

**CLOSING THE READING GAP
THE ARDOUS EIGHT**

Curriculum area: Geography
Text: Map My Area by Harriet Brundt
Context: Mapping

STREET MAPS
A street map is a map which shows all the different streets in an area.

[1] Background knowledge – the sheer range of necessary knowledge and related ideas in a given passage or whole text.

[2] Range and complexity of vocabulary (including word length).

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[4] Sentence length and syntax.

[5] Narrative or whole-text structure.

[6] The generic elements of the text e.g. a biographical account in the history.

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Y1 Knowledge Organiser Geography: Mapping our School

What is a map?

Maps and plans are views from above or a 'bird's eye view' of a place and use symbols. Maps give us information about places.

Map symbols are a quick and easy way to show us what different things or places can be found in an area such as:

- Place of worship
- Place of worship with tower
- Buildings
- Caravan site
- Other natural feature
- Parking
- Information centre
- Golf course
- Recreation or sports centre
- Public telephone
- Roads: solid line = main road; dashed line = minor road; red line = footpath
- Footpaths: dashed line with arrows

Photographs or writing would take up too much space and be too confusing on a map!

Key Vocabulary

Compass	A tool for finding direction
Aerial	From above
Human geography	Things that are manmade
Physical geography	Things that are natural
Map	Maps and plans are views from above or a 'bird's eye view'
Symbol	Map symbols are a quick and easy way to show us what different things or places can be found in an area
Location	Where something is
Direction	Where something is pointing Examples: North South East and West are all directions.

Directions

You can give directions such as left, right, forwards and backwards. A compass can also be used to find direction.

Left and Right
The hand that makes an L shape to the left hand.

Y1 Knowledge Organiser Geography: Mapping

St. Catherine's Primary School

Digimap for Schools

This map of our school shows the human and physical geography of the area. Our school is manmade – it is human geography. The stream next to school – Pearl Brook – is natural. It is physical geography.

Compass

Compasses can be used to find direction

Most maps will have a compass rose placed in the corner.

A compass has four points: north, south, east and west.

You can remember the points of a compass by using this:

Never Eat Shreddy Worms Or Never Eat Shredded Wheat

In between the major directions on a compass are minor directions, such as North East or South West.

Bolton is in Greater Manchester which is in the North West of England

Curriculum area: Geography	Year Group: 2
Text: Car Journey by Deborah Chancellor	
Context: Mapping linked to Human and Physical Features of the UK	

Going North

(Illustrated on the back of the book - click here to view)

Simon, Mum, Dad, Peter and Annabel approach the village of Ripley. The busy road they are on goes around the village. This means that heavy traffic is kept away from Ripley's quiet streets.

A smaller road leads into the village. The family take this country road and drive closely through Ripley.

The family begin the A61, then turn right into a quiet country road. They stop for a moment by a disused railway line. Then they return to the main road and continue on their way.

Mountains are like this one often popular with walkers.



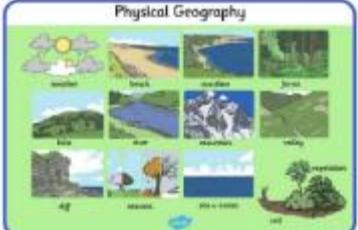



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Y2 Knowledge Organiser Geography: Human and Physical features of the United Kingdom

Key Vocabulary				
Beach	an area of sand sloping down to the water of a sea or lake.			
Coastline	a line that forms the edge between the land and the ocean or a lake.			
Forest	A large area filled with many trees.			
Mountain	A mountain is a landform that rises high above its surroundings. It is taller than a hill.			
Valley	a long depression, or ditch, in Earth's surface.			
City	A large town. Manchester and London are cities.			
Town	A thickly settled area that is usually larger than a village but smaller than a city.			
Village	a place where people live that is usually smaller than a town.			
Harbour	a deep body of water that protects boats near land.			
Aerial	From above.			



Physical Geography



Coastline



Human Geography

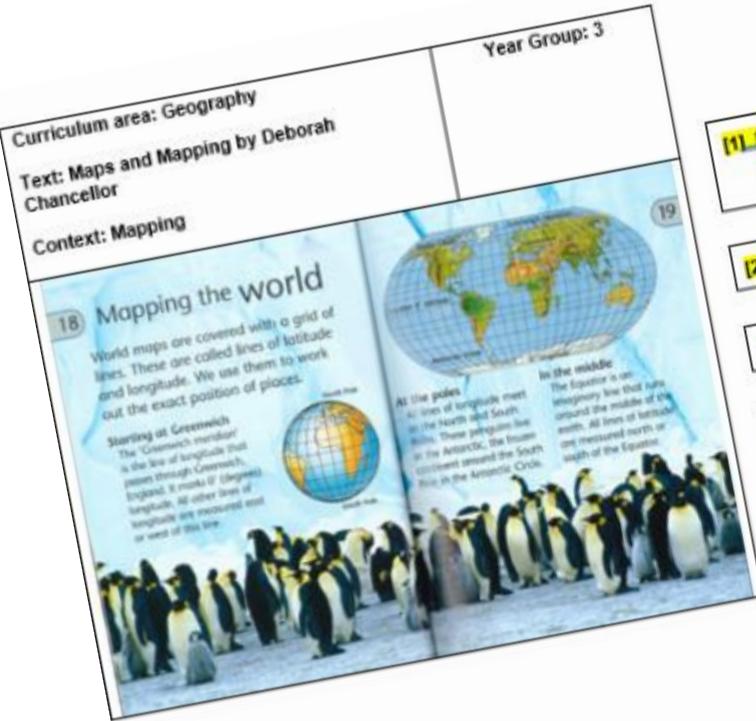


An aerial photograph of the old Locomotive Works in Horwich.

Y2 Knowledge Organiser Geography: Human and Physical features of the United Kingdom

	England	Wales	Scotland	Northern Ireland
Flag				
Capital City	London	Cardiff	Edinburgh	Belfast
Highest mountains	Scafell Pike	Showdon	Ben Nevis	Sleive Donard
Longest rivers in the UK	1. River Severn (Wales/England) 2. River Thames (England) 3. River Trent (England)			

Curriculum area: Geography
Text: Maps and Mapping by Deborah Chancellor
Context: Mapping



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Y3 Knowledge Organiser Geography: Mapping

What is a map?

A map is a two-dimensional drawing of an area. Maps can show the countryside, a town, a country or even the whole world. They are used to help plan routes from one place to another, or to find certain features such as countries or cities.

Different types of map are used for different things depending on whether you are walking, driving or even flying somewhere. Maps can be on paper or on a mobile phone, tablet or computer. To show the Earth on a flat map we need to peel the surface of the globe and flatten it out.

Map reading

To be able to understand maps, it is important to have map-reading skills.

Maps are usually too small to contain lots of writing so instead there are symbols. There is usually a key at the side of the map which explains what the symbols mean.



Most maps will have a compass rose placed in the corner. It shows the direction of North, East, South and West. A compass points north-south on a map.

Symbols and contours

Symbols are generally the same on most types of map. For example, buildings or tourist attractions are shown with blue symbols.



Different types of roads are shown in different colours – blue for a motorway, red for a main road and yellow or orange for narrower roads. Dotted green lines are usually used to show footpaths.



Some maps contain brown contour lines. These are lines that show high and low areas of land. When they are close together it means the hill or mountain is steep. When they are far apart it means the land is gently sloping, or undulating.



How to use an atlas

An atlas is a book of maps that tell us about different parts of the world.

What Can an Atlas Show Us?

Most maps in atlases show countries, roads, or physical features like rivers and mountains.

Reading an Atlas

Atlases have a table of contents in the front of the book and an index at the end of the book. The index, which is in alphabetical order, helps you find the page for specific information.

Betas	Grid Ref.	1:10	1:25	1:50	1:500	1:5000
Place Name	Grid Ref.	Page	Scale	Latitude	Longitude	

Key Vocabulary

Atlas
A book of maps

Lines of latitude and longitude
A system of lines used to describe the location of any place on Earth

Equator
An imaginary circle around the middle of the Earth

Compass
A tool for finding direction

Eastings
The horizontal lines on a map

Northings
The vertical lines on a map

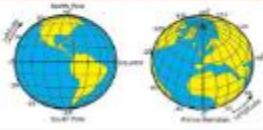
Contour lines
Lines that show high and low areas of land on a map

Undulating
Something that undulates has gentle curves or slopes

What is latitude and longitude?

To help locate where a place is in the world, people use imaginary lines. To find out how far north or south a place is, lines of latitude are used. These lines run parallel to the Equator.

To find out how far east or west a place is, lines of longitude are used. These lines run from the top of the Earth to the bottom.



Y3 Knowledge Organiser Geography: Mapping

Ordnance Survey Maps

Ordnance Survey maps were first made for the military in the 1700s, but it wasn't until the early 20th century that they started work on the maps we might recognise today.

Your map is cross-crossed with lots of horizontal and vertical lines. This creates lots of squares, known as a grid. Using the grid and squares helps to narrow the area to search – making it easier to locate features on the map!

On an Ordnance Survey map, each square represents the same size area: 1 square km (1km²).

Eastings and Northings

Have you ever looked at co-ordinates in Maths? This is very similar! All the grid lines are numbered to help find specific areas on the map.

Eastings are the numbers that run from left to right on the map.

Northings run from south to north.



Four Figure Grid References

Using the 2 digits of the easting and the 2 digits of the northing creates a four-figure grid reference. This is the reference for the bottom-left corner of a square on the map. This makes it easier to search the map for features.

Remember! Always start with the eastings first (try using the phrase 'along the corridor and up the stairs' to get the right order).

Our school is on the map below (33,10)

Scale Bar

Maps have scale bars, usually at the bottom. These can be used to estimate distance.



Digimap for Schools



Curriculum area: Geography
Text: Mapping the Land and Weather by Melaine Waldron
Context: Mapping linked to Climate Zones (biomes)

Year Group: 4

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Y4 Knowledge Organiser Geography: Climate Zones and Vegetation Belts

Climate Zones

The weather changes in different parts of the world. Where there are similar weather patterns this is known as a climate.

At the top of the Earth there is an arctic climate and some of the coldest temperatures in the world are found here.

Temperate climates are found a bit further south, and as you approach the equator you find Mediterranean and desert climates. Some of the hottest places on Earth are found here, and few people live in this climate.

At the equator there is a tropical climate, and travelling south of the equator it gets cooler again before reaching the Antarctic.



What is a biome?

A biome is a natural area of plants and animals. The world is divided into lots of different biomes and they are all different depending on their climate.

Some biomes are:

Aquatic	Desert
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Forest	Grassland
--------	-----------

Tropical Rainforest	Tundra
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Key Vocab

Climate A description of the average weather conditions in a certain place.

Equator An imaginary circle around the middle of the Earth.

Continent A large solid area of land.

Biome Areas of our planet with similar climates, landscapes, animals and plants.

Tropical rainforest Biome which is hot and wet all year round. They are home to half of all the different types of plants and animals on the planet.

Desert Dry areas that receive very little rain.

Savannah A biome that is hot all year round with a long, dry season.

Grassland Areas of land that are vast and open, with grasses being the main plants.

Tundra A large, barren region with no trees. The coldest of all the biomes.

Vegetation Plant life as a whole within a certain area.

Y4 Knowledge Organiser Geography: Climate Zones and Vegetation Belts

Tropical Rainforest

Tropical rainforests are found in Asia, Africa, South America, Central America, and on many of the Pacific Islands. They are often found along the equator.

Rainforests are an endangered biome. People have cut the trees and sold the wood for firewood, building materials, and paper. Parts of the rainforest have been burned to make space for grazing and farming.

Special features

Tropical rainforests have more species of plants and animals than any other biome. Many of the plants used in medicine can only be found in tropical rainforests.

Animals you might find

Anteater, jaguar, brocket deer, lemur, orangutan, manatee, macaw, parrot, sloth, and toucan.

Plants you might find

Bamboo, banana trees, rubber trees, and cassava.

Animals like the Philippine Tarsier are under threat due to the rainforests being cut down and burned.



Savannah

The savannah is hot all year round with a long, dry season.

The savannah biome is mostly made up of grass but there are a few trees.

The largest part of the savannah biome is located in Africa. Almost half of Africa is considered a savannah.

Special features

Because of the availability of grass in the savannah, there are many grazing animals, who take advantage of this abundant food supply.

Animals you might find

Elephant, zebra, giraffe, buffalo, wildebeest, gnus, lion, hyena, cheetah.

Plants you might find

Lemon grass, Rhodes grass, Bermuda grass, acacia tree, baobab tree.

Desert

A desert is an area where little or no life exists because of a lack of water. Scientists estimate that about one-fifth of the earth's land surface is desert.

Deserts can be found on every continent except Europe.

There are two different kinds: hot and dry (such as the Arabian and Sahara deserts) and cold and dry (such as Antarctica and the Gobi desert).

Special features The lack of water and intense heat or cold make this biome inhospitable to most life forms.

Animals you might find A few animals—mainly reptiles, like snakes and lizards, and amphibians, like frogs and toads—are well adapted to the hot desert.

Plants you might find Most of the plants you'll see in the desert are species of cactus.

Fires in the Savannah

Fires are an important part of the savannah. During the dry season fires clear out old dead grass and make way for new growth. The trees have thick bark which helps them to survive. The animals generally can run to escape the fire. Some animals burrow deep into the ground to survive. Insects generally die by the millions in a fire, but this provides a feast to many birds and animals.



Curriculum area: Geography

Text: Understanding Local Maps by Jack and Meg Gillett

Context: Mapping

Distance, direction and scale	Year Group: 5
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Do it yourself

Do you know what a grid reference is? It's a set of numbers that tell us exactly where to find a place on a map. You can use a grid reference to find your way around a town or city. To do this, you need to understand how maps use distance, direction and scale.

Distance and direction

Distance is the amount of space between two places. Direction is the way we travel from one place to another. On a map, distance and direction are often shown together as a grid reference. A grid reference is a set of numbers that tell us exactly where to find a place on a map. You can use a grid reference to find your way around a town or city. To do this, you need to understand how maps use distance, direction and scale.

Scale

A scale is a ratio that shows the size of objects in a drawing compared to their real-life size. It's usually written as a fraction, such as 1:100,000. This means that every centimetre on the map represents 100,000 centimetres in reality. For example, if you draw a road that is 1 cm long on the map, it would be 100,000 cm long in reality, or 1 km.

Grid reference

A grid reference is a set of numbers that tell us exactly where to find a place on a map. It's made up of two parts: a row number and a column number. For example, if you want to find a place in a town, you might say 'it's in the 3rd row and the 4th column'. This means that the place is located in the 3rd row of streets and the 4th column of houses.

Map

A map is a drawing of an area that shows its shape and features. It's used to help us find our way around a town or city. A map can show things like roads, rivers, buildings, and parks. It can also show things like hills, mountains, and forests.

Compass

A compass is a device that helps us find our way around a town or city. It has a needle that always points north. This means that we can use it to find our way around a town or city. We can also use it to find our way around a town or city.

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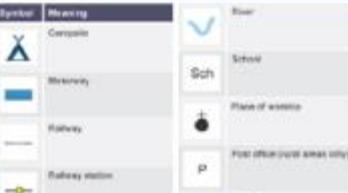
Y5 Knowledge Organiser Geography: Mapping

What I should already know

- To show the world on a flat map we need to peel the surface of the globe and flatten it out.
- That an atlas is a book of maps.
- That lines of latitude and longitude are imaginary lines which circle the earth.
- That lines of latitude and longitude can be used to make a grid in an atlas.
- That you can use an index to find countries/cities in an atlas.
- That a compass on a map points north-south on a map.

Ordnance Survey (OS) Maps Symbols and Keys

It's a good idea to know and be able to identify some of these features usually found on the legend.



Key Vocab

Atlas	A book of maps.
Lines of latitude and longitude	A system of lines used to describe the location of any place on Earth.
Equator	An imaginary circle around the middle of the Earth.
Compass	A tool for finding direction.
Eastings	The horizontal lines on a map.
Northings	The vertical lines on a map.
Contour lines	Lines that show high and low areas of land on a map.
Undulating	Something that undulates has gentle curves or slopes.

All the tourism and leisure symbols on an OS map are blue

P	Parking
X	Public site
i	Other tourist feature
+	Public house



Y5 Knowledge Organiser Geography: Mapping

8-Figure Grid References

Maps have grid lines on them – we use them to pinpoint locations by using grid references.

4-figure grid references are a handy way of identifying any square on a map, e.g. our school is (33,10).

6-figure grid references are best for giving exact locations.

Grid references are easy, as long as you remember that you always go along the corridor before you go up the stairs.

Step 1: Find the 4-figure reference

Step 2: Imagine the square is divided up into 100 tiny squares, 10 along the bottom and 10 up the side

Step 3: Still remembering to go along the corridor then up the stairs, estimate how far across and then up the square the feature is.



Contours

Some maps contain **contour lines**. These are lines that show high and low areas of land. When they are close together it means the hill or mountain is steep. When they are far apart it means the land is gently sloping, or undulating.

Ben Nevis is the tallest mountain in the UK. The contour lines are close together, which means it is very steep.

Curriculum area: Geography

Text: The Story Behind Maps by Barbara Somervill

Context: Mapping linked to Locational Knowledge of Northern England

Year Group: 6

Latitude, longitude, and map projections

Latitude
Longitude
Equator
North Pole
South Pole

For example, if you're looking for a point that is latitude 60° north and longitude 12° west on a map or globe, begin by looking for the equator line around Earth. Find where the equator intersects the 12° west line. Then follow the 60° north line upwards from the equator.

For example, the Arctic Circle lies at latitude 66° north. The sun never sets from the region to the north of the Arctic Circle (at 66°N). All lines of latitude are parallel to the equator. The distance between two lines of latitude is 1° (111 kilometers/69 miles).

For example, if you're looking for a point that is latitude 60° south and longitude 12° east on a map or globe, begin by looking for the equator line around Earth. Find where the equator intersects the 12° east line. Then follow the 60° south line downwards from the equator.

Lines of latitude and longitude form a grid that covers the entire surface of planet Earth.

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Some Northern cities and their counties

Leeds	West Yorkshire	Bolton	South Yorkshire
Salford	Greater Manchester	Manchester	Greater Manchester
Preston	Lancashire	Liverpool	Merseyside

Oceanic Climate

An oceanic climate has cool or mild winters and does not have dry or hot summers. Most places with this type of climate have weather that changes frequently.

Cities with this climate include: Dublin, London, Manchester, Paris, Brussels, Amsterdam, Hamburg, Melbourne and Auckland.

Key Vocab	
City	A large human settlement
County	A geographical region of a country
Borough	A town, village, or part of a large city that has its own government
Oceanic Climate	An oceanic climate, also known as a maritime climate, has cool or mild winters and does not have dry or hot summers
Temperate	Temperate means moderate
Mill town	a settlement that developed around one or more mills or factories, usually cotton mill or factory producing textiles
Boomtown	A community that undergoes sudden and rapid population and economic growth, or that is started from scratch.

Industrial Revolution

The Industrial Revolution began in Lancashire and Manchester. It is named the Industrial revolution because it was a time many people in Britain stopped farming and started working in factories.

What made the Industrial revolution so successful? Firstly lots of new inventions were created that started to make life easier in Britain. The steam engine was invented which ran on coal, and the invent that factories could now be built all over the country.

Manchester was at the heart of the world's cotton industry, and cotton manufacture was central to it becoming the first industrialised city.

From the late 18th century Bolton was transformed by the industrial revolution. It grew very rapidly. Samuel Crompton, a native of Bolton invented the spinning mule in 1779 and opened his first cotton mill in 1786. The cotton industry then grew at a tremendous rate and came to dominate Bolton.

The Pennines

The Pennines are a mountain range in England. Often said to be the "backbone of England", they form an unbroken range stretching from the Peak District in the Midlands to the Cheviot Hills on the Scottish border. Their total length is about 250 mi (402 km).



Manchester

Manchester is a major city and metropolitan borough in Greater Manchester, England, with a population of around 550,000.

The Manchester Ship Canal opened in 1894, creating the Port of Manchester and linking the city to sea, 36 miles (58 km) to the west.

Manchester is the third-most visited city in the UK.

Manchester experiences a temperate Oceanic climate, like much of the British Isles, with mild summers and cool winters.

Manchester Ship Canal

The Manchester Ship Canal is a wide, long river navigation in North West England. It opened in 1894. At the time of its completion, it was the largest navigation canal in the world.

The "Big Ditch", as it is sometimes known, consists of the rivers Irwell and Mersey made navigable for seagoing ships from the Mersey Estuary to Salford Docks in Greater Manchester. It transformed Manchester from a landlocked city into a major sea port.



Bolton

Bolton is a town in Greater Manchester in North West England. A former mill town, Bolton has been a production centre for textiles since Flemish weavers settled in the area in the 14th century, introducing a wool and cotton-weaving tradition.

The urbanisation and development of the town largely coincided with the introduction of textile manufacture during the Industrial Revolution.

Bolton was a 19th-century boomtown, and at its peak in 1929 its 216 cotton mills and 26 bleaching and dyeing works made it one of the largest and most productive centres of cotton spinning in the world.



