crust or volcanic action.	
Volcanic eruption	A mountain or hill, typically conical, having a crater or vent through which lava, rock fragments, hot vapour, and gas are or have been erupted from the earth's crust.	
Wildfire/forest fire	An uncontrolled fire in a forest, grassland, bushland, or land sown to crops.	
Tectonic Plates	Huge slabs of rocks that make up the outer crust of the earth.	
atlas	A book of maps.	
Richter Scale	A scale of 1-10 used to measure the magnitude of earthquakes.	
Seismic	Subject to or caused by an earthquake.	
city	A large town.	
climate	The general weather conditions that are typical.	
coastal	An area of land close to the sea.	
map	A drawing of a particular area such as a city, country or continent.	
continent	A very large area of land that consists of many countries such as Europe.	
country	An area of land that is controlled by its own government.	
river	A large, natural stream of fresh water that flows into the sea or a lake.	

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physical features	Natural features of land.	<p>Key knowledge that the children should know by the end of the topic (beyond the national curriculum)</p> <ul style="list-style-type: none"> - To understand current affairs (e.g. Australian bush fires and how climate change has caused this) - The Greenhouse Effect (this is the process of the Earth getting much warmer. The Earth is protected by the atmosphere and when the sun emits sunlight and heat, the atmosphere traps in these rays from sun. Some of the gases in the Earth's atmosphere are then trapped inside) - Deforestation is the removal of a forest so that the land on which it stood may be put to another use. Deforestation occurs for a number of reasons, the most common being the conversion of the once-forested land into farmland, either for growing crops or for keeping livestock. - Pollution is something, which is added to the environment that is harmful or poisonous to living things. Smoke or dust in the air is a type of pollution as it is bad for the lungs when we breath in. Sewage in drinking water is another type of pollution, as it can make people ill because it contains germs and viruses. People living next to a building site where there is too much noise can become sick, as they cannot sleep. -
human features	Features of land that have been impacted by human activity.	
population	All the people who live in a country or area.	
landscape	Everything you can see when you look across an area of land including hills, trees, buildings, rivers and plants.	
atmosphere	The layer of air surrounding the earth that protects us from the sun's harmful rays.	
emissions	Gases or chemicals released into the air, (such as plumes of smoke from coal-fired power stations or car exhaust fumes).	
weather	The atmospheric conditions which relate to a specific time and place.	
global	Relating to the whole earth.	
greenhouse gases	Gases (like CO ₂) that trap heat and contribute to global warming.	
recycling	The process of converting waste materials into new materials and objects.	
climate	Typical weather conditions for a certain part of the world.	
deforestation	A clearing or cutting down a forest and them not being replanted again. The land, which is stood on, may be put to another use.	
climate change	Major, long term changes to global weather patterns (can happen naturally or be driven by human actions).	
urbanisation	A rural area turns into an urban area. The rural areas are cleared to make room for cities; there are fewer small towns/farmland.	
pollution	When something is added to the environment that is harmful or poisonous to living things.	
plastic pollution	The accumulation of plastic products in the environment that harmfully affects wildlife, wildlife habitat, or humans.	

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fossil fuels

Sources of energy that have come from the remains of living things that died a long time ago (coal, gas, oil).

Geography Skills:

Children will get the chance to apply the following skills through the year:

- 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 to build their knowledge of the United Kingdom and 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, and digital technologies.

10 Deadliest Natural Disasters of the 21st Century

<u>Disaster</u>	<u>Year</u>	<u>Death toll</u>
Haiti Earthquake	2010	220,000
Indian Ocean Tsunami	2004	150,000 +
Kashmir Earthquake	2005	100,000
European Heatwave	2003	70,000
Gujarat Earthquake	2001	20,000
Tohoku Earthquake and Tsunami	2011	15,889
Hurricane Katrina	2005	1833
Afghanistan Blizzard	2008	1000+
East Africa Drought	2011	1000+
Mozambique flood	2000	800+

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SMSC Autumn 2

Spiritual

We will be exploring how natural disasters occur and how they affect our world. During this topic, we will explore different ways of learning new knowledge. For example learning through drama.

Social

We will use our social skills to take part in group discussions. Discussing the level of disaster, effects on physical features and the impact they have on human life. We will look at the different communities that have been effected by natural disasters and explore what could have been done differently.

Be kind and REAP the rewards

We will show empathy towards communities that have been effected by natural disasters. During discussions, we will show respect and kindness towards each other when explaining our thinking.

Moral

We will be comparing the level of destruction and the number of causalities caused by natural disasters, where we will discuss which is more impactful on the community.

Cultural

We will be exploring how despite where people live and how they live their lives, natural disasters can happen to anyone.

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SMSC Spring 1

Spiritual

We will be learning about the impact that humans are having on our world. We will continue to explore learning in different ways.

Social

Once again, we will be using our social skills to take part in group discussions and debates. We will be exploring how working together as a community can positively affect climate change.

Be kind and REAP the rewards

During class debates, the children will show respect to their classmates and understand how people can have different opinions.

Moral

The children will be thinking reflectively about the decisions made by world leaders regarding the climate crisis and exploring the moral right to help others in need.

Cultural

We will explore how climate change is affecting communities around the world differently and show understanding and appreciation of this.

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