



ROSE WOOD ENQUIRY DRIVEN CURRICULUM



Plastic Pollution: What's all the fuss about?

Year 4 Spring Term 2

Rose Wood Academy: Enquiry Driven Learning Overview

Year Group: 4	Enquiry <i>Plastic Pollution: What's all the fuss about?</i>	Term: Spring 2
Context: Look at the human processes that have a positive and negative impact on the planet and its oceans.		
Prior Learning (Direct Pathway) Children will know about the water cycle and that rivers flow into the sea. Children will know 4 compass points. Some knowledge of oceans. Begin to understand the impact of human processes on climate change and the direct effect this has on Ice biomes. Science - Materials and their properties		
Prior Learning (Indirect Pathway) Knowledge of explorers, such as Captain Cook and naturalists such as David Attenborough and Mary Anning who have given us a better understanding of evolution and the natural world.		

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(Content outside of the direct pathway)

Children will study the 5 oceans of the world and have an improved knowledge of the main seas. They will study the depths of the oceans and understand that, although we have a greater understanding of the oceans, we are still learning lots about the creatures within it.

Enquiry Question

**PLASTIC
POLLUTION:
WHAT'S ALL THE
FUSS ABOUT?**

Content on Direct Pathway

Children will use a range of maps, atlases and digital mapping to locate and identify oceans and seas of the world. When using maps, they will be able to use compass points and four-figure grid references efficiently.

Children will also learn about the sudden explosion of plastic into the world from the 1940's to the present day. Children will learn about the oceans/seas of the world and we will look at the impact the human use of plastics is having on the environment through the Great Pacific Garbage Patch and what we, as the next generation, can do about it.

(English content)

Children will learn about the effects of plastic pollution through the book "One Plastic Bag" which is based on a true story of the problems of plastic pollution in The Gambia and how they came together as a community to overcome the problem and create a thriving trade. From this book, children will write:

- *Ocean based poetry*
- *Persuasive letters to the Prime Minister*

Learning Showcase

Children will write persuasive letters to the Prime Minister. Children will be able to explain the effects of plastic pollution on our oceans and suggest possible solutions.

Copies of the letters will be scanned to make an e-book to share online

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Knowledge Narrative

All around the world, the marine biome is being damaged by plastic pollution, especially coral reefs. Single use plastic is particularly damaging and people must try to reduce their use. People can have a positive or a negative impact on the planet.

Rose Wood Academy: Enquiry Driven Learning Overview

Unit Title: Plastic Pollution: What's all the fuss about?

Y4
Spring 2

End Point - The aim of this unit is for pupils to:

- Name and locate the world's oceans and key seas
- Understand the effects of plastic pollution on the oceans
- Understand the cause and effect of the Great Pacific Garbage Patch
- To know the features of a marine biome

End of unit assessment task:

To write persuasive letter to the Prime Minister explaining the effects of plastic pollution on our oceans and suggesting possible solutions

Links:

Text – 'One Plastic Bag' by Miranda Paul

Prior Learning:

- Know the four countries of the UK and their capital cities and the surrounding seas.
- Know, name and locate the continents and oceans of the world.
- Know the 4 compass points.
- Name and locate Middlesbrough on a map.
- Know what a Biome is and be able to name the features of some of them.
- Know that humans can have a negative impact on the planet (Y3 S2)

Key Aspects of the Unit:



Map and atlas work/Fieldwork and investigation






Location



Physical Features: Understand that physical features are natural features in an environment. Understand that physical features can include: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather and volcanoes.

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	Human Features: Understand that human features are features in an environment that have been made by people. Understand that human features can include: city, town, village, factory, farm, house, office, port, harbour and shop.
	Physical Processes: Impact of nature on the earth e.g. erosion, plate tectonics, water cycle.
	Human Processes understand the processes that humans have developed across the globe including travel trade and economics.

Key Knowledge:

- Introduce children to the marine aquatic biome.
- For children to be able to answer the following questions on the marine biome:

- What is the biome like?
- Where is this biome found?
- What is its climate?
- Which animals live there?
- Which plants live there?

The marine biome is the largest biome of them all, covering about three quarters of our planet and accounting for about 90 percent of the total water supply in the world. It mainly comprises of saltwater oceans. The main five oceans are the Atlantic, Pacific, Indian, Arctic and Southern Oceans. The marine biome also consists of smallest bodies of water including saltwater seas, bays and gulfs, such as the North Sea and the Mediterranean Sea. The marine biome is home to thousands of plant and animal species. Marine animals include whales, sea lions, seals, fish, jellyfish, octopus, crustaceans, seabirds, coral and shellfish. Marine plants include seagrasses, algae, phytoplankton and kelp. The main threat to the marine biome is through human activity from plastic pollution to overfishing to global warming.

- Revisit the equator, north/south hemispheres/Tropics of Cancer and Capricorn /Arctic and Antarctic Circle
- Introduce longitude and latitude.
- Begin to understand our reliance on plastic.
- Know how plastic pollution in our oceans occur (link to Power of Reading book, One Plastic Bag)
- Locate the Great Pacific Garbage Patch and know the reasons for its existence.
- Know how we can reduce plastic pollution and have a positive impact on the planet and oceans.
- Revisit and use 4-figure grid references.
- Revisit and use the 8 compass points.

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Geographical Skills:

Mapping:

- Use 4 compass points confidently.
- Begin to use 8 compass points.
- Begin to use 4 figure grid references to locate features on a map.
- Use large and medium scale OS maps.

Fieldwork:

- Use the eight points of a compass to follow and describe routes and identify locations.

Vocabulary

atlas	A book of maps
biome	A natural area of vegetation and animals
city	A large town
climate	The general weather conditions that are typical
coastal	An area of land close to the sea
compass points	Any of the main points of a compass: north, south, east, west, north-east etc
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
county	A region of Britain or Ireland which has its own local government
environment	Everything around us - the natural world of land, sea, air, plants and animals
equator	An imaginary line around the middle of the Earth at an equal distance from the North Pole and the South Pole
human features	Features of land that have been impacted by human activity
landscape	Everything you can see when you look across an area of land including hills, trees, buildings, rivers and plants
map	A drawing of a particular area such as a city, country or continent
ocean	A huge body of salty water
physical features	Natural features of land
population	All the people who live in a country or area
rural	Places that are far away from large towns or cities
sea	A large body of salty water
tourist	A person who is visiting a place for pleasure and interest, especially when they are on holiday
trade	The activity of buying, selling or exchanging goods and services
urban	Belonging to, or relating to, a town or city

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<u>Year Group:</u> YEAR 4	<u>Term:</u> SPRING 2
Title: PLASTIC POLLUTION: WHAT'S ALL THE FUSS ABOUT?	Key Focus : GEOGRAPHY
Project Enhancements: Design and Technology – Designing a sustainable bag for life	
<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 words on the weekly spelling list,• help your child to learn their times tables and division facts up to 12 x 12 If you wish to do additional homework with your child, you could: <ul style="list-style-type: none">• Visit an aquarium• Make a recycled plastic art work• Research effect of plastic in the oceans• Watch Blue Planet series (David Attenborough)• Make a graph of what is in your recycling bin (paper, plastic glass etc)	

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Spiritual

Through our learning about the water cycle, we will foster a sense of wonder at the natural world.

Pupils will use their imagination and creativity to create art-work based around the theme of oceans and sea creatures.

Social

Pupils will have the opportunity to discuss big questions such as:

What is the problem with plastic?

How does plastic end up in the ocean?

What can we do about plastic pollution?

Be kind and REAP the rewards

Children will learn that as humans we need to be kind to the environment that we live in and the planet that we live on.

Moral

Throughout the topic, we will explore the consequences of human action on the natural world, through, creating pollution and damaging coral reefs and depleting fish stocks. There will be opportunities for pupils to develop their principles and discuss and debate their views

Cultural

Children will design a bag for life looking at the best material and design to use for sustainability.

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British Values through EDC

<p style="text-align: center;">Democracy</p>	<p style="text-align: center;">Discuss how we need to encourage sustainability to help reduce pollution and look after the endangered species of the magic kingdom.</p>
<p style="text-align: center;">The Rule of Law</p>	<p style="text-align: center;">Research the laws that protect the land and the animals regarding climate change and pollution.</p>
<p style="text-align: center;">Individual Liberty</p>	<p style="text-align: center;">Pupils think about how their actions can impact their own community and beyond regarding ocean biomes and plastic pollution.</p>
<p style="text-align: center;">Mutual Respect & Tolerance of those of different faith and beliefs</p>	<p style="text-align: center;">Pupils compare similarities and differences between their lives and those of others around the world, with a focus of The Gambia.</p>