

Year Group: 2 Term: Spring	Unit Title: Why don't penguins live in the North Pole?	Driver Subject/s: Geography and Science
<p><b>Coherence</b> – What previous learning will this unit connect to and build upon?</p> <p><u>Science:</u></p> <ul style="list-style-type: none"> <li>Which things are living, dead and things which have never been alive?</li> <li>The names of some common plants and types of trees.</li> <li>Some animals are suitable to be kept as pets but others are not.</li> <li>All animals need water, air and food to survive</li> <li>Animals can be grouped into vertebrates and invertebrates</li> <li>Animals can be grouped into carnivores, herbivores and omnivores</li> <li>Animals, including humans, have offspring which grow into adults.</li> </ul> <p><u>History:</u></p> <ul style="list-style-type: none"> <li>Chronology (Time line)</li> </ul> <p><u>Geography:</u></p> <ul style="list-style-type: none"> <li>The country I live in is called England.</li> <li>I live in Thornbury, which is a village in England.</li> <li>England is a country in the United Kingdom (England, Scotland, Wales and Northern Ireland).</li> <li>Great Britain (England, Scotland, Wales) is an island—it is surrounded by seas: Irish Sea, North Sea, English Channel</li> </ul> <p><b>Knowledge</b> – What will the children know by the end of the unit?</p> <p><u>Living things and their habitats</u></p> <p>What is a habitat?</p> <ul style="list-style-type: none"> <li>A habitat is a place where living things, such as animals and plants, can find all of the things they need to survive. This includes food, water, air, space to move and grow and some shelter.</li> <li>Some habitats are large, like the ocean, and some are very small, such as under a log.</li> <li>Some habitats in our local area include the woodlands and our pond. Other habitats include the coast and the forest.</li> </ul> <p>How do animals and plants depend on each other?</p> <ul style="list-style-type: none"> <li>Animals and plants depend on each other to survive. For example grass and sedges are eaten by the arctic hare. This is then eaten by the arctic fox which is eaten by an arctic wolf.</li> <li>This called a <b>food chain</b>.</li> <li>All living things (or things that were once living) have a part to play in <b>food chains</b>. Without them, other animals and plants may not be able to survive.</li> </ul> <p>grass → rabbits → foxes</p>	<p><u>Continents and Oceans</u></p> <p>There are seven <b>continents</b>:</p> <ul style="list-style-type: none"> <li>Europe</li> <li>Asia</li> <li>Africa</li> <li>North America</li> <li>South America</li> <li>Antarctica</li> <li>Australia (also known as Australasia and Oceania)</li> </ul> <p>There are five <b>oceans</b>:</p> <ul style="list-style-type: none"> <li>Pacific Ocean</li> <li>Atlantic Ocean</li> <li>Indian Ocean</li> <li>Southern Ocean</li> <li>Arctic Ocean</li> </ul> <ul style="list-style-type: none"> <li>The Earth is split into a <b>Northern and Southern hemisphere</b> by the equator.</li> <li>An <b>island</b> is a piece of land completely surround by water, such as the UK. Where land meets the water is called the <b>coastline</b> or the <b>coast</b>.</li> </ul>  <p>©www.countries-of-the-world.com Free for personal and educational use.</p> <p>The <b>polar biomes</b> (which include the <b>arctic tundra</b>) are <b>harsh environments</b> that only the toughest plants and animals can survive in. Unfortunately, the <b>arctic tundra</b> is shrinking as a result of <b>climate change</b>; the increasing temperatures are causing the <b>ice to melt</b>.</p>	<p><b>Future learning</b> – what 'light touches' for future learning will occur?</p> <p><u>Science:</u></p> <ul style="list-style-type: none"> <li>Construct and interpret a variety of food chains, identifying producers, predators and prey (Y4)</li> </ul> <p><u>Geography:</u></p> <ul style="list-style-type: none"> <li>Biomes and climate zones</li> <li>Northern and southern hemisphere</li> </ul> <p><b>Outcomes</b> - What written, creative and technological outcomes will be expected by the end of the unit?</p> <ul style="list-style-type: none"> <li>Find the five <b>oceans</b> and seven <b>continents</b> using map skills. Can you also find them in an atlas and on a globe?</li> <li>Use Google Earth to find Thornbury. Zoom out until you see the UK. Now zoom out until you see Europe. Now zoom out until you can see the world. Discuss what you notice.</li> <li>Use atlases, hall maps and globes to find the <b>Arctic Circle</b> and <b>Antarctica</b>. What are the similarities and differences?</li> <li>Use the <b>compass points</b> to describe the <b>continents</b> in relation to each other (e.g. Asia is to the east of Europe and to the north of Australia).</li> <li>Compare two different <b>habitats</b> and explain what animals and plants can be found there.</li> <li>Answer questions such as 'Why would a polar bear not survive in the desert?'</li> <li>Compare the <b>vegetation</b> in the <b>polar habitat</b> to that of a woodland or forest and explain the similarities and differences.</li> <li>Explain why there is a lack of <b>vegetation</b> in the <b>polar habitats</b>.</li> <li>Create simple <b>food chains</b> that begin with a <b>plant</b>. Discuss what would happen if one of those living things in a <b>food chain</b> did not exist.</li> <li>Explain the effect that <b>climate change</b> has on the <b>arctic tundra</b>.</li> <li>Explain what humans can do to help combat the effects of <b>climate change</b>.</li> </ul>

<p><b>Key Vocabulary:</b></p> <p><b>Science</b></p> <p><b>carnivore</b> - an animal that eats meat</p> <p><b>depend</b> - if you depend on someone or something, you need them in order to be able to survive physically</p> <p><b>food chain</b> - a series of living things which are linked to each other because each thing feeds on the one next to it in the series</p> <p><b>habitat</b> - the natural environment in which an animal or plant normally lives or grows</p> <p><b>herbivore</b> - an animal that only eats plants</p> <p><b>invertebrate</b> - a creature that does not have a spine, for example an insect, a worm, or an octopus</p> <p><b>minibeast</b> - a small invertebrate animal such as an insect or spider</p> <p><b>offspring</b> - a person's children or an animal's young</p> <p><b>omnivore</b> - person or animal eats all kinds of food, including both meat and plants</p> <p><b>plant</b> - a living thing that grows in the earth and has a stem, leaves, and roots</p> <p><b>source</b> - where something comes from</p> <p><b>vegetation</b> - plants, trees and flowers</p> <p><b>vertebrate</b> - a creature which has a spine</p>	<p><b>Key Vocabulary:</b></p> <p><b>Geography</b></p> <p><b>Arctic circle</b> – the area around the <b>North Pole</b></p> <p><b>biome</b> - a natural area of the living world which has its own <b>climate, vegetation and animals</b></p> <p><b>climate</b> - the general weather conditions that are typical of a place</p> <p><b>climate zone</b> -sections of the Earth that are divided according to the climate. There are three main climate zones; polar, temperate and tropical.</p> <p><b>tundra</b> - a flat layer of land where the top layer is frozen. There is hardly any vegetation.</p> <p><b>city</b> - a large town. London is a city.</p> <p><b>compass point</b> - any of the main points of a compass: north, south, east and west</p> <p><b>continent</b> - a very large area of land that consists of many countries. Europe is a continent.</p> <p><b>country</b> - an area of land that is controlled by its own government.</p> <p><b>England</b> - a country in the United Kingdom. Thornbury is a town in England.</p> <p><b>equator</b> - an imaginary line around the middle of the Earth at an equal distance from the North Pole and the South Pole.</p> <p><b>hemisphere</b> – half of a sphere or half= of the Earth</p> <p><b>island</b> - a piece of land that is completely surrounded by water</p> <p><b>Great Britain</b> - An island that is made up of England, Scotland and Wales.</p> <p><b>ocean</b> - one of the five very large areas of salt water on the Earth's surface.</p> <p><b>sea</b> - a large area of salty water that is part of an ocean</p> <p><b>surrounded</b> - to be present all around</p> <p><b>United Kingdom</b> - The UK, is officially known as the United Kingdom of Great Britain and Northern Ireland. It includes England, Scotland, Wales and Northern Ireland.</p> <p><b>vegetation</b> - plants, trees and flowers</p>	<p><b>Local community</b></p> <p>Compare our local habitat (woodland, pond) with those studied.</p> <p>Compare our climate with those studied.</p> <p><b>Global citizenship</b> – including significant people and places.</p> <p>Understanding of the continents and oceans, their location and where the UK fits into this.</p> <p>Exploration of the world including Arctic circle/ Antarctica – SCOTT?</p> <p>Global warming and climate change.</p> <p><b>Opportunities for visitors, trips or outdoor learning</b> –</p> <p>Use of woodland and pond to study habitats.</p> <p><b>Supporting texts –</b></p> <p><b>Fiction:</b></p> <p>The Rainbow Bear - Michael Morpurgo</p> <p>The Great Explorer - Chris Judge</p> <p>Poles Apart - Jeanne Willis</p> <p>Pugs of the Frozen North - Philip Reeve &amp; Sarah McIntyre</p> <p><b>Non-Fiction:</b></p> <p>Polar Animals – Wade Cooper</p> <p>Captain Scott: Journey to the South Pole – Adrian Bradbury (Big Cat book!)</p> <p><b>Mathematical Development –</b></p> <p>Ordering/ comparing continents by size, number of countries etc.</p>
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