
 Lawn Primary School Clean Green World 	Year	6	Topic	A planet full of plastic
	Debate	Should we ban single use plastics?		
<p>This topic will enable children to expand upon learning from earlier year groups by examining the issue of plastic pollution in an increasingly complex context. They will learn about micro-plastics and the damage these can cause to both animals and humans when they enter the food chain. The topic will look at more specific, emotive examples of the damage caused to our oceans by waste plastics. The children will explore eco-friendly alternatives to plastic and carry out a project in which they develop a product made from single-use plastic, such as eco-bricks, which could be exported for use in other countries or used to build furniture or other items for use in school</p>				

Prior Learning

Locational and Place knowledge:

- Know the names of and locate at least 8 major capital cities across the world. (Y4)
- Know where the equator is (Y1)
- Know the names of 4 countries from the Northern Hemisphere and 4 countries from the Southern Hemisphere (Y3)
- Know key differences between living in the UK and in a country in either North or South America (Y5)
- Know the names of and be able to locate a number of South American countries (Y5)

Human and Physical Geography:

- Know the names of some of the World's longest rivers and be able to label the main features of a river (Y4)
- Children will learn the difference between climate and weather (Y4)
- Know what is meant by biomes and what are the features of a specific biome. (Y5)

Skills and fieldwork:

- Use maps to locate European countries and capitals (Y3)
- Use maps and globes to locate the equator, Tropics of Cancer and Capricorn and the Greenwich Meridian. (Y5)
- Know how to use graphs to record features such as temperature or rainfall across the world. (Y5)

Global citizenship

Children will understand how their actions affect the planet (All previous year groups).

Children will understand that rubbish can be sorted and recycled to protect the environment (Y1)

Children will understand the effects of plastic waste on the world's oceans and its wildlife (Y2)
 Children will understand why plastic is so readily available and why retailers choose to use it (Y2)

National Curriculum Links	Global Citizenship Themes	
<p><u>Human and Physical Geography:</u> -Know why industrial areas and ports are important. -Know the main human and physical differences between developed and developing countries including: types of settlement and land use; economic activity including trade links and the distribution of natural resources including energy, food, minerals and water.</p> <p><u>Skills and fieldwork:</u> -Use Google Earth to locate a country or place of interest and to follow the journey of rivers etc. -Know what most of the Ordnance Survey symbols stand for. -Know how to use six-figure grid references.</p>	Globalisation & Interdependence Sustainable Development	
	<i>Knowledge & Understanding</i>	<i>Skills</i>
	<p>Global connections between peoples & countries (e.g. through trade & communications)</p> <p>How local actions affect the wider world in the context of plastic pollution</p> <p>Environmentally responsible living & global inequalities in ecological footprints</p> <p>The wider global impact of plastic pollution and sustainable solutions</p>	<p>Discuss ways in which sustainability can be achieved without negatively impacting on other parts of the world in the context of the use of plastics</p> <p>Listen attentively, question & respond to others positively</p> <p>Express own views & ideas on issues clearly, using a range of appropriate methods</p> <p>Give reasons, evidence & examples in support of an opinion</p>

Key Vocabulary

microplastics, decompose, contaminate, biodegradable, non-biodegradable, compostable, hazardous, toxic, ingest, BPA (Bisphenol A), Great Pacific Garbage Patch, adhesive, debris.

(Recap of previous year vocabulary will be needed)

Recommended Texts & Web Links

What a waste by Jess French, Alba the Hundred-Year-Old Fish by Lara Hawthorne, A Planet full of Plastic by Neal Layton, Song of the Dolphin Boy by Elizabeth Laird, This Book is Not Rubbish by Isabel Thomas, Kids Fight Plastic by Martin Dorey

<https://worldslargestlesson.globalgoals.org/resource/life-below-water-marine-litter/>

<https://worldslargestlesson.globalgoals.org/resource/the-impact-of-pollution/>

<https://worldslargestlesson.globalgoals.org/resource/dont-waste-it/>

<https://www.ecotricity.co.uk/our-news/2019/what-is-an-ecobrick#:~:text=An%20ecobrick%20is%20a%20building,used%20as%20a%20building%20block.>)

What pupils need to know or do to be secure

Key Learning

Activities / Application of knowledge / Possible Evidence

Sustainable development goals to be linked to:
Goal 12 - Responsible consumption and production
Goal 14 - Life below water
Goal 15 - Life on land

Where did plastic come from and why do we use it?

-Children will know that plastic was discovered over 150 years ago by a Scientist called Baekeland.
 -Children will know some of the properties of plastic and why it is used for certain purposes. Expand upon learning in Years 1 and 2 to include plastics used in industries, e.g. medical products.

How do single-use plastics and microplastics affect our oceans?

-Children will recap the terms 'biodegradable' and 'non-biodegradable' from Year 3.
 -Children will learn the meaning of the term 'micro-plastic' and how this is formed.
 -Children will know about the wider impact of plastic pollution on our oceans, referencing the ingestion of micro-plastics by ocean life (recap learning from Year 2 on the South Pacific Garbage Patch).
 -Children will examine more emotive examples of the damage inflicted upon wildlife by waste plastic.
 -Children will know that eating meat from animals that have ingested microplastics can be toxic to humans.
 -Children will complete a case study on how plastic affects: an albatross, green turtle and zoo plankton.

Draw a food chain to show how humans end up eating microplastics.

Children to analyse data on about the amount of plastic in the oceans compared to 50 years ago.

Write and perform a speech to raise awareness about single-use plastics and their negative impact on the oceans.

Write a persuasive letter to the government/big corporations

How do single-use plastics which end up in landfill affect our environment and wildlife?

- Children will recap knowledge of landfill from Years 1, 2 and 3.
- Children will understand that the decomposition of waste in landfill sites is partially responsible for global warming due to methane and carbon dioxide emissions into the atmosphere.
- Children will learn that birds feeding from landfill ingest harmful waste plastics and metals.
- Children will learn that landfill sites are altering the migratory patterns of some bird species as they are choosing to nest in these locations due to the endless supply of food.

What can retail outlets like supermarkets and fast-food restaurants do to limit their single-use plastics?

- Children will examine some of the materials which can be used as an eco-friendlier alternative to plastics, e.g. compostable plastic bags, bamboo, corn-based plastics, glass bottles (easier to recycle), starch-based polymers, paper and cardboard.
- Children identify examples of when they have seen or used some of these alternative materials.

In what ways might we recycle single-use plastics to avoid damage to the environment?

- Children explore this through a practical project, e.g. making eco-bricks either for charity or to make items to be used in school, such as benches.

Should we ban single use plastics?

Debate. Short balanced argument could be written/videos/photos taken.

regarding the use of single use plastics.

Make ecobricks as a way of not sending our single use plastics to landfill.

Give examples of ways different pieces of plastic could affect wildlife.

Field Work / Enrichment

- Possible trip to the SeaLife Centre, Birmingham - KS2 Sea Defenders: Plastic Pollution.
- Derby City Council film: 'A Plastic Ocean.'