



YEAR 5

GEOGRAPHY

CURRICULUM

Year 5 Geography - Broader Curriculum Aims and Objectives

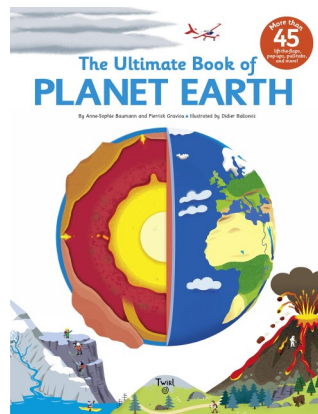
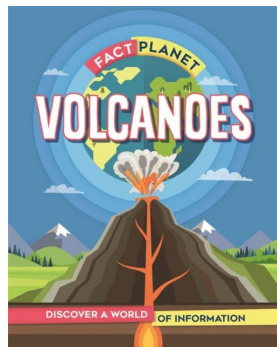
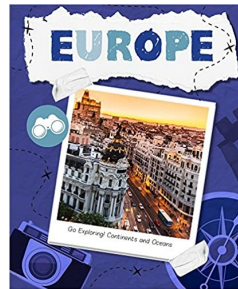
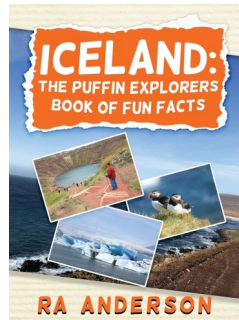
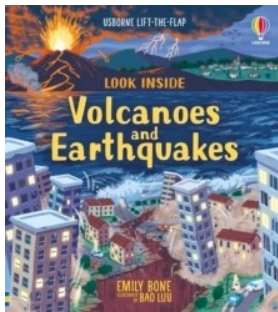
Topics of Study

- Local Area Study– What can maps tells us about our town and locality?
- The Wider World-Europe-Physical Features: Earthquakes and volcanoes: **study of region of Iceland.**

Vocabulary

Fossil fuels, land use, farming, energy, water, natural resources, renewable/non-renewable, sustainable, nuclear, climate, erosion, ice field, tectonic plates, peak, height, contour, range, summit, plateau, hemisphere, equator, mantle, outer core, inner core, magma, active dormant, extinct, epicentre, shock wave, magnitude, tsunami, Richter scale.

Quality Literature Links



Key Geographical Knowledge and Understanding

- ⇒ Know that Ordnance survey is Britain's mapping agency.
- ⇒ Know that it uses different shapes, colours and symbols to show roads, buildings, rivers and other features of a landscape.
- ⇒ Know that landscape features and places (both human and physical) can be located on an Ordnance survey map through the use of grid references and grid squares.
- ⇒ Know that grid references can be made even more specific by adding an extra digit to both the Easting and Northing numbers. These are called six-figure grid references.
- ⇒ Know that the Earth is made up of different layers: the **core** at the centre, which is mainly metal the **mantle**, which is mainly rock the **crust**, which is the part we can see.
- ⇒ Know that the crust (together with the upper layer of the mantle) is made up of different pieces, called **tectonic plates** and that they move a few centimetres each year in different directions and different speeds.
- ⇒ Know that earthquakes are caused when the Earth's tectonic plates slide together or move apart creating friction and causing energy to build up. It becomes so great that the energy is released causing a shock wave-an earthquake.
- ⇒ Know that a volcano is an opening in the Earth's crust that allows magma, hot ashes and gases to escape.
- ⇒ Know that most volcanic eruptions are caused by tectonic plates moving towards each other.
- ⇒ Know where the most active earthquake and volcanic areas are within the wider world and specifically within Europe.
- ⇒ Know that lines of latitude and longitude help to create a coordinate to locate a place accurately.
- ⇒ Know that numbers and letters are used to create this coordinate and that within the coordinate, the ° stands for degrees and the ' stands for minutes.
- ⇒ Know that the letters relate to north, south, east or west and are shown as capitals.
- ⇒ Know that the latitude coordinate is always given first.
- ⇒ Know and describe the effects of earthquakes and volcanic eruptions within European countries studied e.g. Iceland.
- ⇒ Give some reasons why people chose to live in earthquake zones and close to active volcanoes.
- ⇒ Explain how human and physical features are impacted in active volcanic areas.
- ⇒ Know the benefits of volcanic eruptions on the economy of a country due to tourism and fertile land for farming.



Year 5 Geography

What do maps tell us about our town?

Teaching Sequence for this Unit.

PRIOR LEARNING LINKS

Y4 Local Area Study: Rivers and the River Tees: know the different places that the River Tees flows through. Know the different uses of rivers.

FUTURE LEARNING LINKS

Y6 Local Area Study: Our Coast: learn about the physical and human features of coastal areas. Learn about the coastal areas near to Middlesbrough and how they are used. Learn about Middlesbrough's Freeport in order to link in with their next topic on trade.

What are the basic features of an Ordnance Survey map?

How do we identify and plot six-figure grid references using them?

IS

What places and features within our town can be located using grid references and grid squares?

IS CAI

How and why is a compass used to navigate and locate?

IS

How do we plot a short route and mark it on an OS map of our town?

IS CAI ED

DISCIPLINARY KNOWLEDGE AND GEOGRAPHICAL ENQUIRY:

How we 'work' and 'think' like a Geographer.

ENQUIRY	COLLECTION, ANALYSING AND INTERPRETING	INTERPRETING SOURCES	ANALYSING AND COMMUNICATING	EVALUATING AND DEBATING
Asking Geographical-enquiry questions.	Collecting, analysing and interpreting data through fieldwork.	Interpreting sources such as maps, diagrams, globes, aerial photographs etc.	Analysing and communicating geographical information e.g. constructing maps, charts and graphs or writing at length.	Critically evaluating and debating the impact of geographical processes.



Year 5 Geography

What eruptions occur in Europe and why?

Teaching Sequence for this Unit.

PRIOR LEARNING LINKS-Y3 North

America and its Mountainous West: learnt about mountains and how they are formed. Learnt about different mountain ranges and the plant and animal species living within the Rocky Mountains. **Y4 Wider World: South America and its River and Rainforest.** Learnt more about lines of latitude and longitude. Learnt about the human and physical features of the Amazon Rainforest. Debated if more can be done to prevent the threat to the rainforest.

FUTURE LEARNING LINKS

Y6 Trade: Know the significance of coastal areas, docks and harbours for trade. Name and locate relevant countries around the world and major cities that the UK trades with. Know that within Europe, the UK has strong trade links with Germany, The Netherlands and France, as well as others. Know and explain the global supply chain and the threat that aspects of this can have on the environment.

What is inside the Earth and what causes Earthquakes?

IS

What are volcanoes?

How are they different to other mountains?

IS AC

Can we interpret data to identify the world's most volcanic places?

Can we use lines of latitude and longitude to locate these places using coordinates?

IS CAI

Which countries in Europe have the most active volcanoes?

IS CAI AC

Why are volcanoes a fact of life for Iceland?

How does this impact the country's geographical features?

E IS AC

What happened on the Icelandic Island of Heimag?
Why did the Eldfell eruption rock the nation?

<https://youtu.be/xyvRoSb8CO0>

IS AC

What was the settlement like on Heimag before the major volcanic eruption in 1973?

IS AC

How did the eruption change the lives of people and impact the economy?

Why do people still choose to live in eruptive areas?

E ED AC

Year 5 Sequence of Knowledge

Key Knowledge and Vocabulary: Local Areas: Mapping our town and locality.

<ul style="list-style-type: none"> * Ordnance Survey maps are covered in blue lines that make up a grid. The lines have numbers accompanying them that allow you to accurately pinpoint location on a map. This series of numbers is known as a grid reference. The numbers going across the face of the map are called eastings; the numbers going up the face of the map from bottom to top are called northings. * Grid references can be made even more specific by adding an extra digit to both the Easting and Northing numbers. These are called six-figure grid references. 	<ul style="list-style-type: none"> * Ordnance survey uses different shapes, colours and symbols to show roads, buildings, rivers and other features of a landscape. * Landscape features and places (both human and physical) can be located on an Ordnance survey map through the use of grid references and grid squares. * The 'Eastings' and 'Northings' are the numbers around the edge of an OS map. To pinpoint a place you take the Eastings number first, then the Northing. 	<ul style="list-style-type: none"> * Cardinal points on a compass are North, East, South, and West. * Half way between the four main compass points, there are four other points: northeast, south-east, south-west and northwest. These are called Ordinal points. This makes an eight-point compass. * Ordnance Survey maps are always printed so that north is at the top of the map. 	<ul style="list-style-type: none"> * Four-figure/Six-figure grid references and compass points can be used to plan a route using a map. * Landmarks can be identified along the route using four/six-figure grid references. * The direction of travel between each point can be recorded using compass directions. * OS maps allow you to accurately plan a journey, giving an indication of landmarks and features you will pass along the route, as well as how far you will be travelling.
<p style="text-align: center;">Feature, landscape, series, accompanying, specific, reference.</p>	<p style="text-align: center;">Landscape, features, pinpoint, human, physical, place, location.</p>	<p style="text-align: center;">Compass, cardinal, ordinal, points, direction, position, navigation.</p>	<p style="text-align: center;">Route, identify, direction, accurately, precisely, location, place.</p>

Key Knowledge and Vocabulary: Eruptions in Europe

<ul style="list-style-type: none"> * Earth is made up of different layers; the crust (together with the upper layer of the mantle) is made up of different pieces called tectonic plates. * Tectonic plates move a few centimetres each year in different directions and at different speeds. * Earthquakes are caused when the Earth's tectonic plates slide together or move apart creating friction and causing energy to build up. * This becomes so great that the energy is released causing a shockwave-an earthquake. 	<ul style="list-style-type: none"> * A volcano is an opening in the Earth's crust that allows magma, hot ashes and gases to escape. * Most volcanic eruptions are caused by tectonic plates moving towards each other. * Both volcanoes and earthquakes occur due to movement of the Earth's tectonic plates. * They are both caused by the heat and energy releasing from the Earth's core. * Earthquakes can trigger volcanic eruptions through severe movement of tectonic plates. 	<ul style="list-style-type: none"> * Numerical data is continually collect to monitor volcanic activity around the world. * Lines of latitude and longitude help to create a coordinate to locate a place accurately. * Numbers and letters are used to create this coordinate. * Within the coordinate, the ° stands for degrees and the ' stands for minutes. * The letters relate to north, south, east or west and are shown as capitals. * The latitude is always given first. 	<ul style="list-style-type: none"> * Maps can be used to identify inactive and active volcanoes within a country. * Lines of latitude and longitude help to create a coordinate to locate a place accurately. * Numbers and letters are used to create this coordinate. * Within the coordinate, the ° stands for degrees and the ' stands for minutes. * The letters relate to north, south, east or west and are shown as capitals. * The latitude is always given first. 	<ul style="list-style-type: none"> * Iceland sits on top of the Mid-Atlantic Ridge, a long crack in the ocean floor caused by the separation of the North American and Eurasian tectonic plates. * The level of volcanic activity has impacted the physical and human characteristics of the country. * Physical features include, mountainous landscapes, black lava fields and geothermal pools. * Human features include, changes to the economy as they are now more reliant on tourism than farming practices. 	<ul style="list-style-type: none"> * The Heimaey eruption in 1973 was a significant event in Iceland's history. * The eruption surprised the inhabitants of Heimaey, as there were no signs of imminent volcanic activity before the eruption. * It lasted for nearly 6 months and resulted in the entire island being evacuated. 	<ul style="list-style-type: none"> * The island of Heimay is one of the largest of Iceland's volcanic islands. * It had risen from the sea through several eruptions. * A small fishing village had developed on the southern side of the harbour. * The surrounding seas are excellent fishing areas. 	<ul style="list-style-type: none"> * Despite the devastating impact of the eruption, many of the residents chose to return and rebuild their homes and community. * The harbour was vital to the island's economy so during this time, the residents developed a network of pipes to spray tonnes of seawater onto the lava, in order to preserve it. * The global awareness of the impact of this eruption has brought many visitors to the island, which residents, have made a living from.
<p style="text-align: center;">Crust, layer, released.</p>	<p style="text-align: center;">Erupt, occur, releasing, trigger.</p>	<p style="text-align: center;">Monitor, coordinate.</p>	<p style="text-align: center;">Active, inactive, accurately.</p>	<p style="text-align: center;">Ridge, geothermal, economy.</p>	<p style="text-align: center;">Significant, imminent, inhabitants, entire.</p>	<p style="text-align: center;">Surrounding, risen, volcanic.</p>	<p style="text-align: center;">Impact, resident, awareness, network</p>