

Geography Progression Grid Class 5/6 – CYCLE 2

<p>Autumn - Our changing world Objectives - To describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle in the context of erosion and weathering.</p>	<p>Spring- Extreme Earth Objectives – To know how volcanoes are formed To name the layers that make up the earth. To know what happens during tornadoes, earthquakes, and tsunamis.</p>	<p>Summer- Raging rivers Objectives- To know and locate the key rivers in the UK. To know and locate the key rivers of the world. To describe and understand the human and physical key aspects of rivers.</p>
<p>Minimum learning is highlighted</p>		<p>Minimum vocabulary is in bold</p>
<p>What children will know and remember</p>		
<p>To know that weathering is a natural process that slowly breaks apart or changes rock. Heat, water, wind, living things, and other natural forces cause weathering. Over many years, weathering can shape rock into unusual formations but does not involve movement.</p>	<p>To know that the earth is made up of layers:</p> <ul style="list-style-type: none"> • Crust -Thin outer layer. Hard rock. 10km–90km thick. • Mantle - Extremely hot rock that flows. 3000km thick. • Outer core - Iron and nickel. Mostly liquid with some rocky parts. 4000°C. • Inner core - Iron and nickel. Hottest layer at over 5000°C. 	<p>To know that rivers flow downhill toward their mouth. The mouth of the river is where the river enters a lake or ocean. Rivers have many small streams (tributaries) which join together to form a main channel. V-shaped valleys form in the upper course of a river where there is a lot of downwards</p>
<p>To know that erosion is the geological process in which earthen materials are worn away and transported by natural forces such as wind or water. Physical properties change without changing their basic chemical composition. Physical erosion often causes rocks to get smaller or smoother. Rocks eroded through physical erosion often form clastic sediments</p>	<p>To know that when a volcano erupts, hot gases and melted rock from deep within Earth find their way up to the surface. This material may flow slowly out of a fissure, or crack, in the ground, or it may explode suddenly into the air. Volcanic eruptions may be very destructive. But they also create new landforms.</p>	<p>To know the course of a river: The Upper Course -Rain falling on high ground collects in channels and flows downwards forming a stream. Streams run downhill and join other streams, increasing in size and speed, forming a river. The river here flows quickly and the channel has steep sides and runs through valleys. Features include – waterfalls and rapids. The Middle Course - Fast flowing water causes erosion making the river deeper and wider. Features include - meanders. The Lower Course - Rivers flow with less force due to being on flat land. The river deposits the eroded material that it has carried. Riverbanks have shallower sides. Features include - floodplains, deltas and estuaries.</p>
<p>To know a coastline is the zone between land and sea. The action of the waves and the sea constantly changes the shape and form of the coast, and people manage these changes in different ways. The coast is the place where land and sea meet. To know a cliff is a type of landform on the surface of the Earth. They are tall, steep rocks that were created by erosion and have vertical (straight up-and-down) faces.</p>	<p>To know the constant motion of tectonic plates can cause cracks, known as faults, in the Earth's crust. Earthquakes occur when the crust moves suddenly on or near one of these fault lines and that a tsunami is a series of extremely long waves caused by a large and sudden displacement of the ocean, usually the result of an earthquake below or near the ocean floor.</p> <p>(The earth's crust is made up of large areas called tectonic plates that join together.)</p>	<p>To know that a river may contain a meander - a curve in the river Eroded materials are carried by the river and released, building up the land on the inside of the bend where the water flows more slowly and as meanders grow, two meanders can merge together through erosion. The water takes this newer, shorter course. The river deposits eroded materials which block off the old part of the river forming an oxbow lake.</p>

<p>To know that an arch is formed when a cave breaks through the headland. To know that when an arch collapses it leaves behind a stack and when this erodes and gets smaller it is called a stump,</p>	<p>To know a tornado is a swirling funnel of air that forms when warm air rises from near the ground into big cumulonimbus clouds.</p>	<p>To know that rivers can be used for different reasons and that these bring some negative and some positive impacts Leisure e.g. fishing + Controlled population of fish – May leave litter and pollute the water Industry e.g. factories + Sections of rivers maintained – Chemicals pollute the water and habitats Tourism e.g. walking routes + Conservation and education about local wildlife – Too many people near wildlife habitats</p>				
<p>To know that many coastal areas are being affected by erosion but that the Holderness coastline is located on the east coast of England. It is the fastest eroding coastline in Europe (BBC Bitesize)</p>	<p>To know earthquakes are measured using the Richter scale, volcanic eruptions using the VEI and Tornadoes using Enhanced Fujita Scale (EF-Scale).</p>	<p>To know that rivers can be dammed – blocked deliberately to hold water back, usually in a reservoir and that they may be dammed to control the flow of a river to prevent flooding or to generate power (hydroelectric power)</p> <p>Hydroelectric Power</p> <ol style="list-style-type: none"> 1. Water is held behind a dam. 2. When needed, some of the water is released and flows through a pipe (penstock). 3. The falling water turns a water wheel (turbine) which is linked to a generator which produces electricity. 4. The water continues into the river on the other side of the dam 				
	<p>To know people’s lives are affected through damage and destruction to property, land, power supplies, availability of food and injury (there are more reasons children may research and find)</p>	<p>To know where the following rivers are in the UK and be able to identify and name them on a map:</p> <table border="0"> <tr> <td>Trent 183miles/297km</td> <td>Severn 220miles/354km</td> </tr> <tr> <td>Thames 215miles/346km</td> <td>Wye 155miles/250km</td> </tr> </table> <p>To know that these are the longest rivers in the UK and how long they are</p>	Trent 183miles/297km	Severn 220miles/354km	Thames 215miles/346km	Wye 155miles/250km
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<p>Disciplinary skills and knowledge</p>						
<p>To define human and physical characteristics of places and locations and understand the actions of processes</p>	<p>To define human and physical characteristics of places and locations and understand the actions of processes</p>	<p>To define human and physical characteristics of places and locations and understand the actions of processes</p>				