## Northgate Geography Knowledge Organisers

Year: 3

Term: Autumn 1

Cornerstones Topic: Predators

## Hours spent on this topic: 6

AN ACADEMY SCHOOL

Geography Topic: Climates

## Geographical Enquiry

Begin to ask/initiate geographical questions. Use books, atlases, pictures and internet as sources of information.

Critically study photographs.

Begin to collect and record evidence with support. Analyse evidence and begin to draw conclusions e.g. make comparisons between two locations using photos/pictures, temperatures in different locations e.g. the different climate zones.

Make comparisons between an English forest and a transcal rainforest

# Using maps and scale, Making maps, Map Knowledge

Begin to use junior atlases.

Locate places on larger scale maps e.g. UK on map of Europe and Brazil on the map of South America.

Locate climate zones on a map of the world.

# Polar zone Quator (0°) Tropical zone Tropical zone Tropical zone Tropical zone Tropical zone Polar zone 60°S Polar zone

## What should I already know?

There are four countries in the United Kingdom.

The names and locations of the world's seven continents.

The names and locations of the world's five oceans.

Hot and cold places can look very different and have different physical features. Different things will grow, animals and people will do different activities depending on the weather.

The **Equator** is an imaginary line around the middle of the earth. Countries near the equator are very hot, countries far away, for example the **North Pole** at the top and the **South Pole** at the bottom of the earth are very cold.

## Key Locational / Place Knowledge

## Human and Physical Geography

Climate is weather patterns in a place over a long period, such as seasonal rainfall,

**Climate zones** are geographical zones loosely divided according to their climate.

The three major climate zones on earth are the arid, polar, temperate and tropical zones . These are then split to smaller zones.

**Tropical zone** is found on or close to the Equator are typically tropical: they're warm and wet. The Amazon Rainforest has a tropical climate.

**Temperate zone** is where temperatures can change greatly between summer and winter. Most places with a temperate climate have four seasons: summer, autumn, winter and spring.

**Polar zone** usually has a temperature below freezing, is icy and covered in snow. These areas do not get direct heat and sunlight from the sun. The North Pole has a polar climate.

A biome is an ecological area on the earth's surface with plants and animals due to a shared climate. These can cover large areas.

A microclimate is the climate of a very small or restricted area which differs from the climate of the surrounding area.

What climate change is, how we influence it and its impact.

Arid  A hot, dry climate. They are often sandy, have few plants or animals and are found close to the equator.  A geographical area defined by its climate, plant and animal life and the activities of the people who live there.  Climate  Weather patterns in a place over a long period, such as seasonal rainfall.  Environment  Conditions to which a plant, animal or person is adapted.  A climate that is often below freezing. They are often icy, have few plants or animals and are found at the North and South Poles.  Temperate  A climate with mild weather that can be both hot and cold.  Temperature  Measured level of heat or cold in the air.  A hot, wet climate. They often have lots of plants and animals. They are found close to the equator.  Vegetation belt  An area with distinct plant types, determined by climate, soil, drainage and elevation.  Conditions in the atmosphere on a particular day, such as temperature, windiness or rainfall.  The climate of a very small or restricted area which differs from the climate of the surrounding area.	<u>Key Vocabulary</u>		
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Microclimate which differs from the climate of the surrounding	Weather		
	Microclimate	which differs from the climate of the surrounding	

## Cross curricular opportunities

#### Computing:

Using search engines to research and creating a Power Point.

#### Current Events:

Greta Thunberg and climate change activism.

# **Vocabulary Word Mat for Climates**

# Biome

An area defined by its climate, plant and animal life, and the activities of the people there.



## Arid

A hot, dry climate. They are often sandy, have few plants or animals and are found close to the equator.



# Polar

A climate that is below freezing. They are icy, have few plants or animals & are found near the Poles.



# Climate

Weather patterns in a place over a long period.



# Temperate

A climate with mild weather that can be both hot and cold.



# Environment

Conditions to which a plant, animal or person is adapted.



# Temperature

Measured level of heat or cold in the air.



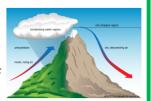
# Vegetation Belt

An area with distinct plant types determined by climate.



## Microclimate

The climate of a very small area which differs from the climate of the surrounding area.



# Weather

Conditions in the atmosphere on a particular day, such as temperature or rainfall.



# Tropical

A hot, wet climate. They often have lots of plants and animals, and are found close to the equator.



## Northqate Geography Knowledge Organisers

Year: 3 Term: Autumn 2

Cornerstones Topic: Scrumdiddlydumptious

## Hours spent on this topic: 8

Geography Topic: Fruits and Fairtrade

#### Human and Physical Geography

We can grow many fruits and vegetables in the UK, eq. apples but some cannot grow here because of our climate.

We need to import some foods from other countries. Different areas of the world are suited to growing different foods for reasons including their climate. Bananas are grown in tropical regions where the

average temperature is 27 degrees and rainfall moderate:

Fairtrade is a way of buying and selling products that allows farmers to be paid a fair price for their produce and have better working conditions
Geographical Enquiry

Begin to ask/initiate geographical questions, e.g. Where is this place? What is this place like? (link to climate)

Use books, stories, atlases, pictures/photos and internet as sources of information.

Follow the journey of a banana from tree to fruit bowl.

#### Key Locational / Place Knowledge

Know that bananas grow in Central and South America.

Know what a tropical climate is.

Know that climate can effect what plants grow and animals live in a particular place.

Know where Costa Rica is.



## What should I already know?

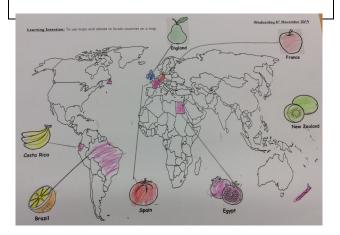
Name and locate the world's seven continents. Name and locate the world's five oceans. Name, locate and identify characteristics of the 4 countries and capital cities of the United Kinadom.

Use basic geographical vocabulary to refer to key physical features, including: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather and key human features, including: city, town, village, factory, farm, house, office, port, harbour and shop Understand what a climate is and locate different

## Using maps and scale

Revise locating the seven continents on a map. Begin to use junior atlases and map sites on internet to locate countries where fruit is grown eg Banana Costa Rica, kiwi New Zealand, apple England.

Look at a BS street map. Go to Waitrose to look at where food comes from. Make a map of a short route experienced, with features in the correct



<u>Key Vocabulary</u>		
Climate	Weather patterns in a place over a long period, such as seasonal rainfall.	
Continent	A very large area of land that consists of many countries.	
Import	To bring goods or services into a country from abroad for sale.	
Export	To send goods or services to another country for sale.	
Atlas	A book of maps.	
Locate	To discover the exact place of something.	
Trade	The activity of buying, selling, or exchanging goods or services.	
Fair Trade	A trade between companies in developed countries and producers in developing countries in which fair prices are paid to the producers.	
<u>C</u> r	oss curricular opportunities	

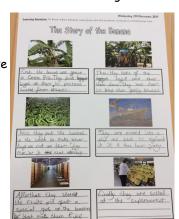
In OOA children to learn the basics of orienteering and use simple maps and compass directions.

#### Maths

Using grid references to locate countries within an atlas.

#### **Enalish**

Children to explain the journey a banana makes from where it is grown in Costa Rica to a fruit bowl in England.



# **Vocabulary Word Mat for**

# Locate

To discover the exact place of something.



# Trade

The activity of buying, selling or exchanging goods or services.



# Climate

Weather patterns in a place over a long period, such as rainfall.



# Continent

A very large area of land that consists of many countries.



# **Import**

To bring goods and services into a country from abroad for sale.



# Fair Trade

A trade where companies pay a fair price to producers.



# **Atlas**

A book of maps.



# Export

To send goods or services to another country for sale.



## Northgate Geography Knowledge Organisers

Year: 3

Term: Spring 1

#### Human and Physical Geography

A volcano is a very deep hole in the Earth's top layer that can let out hot gasses, ash and lava. Many volcanoes are also mountains.

The earth is made up of layers -crust, mantle, outer core and inner core

The earth's crust is made up of tectonic plates. which fit together like a jigsaw puzzle.

These **tectonic plates** slowly move over a long period of time.

**Earthquakes**, **mountains and volcanos** are caused from interactions between tectonic plates.

Volcanoes have long vents that go all the way down through the Earth's first layer, the crust, to magma in between the crust and the mantle (the Earth's second layer). It's so hot there that rocks melt into liquid. This is called magma, which travels up through volcanoes and flows out as lava.

There are three ways to describe a volcano and explain what it's doing - active, erupting, and dormant

When a volcano erupts, magma comes up and out

#### Cross curricular opportunities

outside the voicano. Science

Types of rock; metamorphic, igneous and sedimentary and how they are formed.

### <u>History</u>

The Romans and the eruption of Vesuvius in 79AD.

## <u>English</u>

Acrostic poems about volcanos, explanation text of how volcanos are formed and erupt.

#### Art

Creating a sculpture of a volcano using junk

## Cornerstones Topic: Tremors

#### What should I already know?

The names of the seven continents and locate them on a map.

The names of the five oceans and locate them on a map.

The name and location of some countries of the world, including the United Kingdom.

What the word 'climate' means and how if effects the plants and animals that live in that area.

Physical feature: Geographic de Engeiror the land e.g. rivers.

Continue to ask/initiate geographical questions, e.g Where is this place? What is it like? (link to climate)

Use books, atlases, pictures and internet as sources of information.

Make links between the location of volcanos and earthquakes, and the boundaries of tectonic plates.

## Using maps and scale

Revise locating the seven continents on a map - Europe, Africa, Asia, North America, South America., Antarctica, Australia

Use junior atlases to locate sites of earthquakes and volcanos, making links to the locations of tectonic plate boundaries.

Use junior atlases to locate regions within a specific country; the main regions of Italy i.e. Naples, Rome, Florence, Venice, Milan as well as the site of Vesuvius.

Begin to use junior atlases to plan routes from one place to another i.e. Naples to Pompeii; planning a trip to visit Vesuvius.

Draw maps and plot the locations of Pompeii, Naples, Herculaneum and Rome

## <u>Direction</u>

Use 4 compass points to follow/give directions.
Use letter/no, co-ordinates to locate features on a map.

Hours spent on this topic: 6



Geography Topic: Volcanoes

<u>Key Vocabulary</u>		
Mantle	The part of the earth between the crust and the core.	
Core	The central part of the earth, beneath the mantle.	
Crust	It is the earth's outer layer.	
Tectonic Plate	A huge piece of the earth's crust that moves on top of the mantle. They fit together like a puzzle.	
Volcano	A mountain from which lava, steam gas and ash erupt from inside the earth.	
Magma	Molten, melted rock that is formed in very hot conditions inside of the earth.	
Lava	The name for magma after it has erupted from a volcano.	
Vent	The part of the volcano which lava and gases erupt.	
Erupt	When a volcano throws out hot lava, steam and ash.	
Active	A volcano that has erupted recently and is expected to erupt again soon.	
Dormant	A volcano that is not active but is expected to become active in the future.	
Extinct	A volcano that has not erupted in recorded history.	
Earthquake	A sudden shaking of the ground caused by the tectonic plates rubbing against each other.	

### Key Locational / Place Knowledge

Italy and the UK are in Europe.

Locate Italy on a map.

Rome is the capital city of Italy.

Vesuvius is a volcano in Italy.

There are no volcanoes in the UK.

The largest volcano in Europe is Mount Etna in Sicily (Italy).

# Vocabulary Word Mat for Volcanoes

# Magma

Molten, melted rock that is formed in very hot conditions inside of the earth.



# Earthquake

A sudden shaking of the ground caused by the tectonic plates rubbing against each other.



## **Dormant**

A volcano that is not active but is expected to become active in the future.



## Volcano

A mountain from which lava, steam gas and ash erupt from inside the earth.



## Mantle

The part of the earth between the crust and the core. It is made of molten rock & flows like treacle.



## Tectonic Plate

A huge piece of the earth's crust that moves on top of the mantle. They fit together like puzzle pieces.



# Erupt

When a volcano throws out hot lava, steam and ash.



## **Active**

A volcano that has erupted recently and is expected to erupt again soon.



## Extinct

A volcano that has not erupted in recorded history.



## Core

The central part of the earth, under the mantle.



## Vent

The part of the volcano where lava and gases erupt from.



## Lava

The name for magma after it have erupted from a volcano.



## Crust

The earth's outer layer. It is made of solid rock.

