

Northgate Geography Knowledge Organisers

Hours spent on this topic: 10



Year: 4

Term: Autumn

Cornerstones Topic: Misty Mountain Sierra

Geography Topic: Mountains

What should I already know?

Location of seven continents and five oceans of the world.
 Locate some countries on a world map (where fruits were grown).
 Mountains and volcanoes can be formed when the tectonic plates rub together.
 How to use an atlas.
 Used basic vocabulary to refer to mountains and hills.
 Human features are features that have been made by people eg road, shops

Key Vocabulary

Physical features are natural features of land eg rivers
 A mountain is a large landform that rises above the surrounding land in a limited area, usually in the form of a peak.

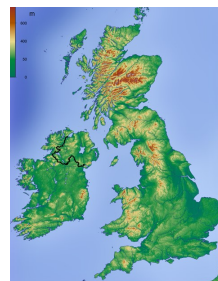
Mountain	A mountain is a large landform that rises above the surrounding land in a limited area, usually in the form of a peak.
Range	A mountain range is a series of mountains or hills ranged in a line and connected by high ground.
Fold Mountain	Fold mountains are formed when two plates collide head on.
Fault Block Mountain	Fault Block mountains form when faults or cracks in the earth's crust force some materials or blocks of rock up and others down.
Volcanic Mountain	Volcanic mountains are formed by volcanoes.
Dome Mountain	Dome mountains are the result of a great amount of melted rock (magma) pushing its way up under the earth crust.
Plateau Mountain	Plateau mountains are formed by erosion.
Peak	A pointed top of a mountain.
Slope	The side of a mountain.
Valley	A low area between hills or <i>mountains</i> typically with a river running through it.
Summit	The very top of a mountain.
Physical features	Natural features of land eg rivers
Foot	The bottom of the mountain.

Key Locational / Place Knowledge

Ben Nevis is the highest mountains in Scotland (1345m) (also the highest in the UK)
 Scafell Pike is the highest mountain in England (978m)
 The highest mountain in the world is Mount Everest (8,850 m). It is in a range of mountains called the Himalayas
 The Himalayas are in Asia.
 The Alps are a mountain range in Europe
 The highest mountain in the Alps is Mont Blanc (4,810 m)

Human and Physical Geography

Mountains are areas of land that are much higher than the land surrounding them. They are higher and usually steeper than a **hill** and are generally over 600 metres high. When many mountains are close together, this is called a **range**.
 The highest point of a mountain is called the **peak** or the **summit**.
 There are 5 different types of mountain - fold mountains, fault block mountains, volcanic mountains, dome mountains and plateau mountains.
 Mountain features include a summit, peak, slope, foot and valley.
 Describe the water cycle and know that the different stages are evaporation, condensation, precipitation and collection.



Geographical Enquiry

Ask and respond to geographical questions and offer their own ideas e.g What is it like there?
 Enquire about aerial photographs.
 Make comparisons between locations using photos/ pictures/ maps.
 Research facts about the Alps and compare it to England

Using maps and scale

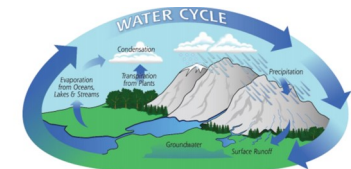
Name and locate mountains and mountain ranges in the UK using an atlas.
 Name and locate mountain ranges around the world using large junior atlases and /or map sites on internet
 Name and locate the highest peaks of each continent using a map.
 Locate where the Alps are using aerial photographs and an atlas.
 Identify features of mountains on aerial photographs.

Cross curricular opportunities


English—writing an explanation text about the water cycle.


Diversity


Tom Whittaker - first disabled person to climb Mount Everest




Vocabulary Word Mat for Misty Mountain Sierra


<u>Word</u> Mountain	<u>Picture</u> 
<u>Definition</u> A mountain is a large landform that rises above the surrounding land in a limited area, usually in the form of a peak.	


<u>Word</u> Range	<u>Picture</u> 
<u>Definition</u> A mountain range is a series of mountains or hills ranged in a line and connected by high ground.	

<u>Word</u> Peak	<u>Picture</u> 
<u>Definition</u> A peak is the pointed top of a mountain.	

<u>Word</u> Slope	<u>Picture</u> 
<u>Definition</u> A slope is the side of a mountain.	

<u>Word</u> Summit	<u>Picture</u> 
<u>Definition</u> The summit is the very top of a mountain.	

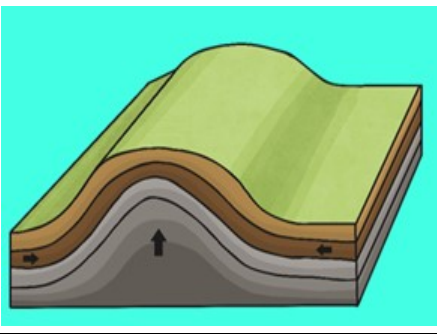
<u>Word</u> Foot	<u>Picture</u> 
<u>Definition</u> The foot is the bottom of the mountain.	

<u>Word</u> Valley	<u>Picture</u> 
<u>Definition</u> A valley is the low area between hills or mountains typically with a river running through it.	

Different types of mountains

Fold Mountain

Fold mountains are formed when two plates collide head on.



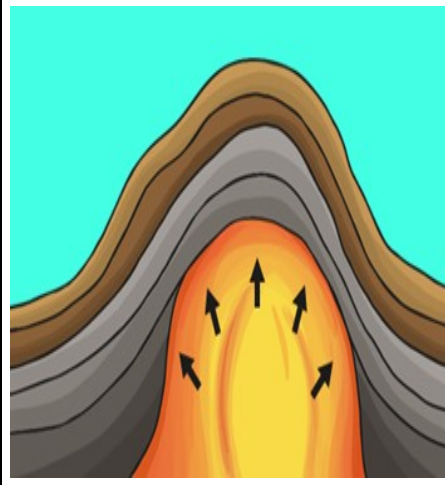
Volcanic Mountain

Volcanic mountains are formed by volcanoes.



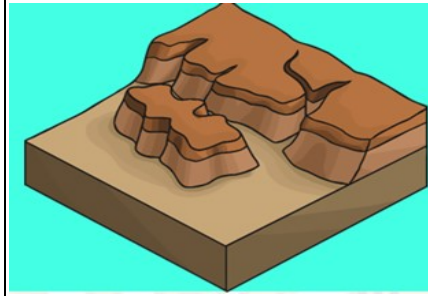
Dome Mountain

Dome mountains are the result of a great amount of melted rock (magma) pushing its way up under the earth crust.



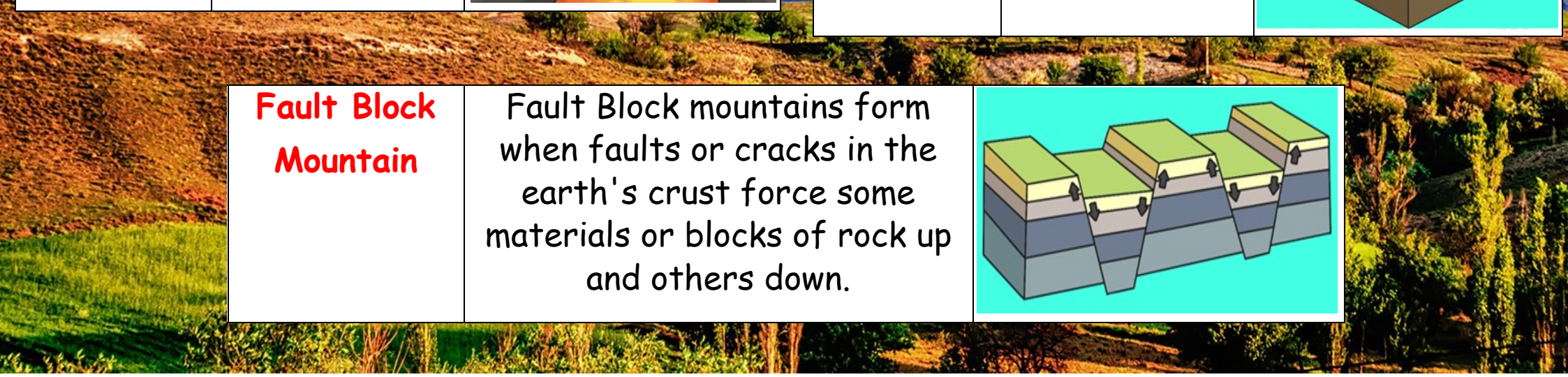
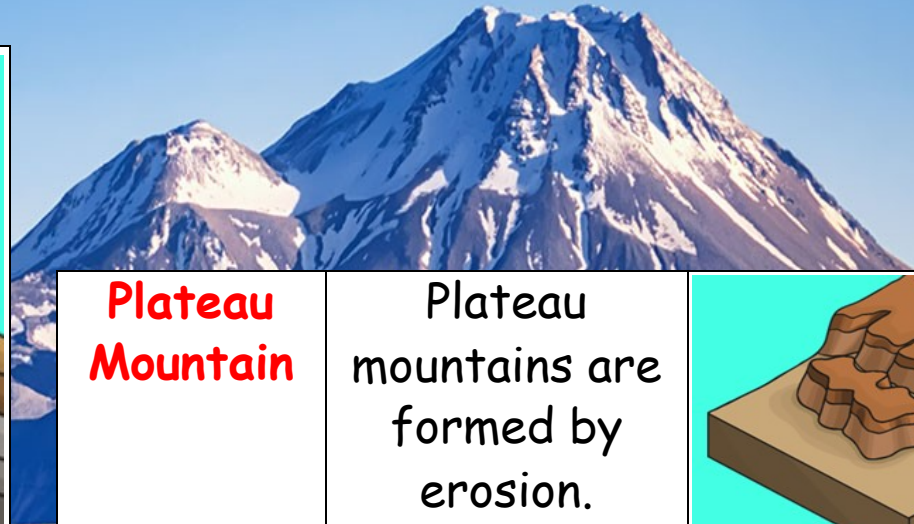
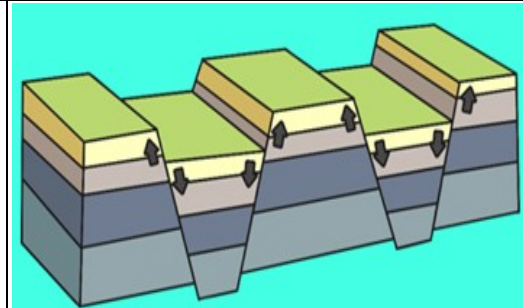
Plateau Mountain

Plateau mountains are formed by erosion.



Fault Block Mountain

Fault Block mountains form when faults or cracks in the earth's crust force some materials or blocks of rock up and others down.



What should I already know?

The seven continents, five oceans and surrounding seas of the United Kingdom (KS1)

The names of some key rivers including the Thames and the River Stort (KS1)

The name and location of mountains and mountain ranges in the UK and around the world (Y4)

The equator is an imaginary circle around the Earth, exactly between the North and South Poles. (KS1)

Physical features are natural features on the Earth's surface eg rivers

Key Vocabulary

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.
Equator	An imaginary circle around the Earth, exactly between the North and South Poles.
Continent	A very large area of land that consists of many countries.
Tropic of Cancer	The imaginary line that is about 23° North of the equator.
Tropic of Capricorn	The imaginary line that is about 23° South of the equator.
Oceans	One of the five very large areas of salt water that cover approximately two-thirds of the Earth's surface.
Seas	A large area of salt water on the Earth's surface.
River	A natural watercourse, flowing towards the sea, an ocean or a lake.
Canal	A man-made waterway, which is used by boats and

Diversity

Families who live on a river in Asia.

Key Locational / Place Knowledge

Understand the terms and significance of the Tropics of Cancer and Capricorn (See vocabulary)

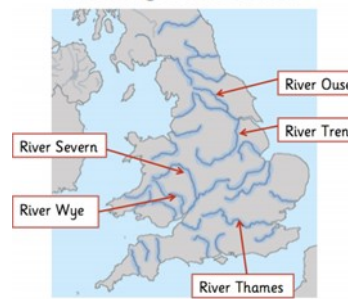
Know the UK is in the Northern Hemisphere.

The 3 longest rivers in the UK—River Severn, River Thames and the River Trent

The River in Bishop's Stortford is called the Stort. It flows into the River Lea near Hoddesdon.

The Thames flows into the North Sea.

Five largest UK Rivers



Human and Physical Geography

Rivers are natural streams of fresh water that flow into seas, oceans and lakes

The **source** of a river is where it starts.

Water always flows downhill towards the sea.

The **mouth** of a river is the end of a river, where it meets the sea.

The riverbed is the bottom of the river and it is usually made of sand, rocks or mud.

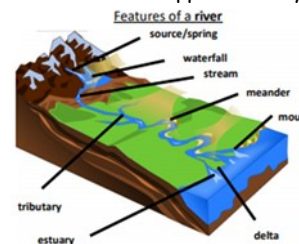
A canal is a man-made waterway, which is used by boats and ships to transport goods across land.

The river Stort was canalised in the late 17 hundreds to transport malt.

Oceans are very large areas of salt water that cover approximately two-thirds of the Earth's surface.

Seas are smaller areas of salt water

The ocean has 5 layers—The Sunlight Zone, The Twilight Zone, The Midnight Zone, The Lower Midnight Zone and The Trenches.



Geographical Enquiry

Fieldwork skills

Ask and respond to questions and offer their own ideas.

Investigate the **River Stort** - can you notice the different features of a river? **Sketch** the river including the features you can see. Add labels.

Make comparisons between locations. How is it different around Grange Paddocks and across near the town centre?

How can we measure the depth of the river? **Measure** depth from a bridge in different places. Record findings

Visit the coast—Southend—**Sketch and label** key features

Use compass to locate points (at town park)

Investigate the effects of climate change and plastic pollution on oceans, seas and rivers. Use your knowledge of the bodies of

Using maps and scale Map Knowledge

Direction

Locate rivers in UK and oceans on scale maps.

Locate The Great Barrier Reef on a map.

Use a larger scale OS map to look at route to the River Stort.

Identify the position of lines of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn.

Identify which oceans are in the northern/southern Hemisphere.

Use 4 compass points well.

Cross curricular opportunities


English writing—'The Sea' poetry based on the poem by James Reeves.


Guided Reading—Kensuke's Kingdom


Art - The Great Wave By Hokusai


DT— Cam models of under the sea

Vocabulary Word Mat for The Blue Abyss

<u>Word</u> Oceans	<u>Picture</u> 
<u>Definition</u> One of the five very large areas of salt water that cover approximately two-thirds of the Earth's surface.	

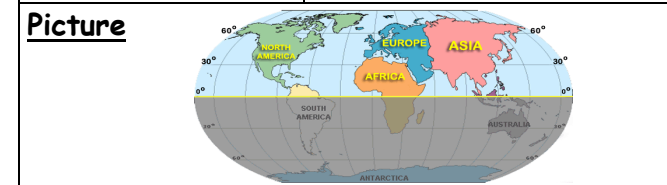
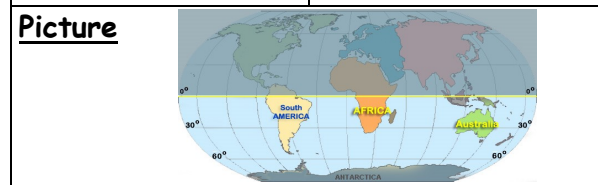
<u>Word</u> Seas	<u>Picture</u> 
<u>Definition</u> A large area of salt water on the Earth's surface.	

<u>Word</u> Rivers	<u>Picture</u> 
<u>Definition</u> A natural watercourse, flowing towards the sea, an ocean or a lake.	

<u>Word</u> Canal	<u>Picture</u> 
<u>Definition</u> A man-made waterway, which is used by boats and ships to transport goods across land.	

<u>Word</u> Southern Hemisphere	<u>Definition</u> The half of the Earth that is south of the equator.
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<u>Word</u> Northern Hemisphere	<u>Definition</u> The half of the Earth that is north of the equator.
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<u>Word</u> Equator	<u>Definition</u> An imaginary circle around the Earth, exactly between the North and South Poles.
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<u>Word</u> Tropic of Cancer	<u>Definition</u> The imaginary line that is about 23° North of the equator.
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