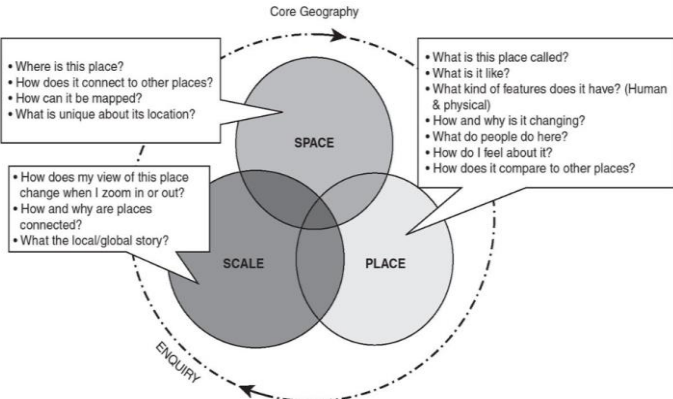


Year Group	4	Enquiry Question	4:1 How do natural resources help us?
Key NC Reference and Objectives	G.2.1.1. Name and locate counties, cities and geographical regions of the United Kingdom and recognise their identifying human and physical characteristics. G.2.2.1. Locate the world's countries, focusing on Europe and North and South America. G.2.2.2. Identify the position and significance of ... Northern Hemisphere, Southern Hemisphere G.2.4.5. Describe and understand key aspects of human geography including: economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.		
Enquiry Question Sequence	1. How do we use natural resources? 2. Where does our food come from? 3. How can we preserve Earth's resources?		
Key Concepts	Substantive 	2nd Order Natural Resources Sustainability Conservation Human impact Trade Industry Globalisation Physical Processes	
K e o b j e c t i v e s	Geographical Knowledge	<ul style="list-style-type: none"> Name and locate on a map the locations of some non-renewable and renewable energy sources (eg. coal mines, wind farms, power stations) Name and locate the Northern and Southern Hemisphere Name and locate some countries where our food comes from (Focusing on Europe and North and South America) 	
	Geographical Understanding	<ul style="list-style-type: none"> Understand that products we use are imported as well as locally produced. Understand where our energy and natural resources come from Explain how the types of industry in the area have changed over time – coal mining/steel. 	
	Mapping and Fieldwork <i>Objectives in italics are covered in this unit only.</i>	Using and interpreting: <ul style="list-style-type: none"> Use atlases, maps and globes. Use maps at more than one scale. Locate photos of features on maps. Use oblique and aerial views. Recognise some patterns on maps and begin to explain what they show. Use thematic maps. Digital map making: <ul style="list-style-type: none"> Confidently add a range of annotation labels and text to help me explain features and places. Highlight an area on a map and measure it using the Area Measurement Tool. Use the grid reference tool to record a location. Highlight areas within a given radius. Add photographs to specific locations. 	
Relevant Previously Taught Vocabulary	Y2: Equator, Europe, North/South America, distance measurement tool, scale, Y3: Mineral, crops, grid reference, coordinates, annotation		

<p>New Key Vocabulary</p>	<p>LOCATIONAL VOCABULARY Hemisphere: A half of the Earth. Northern Hemisphere: The half of the Earth that is North of the Equator. Southern Hemisphere: The half of the Earth that is South of the Equator.</p> <p>HUMAN GEOGRAPHY VOCABULARY Electricity: a form of energy that can be carried by wires and is used to heat and light homes and power machines. Trade: the activity of buying, selling, or exchanging goods or services between people, firms, or countries Wind Turbine: a machine with shafts that turn in the wind to create electricity. Industry: The work involved in collecting raw materials and making them into products in factories Globalisation: The spreading of ideas and products around the world.</p> <p>PHYSICAL GEOGRAPHY VOCABULARY Natural resource: materials or substances that are produced by the environment. Humans rely on them to survive. Renewable Resources: resources which will always be available. Non-renewable Resources: resources which will eventually run out. Fuel: a substance that is burned to provide heat or power. Fossil fuel: fuels such as coal, oil and gas that are formed from the remains of plants and animals that lived a long time ago. Oil: a smooth, thick liquid that is found underground and used as fuel and for making parts of machines move smoothly. Gas: a substance like air that is neither liquid nor solid. It is used as a fuel for cooking and heating. Coal: a hard black substance that is found underground and burned as fuel. Energy: power that is used to create heat, light and to make machines work. Wind Energy: wind turns turbines to create electricity. Hydropower: moving water helps create electricity by turning turbines under the sea as the tide moves in and out, or by using water stored in a dam. Solar Energy: solar panels collect energy from the Sun to create electricity. Global Warming: The gradual rising of the average temperatures on the Earth caused by over-use of fossil fuels.</p> <p>MAPPING VOCABULARY Thematic Map: a map that focuses on a specific theme or subject area. Oblique View: a side-on view of the landscape rather than an aerial view. Area Measuring Tool: A feature of an online map that allows you to measure area.</p>
<p>Core Substantive Knowledge</p>	<p>Natural resources are materials or substances that are produced by the environment. Humans use natural resources to survive. They can be used to heat our homes, transport us around the world, feed us and clothe us.</p> <p>Some natural resources like oil, gas and metal ores are limited which means they will eventually run out. These are called non-renewable resources. Other natural resources such as food crops and wood are renewable which means they can be replaced. Wind and sunshine are also examples of renewable resources. Soil, too, is regarded as a renewable resource. However, if it is damaged or overused it becomes degraded and may blow away or become unable to support plant life.</p> <p>People depend on the Earth’s resources in order to survive. Air and Water are our most fundamental needs. Food is crucial too in that we cannot live long without it. Coal, gas and oil provide us with energy for heating and machines along with the Sun, tides, wind and rivers. Meanwhile, minerals supply us with the raw materials needed in</p>

	<p>manufacturing and industry. We build houses for shelter out of bricks, wood, glass, steel and concrete.</p> <p>Natural resources are distributed unevenly between countries and regions. In the eighteenth and nineteenth centuries, the Industrial Revolution was fuelled by the discovery of large quantities of coal in the UK. Since the middle of the twentieth century, the Middle East has played a key role in world economic affairs due to its huge reserves of oil. Countries such as the USA, Canada and Australia, which export surplus wheat are in a strong economic position, particularly as food security becomes a matter of growing concern. A countries are unusually rich in minerals. South Africa, for example, is famous for diamonds and Brazil has huge deposits of iron ore.</p> <p>This area of study introduces pupils to natural resources by highlighting minerals and energy, food and water. Although we use these resources on a daily basis, we often take them for granted. Learning that resources are evenly distributed geographically, is one of the starting points for understanding the modern world. The increasing demand for natural resources also raises important questions about sustainability. Finding a way to live in harmony with the planet that supports us is becoming ever more urgent as we move towards the middle years of the twenty-first century.</p> <p>Misconceptions and Research</p> <p>Children are often unaware that their food comes from farms and plantations all over the world. They also tend to take it for granted that we have ready access to electricity, water and natural resources. One of the key ideas which underpins this area of study is the notion of interdependence. We are linked to people and places in all manner of unexpected ways. At the same time we need to be aware that those natural resources which are finite need to be used as sparingly as possible.</p>
Prior Knowledge	Pupils can already name and locate the seven continents and five oceans on a globe or world atlas.
Assessment	<ul style="list-style-type: none"> ● Low Stakes Quizzes linked to knowledge ● Response to enquiry questions ● Ongoing formative assessment
Useful Planning Resources	Teaching Primary Geography' : Chapter 28 'Natural Resources'
Useful Links	<p>A good overview/introduction to the topic: https://www.bbc.co.uk/bitesize/topics/zshp34j/articles/z62qy9q</p> <p>Fossil Fuels and renewable energy clip: https://www.bbc.co.uk/bitesize/topics/zshp34j/articles/zntxgwx</p> <p>A KS 3 unit (good for teacher knowledge and ideas: https://www.rgs.org/schools/teaching-resources/natural-resources/</p> <p>A lesson designed by NASA looking at Earth's natural resources https://www.nasa.gov/stem-ed-resources/moon-munchies-lesson1.html</p> <p>Sustainability resource pack: https://www.twinkl.co.uk/resource/t2-t-72357-imagine-sustainability-ks2-resource-pack</p> <p>Uk wind farms mapping lesson: https://www.sustainablelearning.com/resource/wind-farm-locations?destination=teaching-resources/natural%20resource%3Ff%255B0%255D%3Dtheme%253A41</p> <p>Lots of teaching resources and ideas around sustainability: https://www.sustainablelearning.com/teaching-resources</p>