

Name: .....

Class: .....



# Year 7 Unit 1:



## What do Geographers do?

<b>Unit Overview: Introduction to Geography</b> <b>ENQUIRY: What do Geographers do?</b>
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<b>Unit intention:</b>		
<b>Success criteria</b>	✓	X
1. I can find places in the Atlas on my own 2. I can explain why Geography exists as a subject 3. I can identify the different types of Geography 4. I can name the major lines of latitude and longitude 5. I can name 5 Geographical jobs 6. I can explain why maps aren't always accurate		
<b>Unit summative and formative assessment details:</b>  Baseline assessment Mid unit assessment		
<b>Home Learning (What and how often):</b>  Set every lesson – review and practice skills		
<b>Topic Sequence</b>  1. Key global features 2. Atlas skills 3. Geography as a discipline 4. Latitude and longitude 5. Geographical careers	<b>Recommended reading:</b>  OS map skills quiz books  <b>Places to visit:</b> Greenwich – Prime Meridian Greenwich – Royal Observatory British Museum – Ancient Greece	

Professionalism. Inclusion. Pedagogy. Curriculum. Be professional. Be inclusive. Be a learner. Be knowledgeable.

### End of unit evaluation

**Success criteria** – Have you met them? Show your evidence in preparation for your assessment.

1.

2.

3.

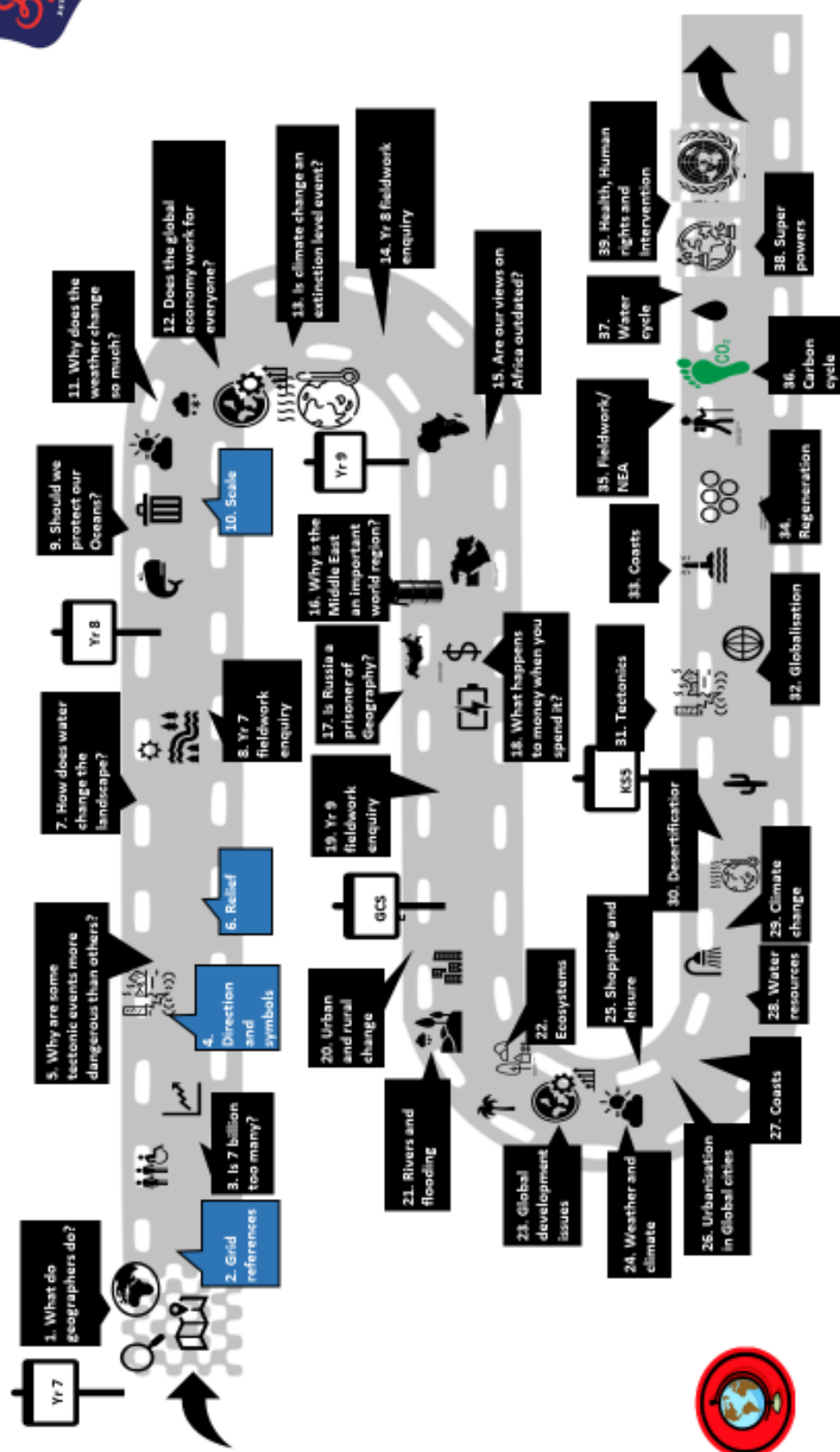
4.

5.

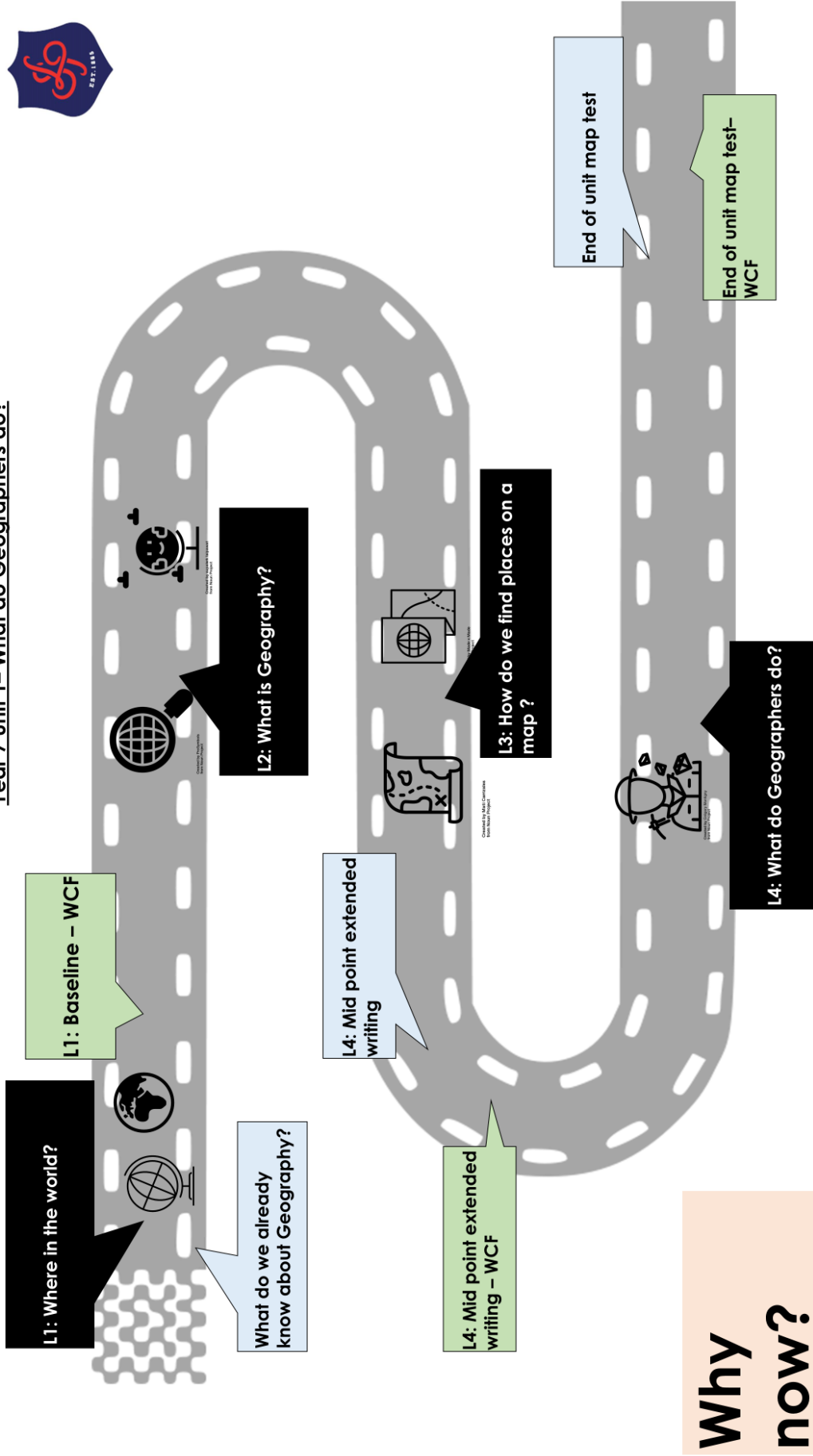
6.

How will you improve your work?

Year 7 (Term 1)					
LI	Extending	Mastering	Learning	How assessed	HW Check
<b>To learn to use an atlas to locate places independently</b>	I can find places in the Atlas on my own	I can use a contents page and index	I can name the continents and oceans	Baseline assessment at start of lesson 1	A place I have visited sheet
<b>To understand what Geography is as a discipline</b>	I can identify the different types of Geography	I can explain why Geography exists as a subject	I can define Geography		Geography crossword
<b>To understand how we locate places on a world map</b>	I can use latitude and longitude to locate places	I can explain how lines of latitude are calculated	I can name the major lines of latitude and longitude	Mid-point essay	Spy catcher sheet
<b>To understand the different careers Geographers do</b>	I can explain why maps aren't always accurate	I can tell the story of the early explorers	I can name 5 Geographical jobs	Throughout	Revise for maps skills test



## Year 7 unit 1 – What do Geographers do?



## Glossary

[illegible]

## Lesson 1: Where in the world?

### Big Picture

L/M/E		I think I can ...	My teacher thinks I can ...
Learning	I can name the continents and oceans		
Mastering	I can use a contents page and index		
Extending	I can find places in the Atlas on my own		

### Do now: Match the start and end of sentences

Africa is ...
Physical geography is ...
The capital of Spain is ...
China is ...
Human geography is ...
Global means ...
London is ...

... a country.
... a city.
... about rivers, coasts, and volcanoes.
... about farming, settlement, and population.
... a continent.
... Madrid.
... relating to the whole world.

### Starter: Match the countries to the continents

The United Kingdom
Afghanistan
The United States of America
Australia
Brazil
South Africa

Asia
Africa
Oceania
Europe
North America
South America

A globe is .....

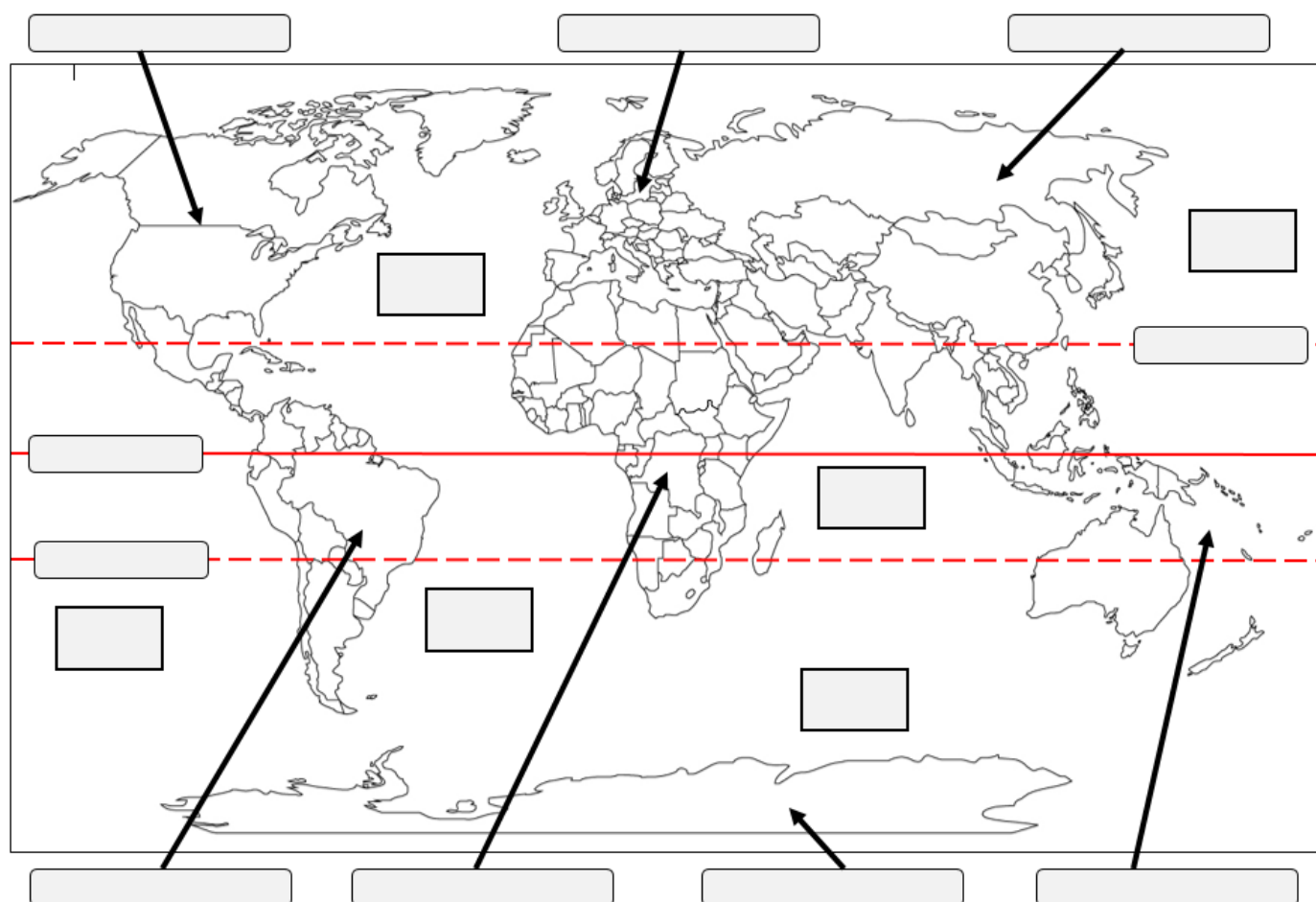
A map is .....

An Atlas is .....

A continent is .....

A country is .....

Complete the map



### Continents

- ☐ North America
- ☐ South America
- ☐ Africa
- ☐ Europe
- ☐ Asia
- ☐ Oceania
- ☐ Antarctica

### Oceans

- ☐ North Atlantic
- ☐ South Atlantic
- ☐ North Pacific
- ☐ South Pacific
- ☐ Indian
- ☐ Southern

### Lines of Latitude

- ☐ Tropic of Cancer
- ☐ Equator
- ☐ Tropic of Capricorn

Use your world map to complete the sentences

The ocean to the west of the Europe is the \_\_\_\_\_

The ocean to the east of Asia is the \_\_\_\_\_

The continent to the west of the South Atlantic Ocean is \_\_\_\_\_

Africa is surrounded by 4 oceans, these are: the \_\_\_\_\_, the \_\_\_\_\_, the \_\_\_\_\_ and the \_\_\_\_\_.

The only oceans north of the Tropic of Cancer are the \_\_\_\_\_ and the \_\_\_\_\_

The \_\_\_\_\_ passes through the continents of South America, \_\_\_\_\_ and Oceania

Only one continent is crossed by all three important lines of latitude, this continent is \_\_\_\_\_.

### Using an Atlas

Contents page:

- 1) Open the Atlas at the contents page. What does this page tell us about this book?  
.....
- 2) There are 2 new keywords to describe most of the different types of maps in the Atlas. Can you find them? .....
- 3) What does "Political" mean? And what about "Relief"?  
.....  
.....
- 4) What page is the Political map of Europe on? .....
- 5) What page is Relief map of Africa on? .....
- 6) Where would you find information on Natural Hazards? .....
- 7) What do you think the map on Page 80 would show you?

Index:

- 1) What does the first column of numbers tell you? .....
- 2) And what does the next column tell you? .....
- 3) If you wanted to find information on "Athens" what page would you need to look at?  
.....
- 4) What page number and grid code would you need to find for "Mablethorpe"?  
.....
- 5) The last 2 columns tell you the longitude and latitude of a place. What do you think these mean? .....

Maps:

- 1) What is the scale used on the map on pages 10 and 11? .....
- 2) Which country does it show? .....
- 3) What is the name of the 2 stretches of water on this map?  
.....
- 4) What type of map is on page 19? .....
- 5) What does it show? .....
- 6) Look at the pie chart on page 33. What does it tell us about where people came from to visit the UK?  
.....  
.....
- 7) Page 35 shows a political map of Europe. How many capital cities are there in Europe?  
.....
- 8) Which country has the largest land size in Africa? .....
- 9) What is the name of the mountain range in South America? .....
- 10) Pages 122 and 123 show the different climates around the world. Can you name a place in the 'Temperate' region? .....

Turn to pages 150-7. These pages give you lots of information about different countries. Fill in the table below with information from these pages.

Country	Total Population	Description of flag
Belgium		
Denmark		
Egypt		
Italy		
Jamaica		
Madagascar		
Rwanda		
Singapore		
Turkey		
United Kingdom		

Now use your knowledge of the Atlas to find the answers to these questions:

at the back of the atlas to help you.

1. What is the name of the river that runs through London? \_\_\_\_\_
2. Budapest is the capital of which country? \_\_\_\_\_
3. Cairo is the capital of which country? \_\_\_\_\_
4. Algeria, Libya, Sudan, Tanzania, Congo, and Ghana are all found on which continent?  
\_\_\_\_\_
5. Bangkok is the capital of which country? \_\_\_\_\_
6. Which city is the capital of Italy? \_\_\_\_\_
7. Sweden, Romania, Slovakia, and Ukraine are all countries in which continent?  
\_\_\_\_\_
8. Which city is the capital of Norway? \_\_\_\_\_
9. What is the name of the two islands in the South Atlantic Ocean off the coast of South America? \_\_\_\_\_
10. What is the name of the large country in Europe which borders both the Black Sea and the Mediterranean Sea? \_\_\_\_\_
11. What is the name given to the volcanic islands in the North Pacific Ocean that are a part of the USA? \_\_\_\_\_
12. What is the name given to the imaginary line around the middle of the world?  
\_\_\_\_\_
13. Which country covers the most time zones? \_\_\_\_\_
14. Atlantic, Pacific, Southern and Indian are all types of what? \_\_\_\_\_
15. Kiev is the capital city of which country? \_\_\_\_\_
16. What is the name of the river that runs through 10 countries in Northern Africa including Sudan, Ethiopia, and Egypt? The \_\_\_\_\_
17. The world is made up of many different ecosystems and environments. What is the name given to the common ecosystem of North Africa that is sand and stones with very little vegetation (plants)? \_\_\_\_\_
18. What is the name given to the highest mountain in the Himalayas? Mt \_\_\_\_\_
19. Which continent has the highest population (number of people)? \_\_\_\_\_
20. On a climate graph we show record the average of two measurements of weather. One is temperature, what is the other? \_\_\_\_\_
21. In addition to the equator there are two additional lines of latitude marked on world maps, what are they called? \_\_\_\_\_  
\_\_\_\_\_

22. What is the name of the coastal town on the border of Kent and East Sussex?

The first letter of each answer creates a phrase. Write each letter out below, can you work out what the phrase is?

**Time to reflect:**

**Around the world in 5 minutes...**

Q1. Name this country and tell me what its capital city is.

Q2. Name this country and name one of its major rivers

Q3. Name this country and tell me what three colours make up its flag

Q4. Name this country and tell what its capital city is

Q5. Name this country – is it true that this is the worlds biggest country by land area?

Q6. Name this small country and tell me what major mountainous area is located here.

Q7. Name this country and tell what makes it unique in terms of its plate tectonics

Q8. Name this country and tell what famous trail is located here

Q9. Name this country and tell me what biome dominates this landscape

Q10. Name this country and tell what its capital city is

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

## Lesson 2: What is Geography?

### Big Picture

L/M/E		I think I can ...	My teacher thinks I can ...
Learning	I can define Geography		
Mastering	I can explain why Geography exists as a subject		
Extending	I can identify the different types of Geography		

### Do now:

Geography is the study of the \_\_\_\_\_ we \_\_\_\_\_ in. Geographers study \_\_\_\_\_ processes and landforms, such as, \_\_\_\_\_ rivers, \_\_\_\_\_ and oceans. Geographers also study patterns of \_\_\_\_\_ activity and the links between \_\_\_\_\_ and the environment.

people   world   live   natural   deserts   mountains   human

### Starter:

Name 2 countries in each of these continents:

Africa .....

Asia .....

Europe .....

North America .....

Oceania .....

South America .....

Why did I not include Antarctica?

.....  
.....  
.....

## The story of Eratosthenes and the word Geography

The word Geography was first written down in an empire called Ancient Greece. The man in Ancient Greece who first wrote it down was called Eratosthenes. We don't know exactly when Eratosthenes first wrote down the word Geography. We estimate it was 220 B.C. That would mean the word Geography was written down for the first time over 2239 years ago.

Eratosthenes lived in the city of Alexandria in the country of Egypt. Egypt was part of the empire of Ancient Greece in 220 B.C. Alexandria was a coastal city in the North of Egypt next to the Mediterranean Sea. The city of Alexandria was founded by a Greek, Alexander the Great; he named the city after himself. The city of Alexandria was home to the Great Library. The Great Library was home to knowledge and information from across the Greek Empire. Eratosthenes worked in the Great Library as the Chief Librarian. Like many of you here, Eratosthenes wanted to understand the world around him. Just like you, Eratosthenes studied many different subjects. In Ancient Greece, these subjects were called disciplines.

Eratosthenes studied Mathematics, Astronomy, Poetry, History, and Philosophy. Because he studied these different disciplines, Eratosthenes began to see the links between the disciplines and how they were connected. Thinking like this is called interdisciplinary. Eratosthenes made a new word called Geography. In Ancient Greek, Geo means 'the Earth' and 'graphy' means 'to write'. Geography means 'to write about the Earth'. We still 'write about the Earth' in Geography today. It is still an interdisciplinary way of thinking. Students, like you, have studied Geography in schools since Eratosthenes first wrote it down in the Great Library of Alexandria.

Eratosthenes wrote three books about Geography. In his third book, Eratosthenes created a map of all the places mentioned in the Great Library. Sadly, all the copies that were made have since been lost.

📍 Draw a neat line, using a ruler, to show the location of these on the map of the Mediterranean below.



Mediterranean



Egypt



Eratosthenes



The Great Library

Answer the

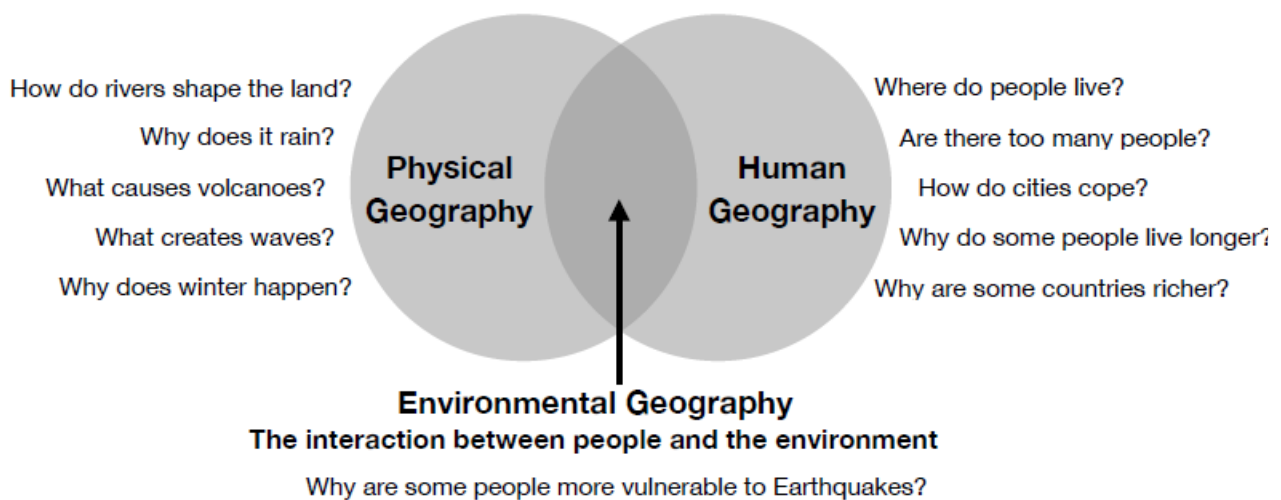
questions below

1. Which empire was the word Geography first written down in?		10. What were subjects called in Ancient Greece?	
2. What was the name of the man that first wrote down the word Geography?		11. What job did Eratosthenes have in the Great Library?	
3. What was the word that Eratosthenes first wrote down?		12. What is it called when you study many disciplines and see the connections between them?	
4. In which year do we estimate the word Geography was first written down?		13. When the word Geography was first written down; what empire was Egypt in?	
5. Which city did Eratosthenes live in?		14. Which city was home to the Great Library?	
6. What does the word Geo mean?		15. Where did Eratosthenes work?	
7. What does the word graphy mean?		16. Who was the first person to write down the word Geography?	
8. What does the word Geography mean?		17. How many books of Geography did Eratosthenes write?	
9. Which sea was Alexandria next to?		18. Are there any copies for us to read today?	

## The meaning of the word Geography today

The way we use the word Geography has changed since Eratosthenes first wrote it down.

Today, we say that there are two main *branches* of Geography. The two main branches are Physical Geography and Human Geography. The two main branches of Physical and Human Geography ask different types of questions. However, some of the questions that Geographers ask don't belong to just one branch of Geography, they belong to both:



We still use a lot of the same words in Geography that Eratosthenes would have used in Ancient Greece. Like the word Geography, they are made of a prefix, like *Geo*, and a suffix, like *graphy*. Use the meanings opposite to match up the words below with a ruler.

<b>Geo = Earth</b>	<b>Graphy = To write</b>
<b>Hydro = Water</b>	<b>Metry = To Measure</b>
<b>Carte = Paper</b>	<b>Logy = To Study</b>
<b>Demos = People</b>	<b>Morph = Shape</b>

Geology	Studying the Earth's Shape	Checking the quality of water in a lake that the residents of a city drink
Hydrology	Writing it down on Paper	Reporting on how many children live in an area so the right number of schools are built
Hydrometry	Measuring the Earth	Designing a map that shows tourists where the rides are in a theme park
Cartography	Studying the Earth	Studying the shape of the coastline and explaining why it's like that
Demography	Measuring water	Although it started as a type of Geography, it's now the measuring of all shapes, and it a type of Mathematics.
Geomorphology	Describing the people	Measuring the volume of water in a river after rainfall
Geometry	Studying the water	Studying the type of rocks under the surface to know where to drill for oil

Eratosthenes was the Chief Librarian in the city of Alexandria. Suggest why having this role would have helped him create the word Geography

.....

.....

.....

.....

.....

Look at the location of Athens and Alexandria, two important cities in the Greek Empire. Suggest why the sea between them would have become known as the Mediterranean.

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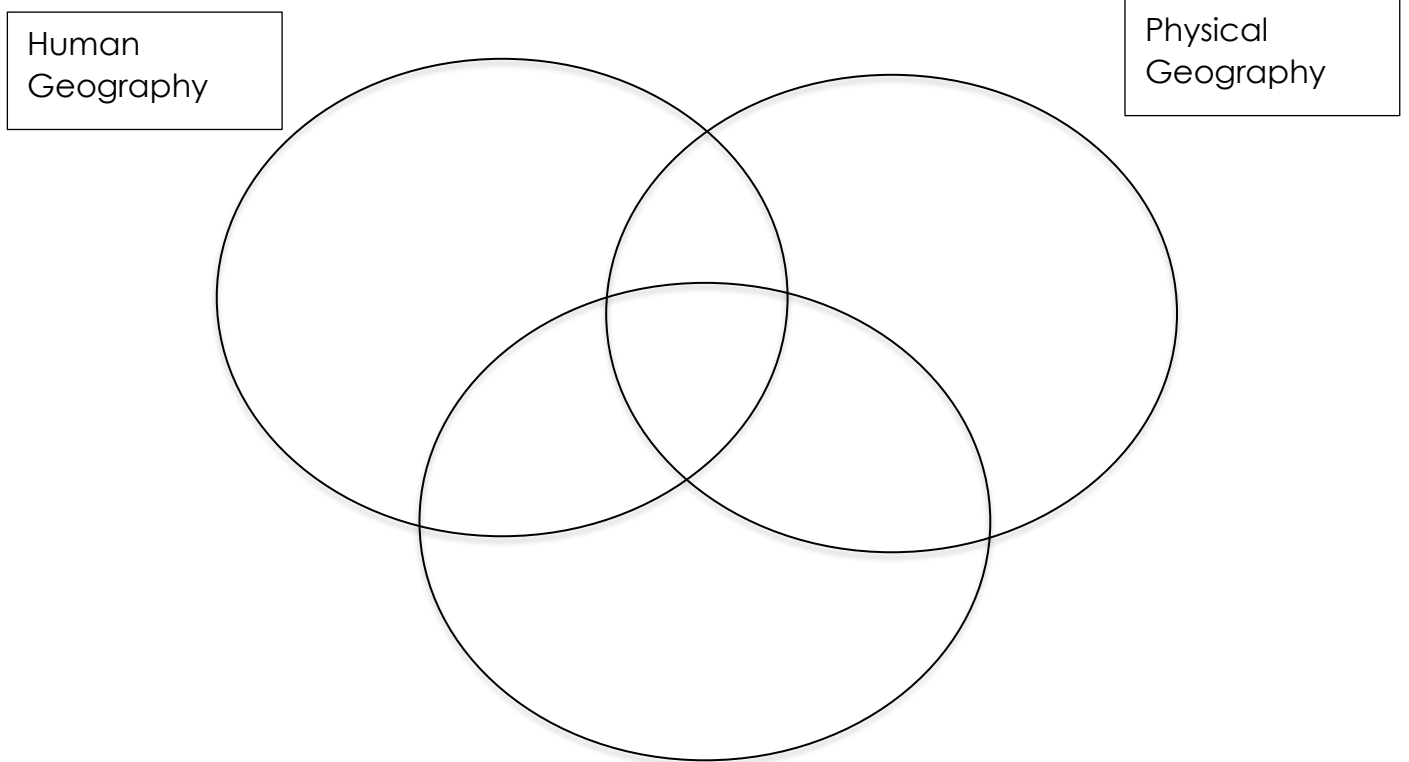
.....

.....

What are the different parts of Geography?  
 Human Geography – concerned with people  
 Physical Geography – nature and the effect it has on people and/or the environment

# Environmental Geography – how people can harm or protect the environment

Sort the Geography topics into the Venn diagram



1	Rivers	9	Poverty	17	Industry	25	Recycling
2	Tourism	10	Coasts	18	Aid	26	Transport
3	Rainforests	11	Farming	19	Climate change	27	Urbanisation
4	Trade	12	Maps	20	Earthquakes	28	Crime
5	Migration	13	Conservation	21	Volcanoes	29	Litter
6	Health	14	Soils	22	Glaciers	30	Development
7	Deforestation	15	Globalisation	23	Deserts	31	Hurricanes
8	Mountains	16	Global warming	24	Population	32	Weather

Write a definition of the keyword

Create a question where the keyword is the answer

Use the keyword correctly in a sentence

Draw an image, picture or symbol to illustrate the keyword

Keyword  
**Physical  
geography**

What other words can be linked to that keyword?

Why is the keyword important? What other units/topics can this keyword be included in?

Write a definition of the keyword

Create a question where the keyword is the answer

Use the keyword correctly in a sentence

Draw an image, picture or symbol to illustrate the keyword

Keyword  
**Human  
geography**

What other words can be linked to that keyword?

Why is the keyword important? What other units/topics can this keyword be included in?

### Time to reflect:

Which are human and which are physical?

1		8		15	
2		9		16	
3		10		17	
4		11		18	
5		12		19	
6		13		20	
7		14		21	

## Lesson 3: What are lines of latitude and longitude?

### Big Picture

L/M/E		I think I can ...	My teacher thinks I can ...
Learning	I can name the major lines of latitude and longitude		
Mastering	I can explain how lines of latitude are calculated		
Extending	I can use latitude and longitude to locate places		

### Do now:

1	
2	
3	
4	
5	
6	
7	

### Starter:

Name 3 lines of latitude:

1. ....
2. ....
3. ....

Lines of latitude .....

Lines of Longitude .....

The equator is .....

The Prime Meridian is .....

The Tropic of Cancer is .....

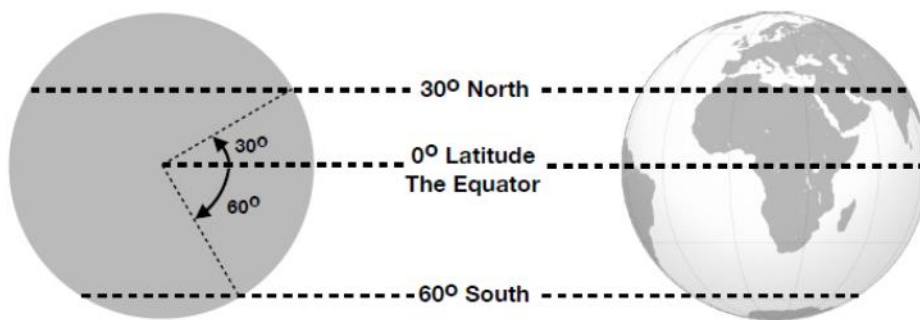
The Tropic of Capricorn is .....

## The story of why Latitude is measured in degrees

Eratosthenes wanted to make a map that was as accurate as possible. To do this he invented lines of latitude. Eratosthenes invented lines of latitude so that anyone could use the map to see how far North or South a place was on the Earth's surface.

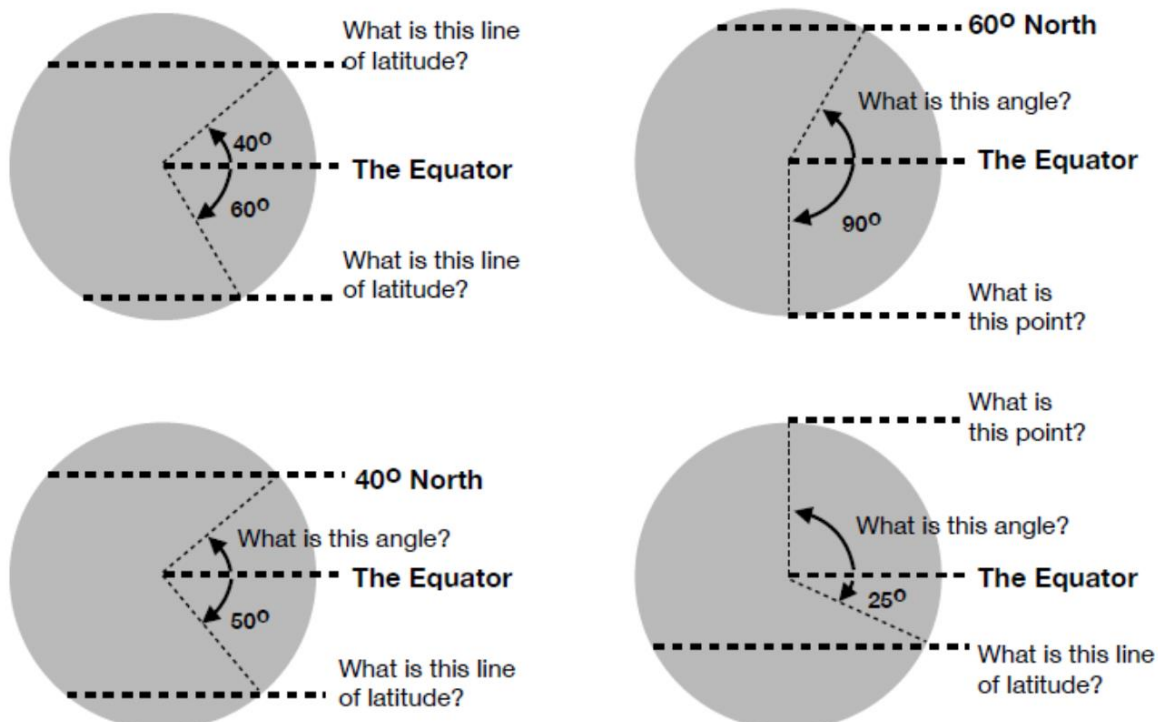
Lines of latitude run horizontally across the Earth. The line that runs horizontally around the surface of the Earth in the middle is called the equator. It is called the equator because it separates the surface of the Earth into two equal halves.

The point at the very top of the surface of the earth is called the North Pole. The point at the very bottom of the surface of the Earth is called the South Pole. Every other line of latitude is measured as being either North or South of the equator.



The diagram above show how the unit of measurement for Latitude is degrees. This is because of the angle measured from the centre of the Earth. The line of latitude runs horizontally around the Earth's surface at the place where the angle from the centre of the Earth reaches the surface.

The angle from the centre of the Earth has a range from 0° - 90°. The equator is at 0°. The North Pole is 90° North and the South Pole is 90° South.



21. What is the name of the line that runs horizontally around the surface of the Earth in the middle?		29. What is the name of the lines that separates the surface of the Earth into two equal halves?	
22. What is the unit of measurement for lines of latitude?		30. What is the range of the angles of latitude?	
23. What is the name of the place 90° North?		31. Which is near the South Pole, 20°N or 40° S?	
24. Which is further from the Equator, 20°N or 40° S?		32. Which line of latitude is longer, 20°N or 40° S?	
25. Do lines of latitude run horizontally or vertically around the Earth?		33. Can we see lines of latitude when we're standing on the surface of the Earth?	
26. What is the name of the point 90° South?		34. Can we see lines of latitude from space?	
27. What is angle from the centre of the Earth at the Equator?		35. Which line of latitude is longer, the Equator or 20°N?	
28. What is angle from the centre of the Earth at 20°N?		36. Which line of latitude is shorter, 60°N or 20°N?	

## The story of the Tropics of Cancer and Capricorn

The sun is directly above the Tropic of Cancer during the summer solstice. The summer solstice is the day of the year with the most hours of sunlight. This is during the month of June in the Northern Hemisphere. This line is at 23.5°N

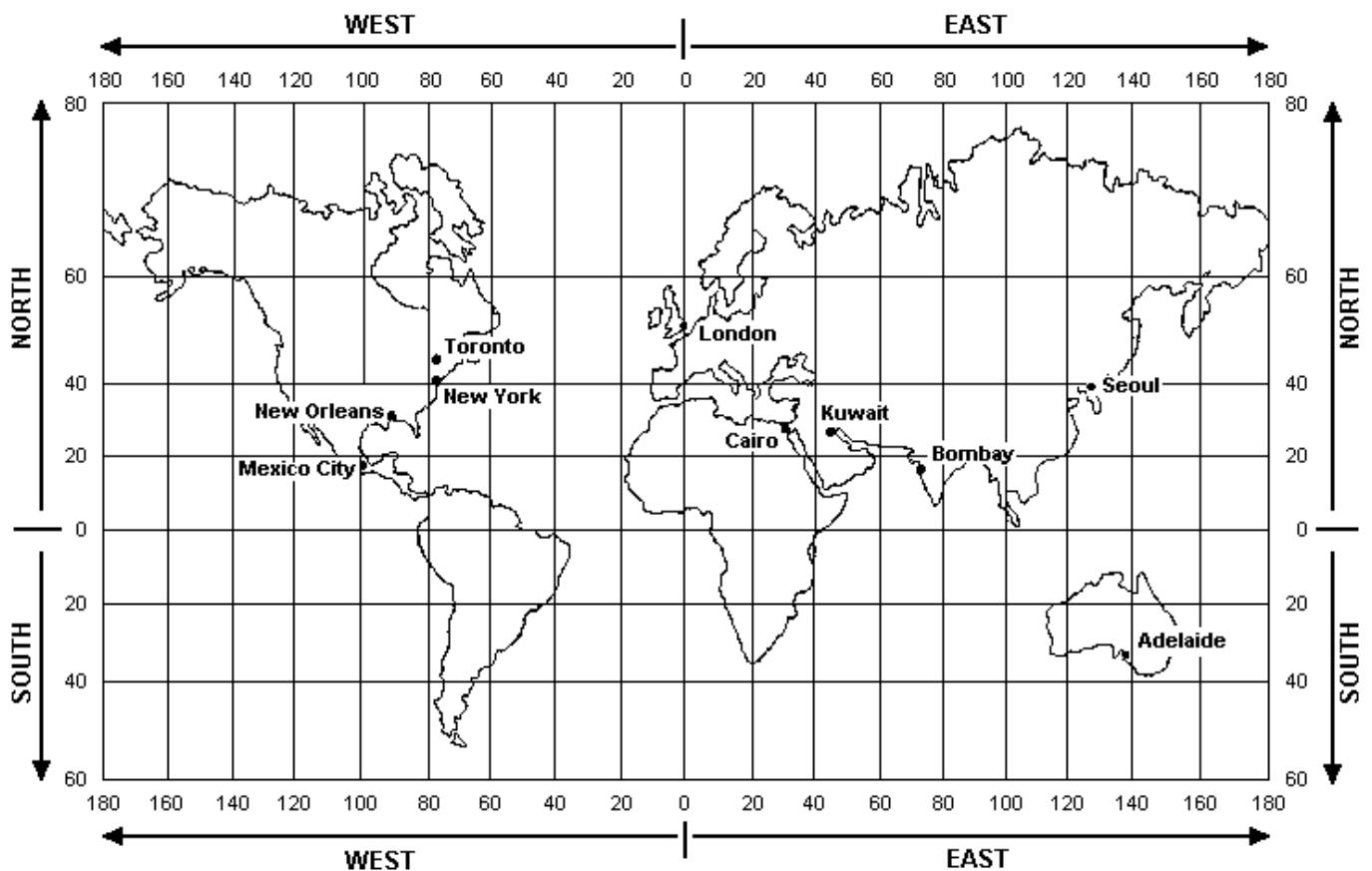
In Ancient Greece, people could see the stars in the night sky more clearly than they can now. We cannot see the stars as well because of light pollution. This is the effect of all the lights in the cities on Earth.

The stars in the sky were so bright in Ancient Greece that the Ancient Greeks believed they could see patterns and pictures in the stars, these patterns and pictures were called constellations. These constellations are still there but we cannot see them very often. The constellations were given names. This helped people in Ancient Greece to know which direction they were travelling at night time.

Around 200 BC, when Eratosthenes would have been alive and working as the Chief Librarian in Alexandria, the Tropic of Cancer was named. During the summer solstice the constellation Cancer was directly overhead of the Tropic of Cancer.

In Greek mythology, Cancer is identified with the crab that appeared while Hercules fought the many-headed Hydra. Hercules slew the crab after it bit him in the foot. Afterwards, the goddess Hera, an enemy of Heracles, placed the crab among the stars

155. Which Tropic is in the Northern Hemisphere?		161. In which solstice is the sun directly overhead of the Tropic of Capricorn?	
156. Which Tropic is in the Southern Hemisphere?		162. Are the Tropics the same distance from the Equator?	
157. Which Tropic was the city of Syene closest to?		163. Which has a longer circumference, the Tropic of Cancer or the Equator?	
158. Which constellation is the Tropic of Cancer named after?		164. How many degrees North is the Tropic of Cancer?	
159. In which solstice is the sun directly overhead of the Tropic of Cancer?		165. How many degrees South is the Tropic of Capricorn?	
160. Which constellation is the Tropic of Capricorn named after?		166. What degrees is the Equator?	



City	Latitude	Longitude
New Orleans		
	34°S	18°E
Cairo		
Seoul		
	12°S	77°W
London		
	60°N	11°E
Toronto		
New York		
	23°S	43°W
Adelaide		
	56°N	37°E
Kuwait		
	49°N	123°W
Mexico City		
Mumbai		

**Time to reflect:**

Answer these questions:

What is the most important line of Latitude?

.....

What is the latitude of the Tropic of Cancer?

.....

Which of the Tropics is located in the Northern Hemisphere?

.....

What latitudes is the United Kingdom located between?

.....

What longitudes is Africa located between?

.....

## Lesson 4: What do Geographers do?

### Big Picture

L/M/E		I think I can ...	My teacher thinks I can ...
Learning	I can name 5 Geographical jobs		
Mastering	I can tell the story of the early explorers		
Extending	I can explain why maps aren't always accurate		

### Do Now:

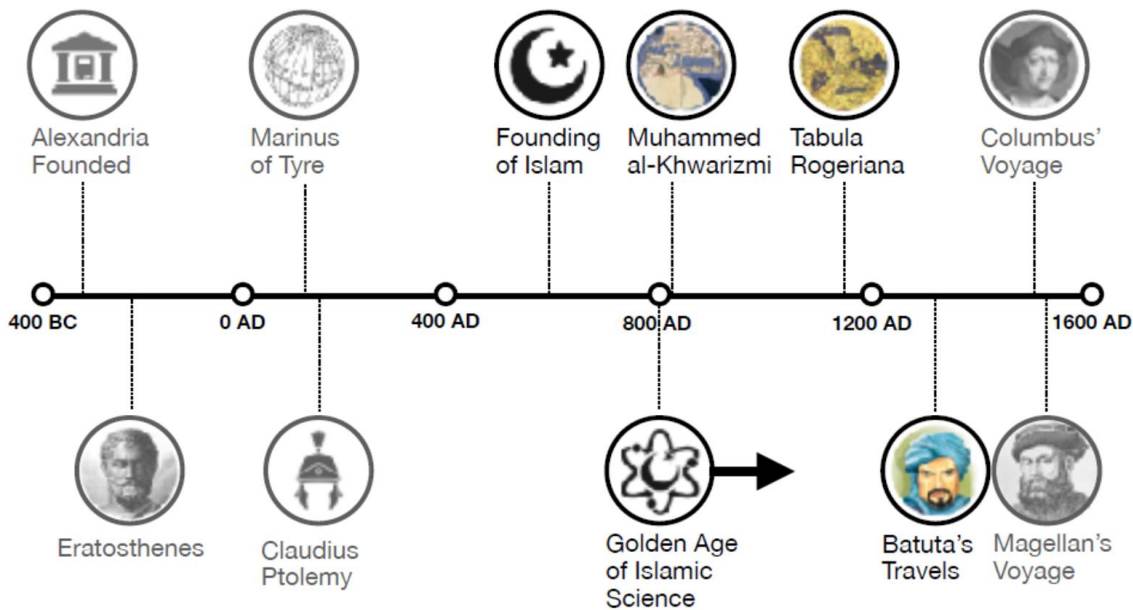
	Studies .....
Anthropologist	Rocks and structure of the earth
Botanist	Earthquakes
Climatologist	Plants
Demographer	Changes in the wealth and poverty of people and places
Economist	Animals
Environmentalist	Human populations
Geologist	Weather
Geomorphologist	Water and ice processes and interactions
Hydrologist	Human behaviour and migrations of the past
Meteorologist	Interactions and processes
Palaeontologist	Volcanoes
Scientist	History of life on earth
Seismologist	Interactions between people and the planet
Volcanologist	Changes in the physical landscape of the earth

**Starter:**

What do these people have in common?

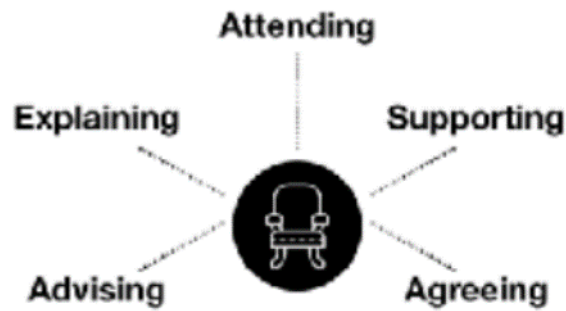
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**Islamic explorers**

By the 12th Century, Europe had entered the Dark Ages and almost all the knowledge of Geography and Cartography had been lost. To the South and East, the Islamic Empire had entered its Golden Age of Science and the discipline of Geography was still being studied. The explorers of the Islamic Empires increased our knowledge of regions and cities across the world.

Muhammed al-Idrisi was a Muslim and a North African. He was born in the city of Cautia. Cautia is in the modern country of Morocco on the Mediterranean Sea. Muhammed al-Idrisi was very interested in different places. Whilst in his twenties he travelled to many parts of Europe including Portugal, the Pyrenees and even as far north as the English city of York. He finished his travels by visiting the city of Palermo on the Island of Sicily. Mohammed al-Idrisi met the King of Sicily, King Roger II and was invited to become a guest at King Roger II's court. He had a number of responsibilities while there



Muhammed al-Idrisi was a Geographer and was very interested in the study of Cartography. He had the opportunity to study the maps of Eratosthenes. Whilst there were no copies in Europe during the Dark Ages, there were copies in the Islamic Empire. King Roger II of Sicily gave Muhammed al-Idrisi the task of creating the most accurate map of the world that had ever been made. King Roger II was also a keen Geographer and Cartographer. Muhammed al-Idrisi based his map on the same rules of longitude and latitude that Eratosthenes had developed more than 1,000 years before him.

Muhammed al-Idrisi worked on the map for 15 years. He used information gathered by Muhammed al-Khwarizmi, who was the Chief Librarian of the House of Wisdom in Baghdad.. Muhammed al-Khwarizmi had a significant impact on Geography and Mathematics. Like Eratosthenes he studies many disciplines. He is credited with discovering both algebra and algorithms.

The map made by Muhammed al-Idrisi was made as a gift for King Roger II and was named the Tabula Rogeriana, which translates as 'The Map of Roger'. In Arabic the map is called the Nuzhat al-Mushtāq fi'khtirāq al-āfāq which translates as 'The book of pleasant journeys into faraway lands'

Complete the map:

### Label the cities and regions :

Central Asia – 39,06

China - 43,05

Middle East – 38,04

North Africa – 34,04

South Asia – 40,04

South-east Asia 43,02

Sub-Saharan Africa – 36,03

### Cities:

Alexandria – 36,05

Athens – 36,05

Baghdad – 37,05

Beijing – 43,06

Delhi – 40,05

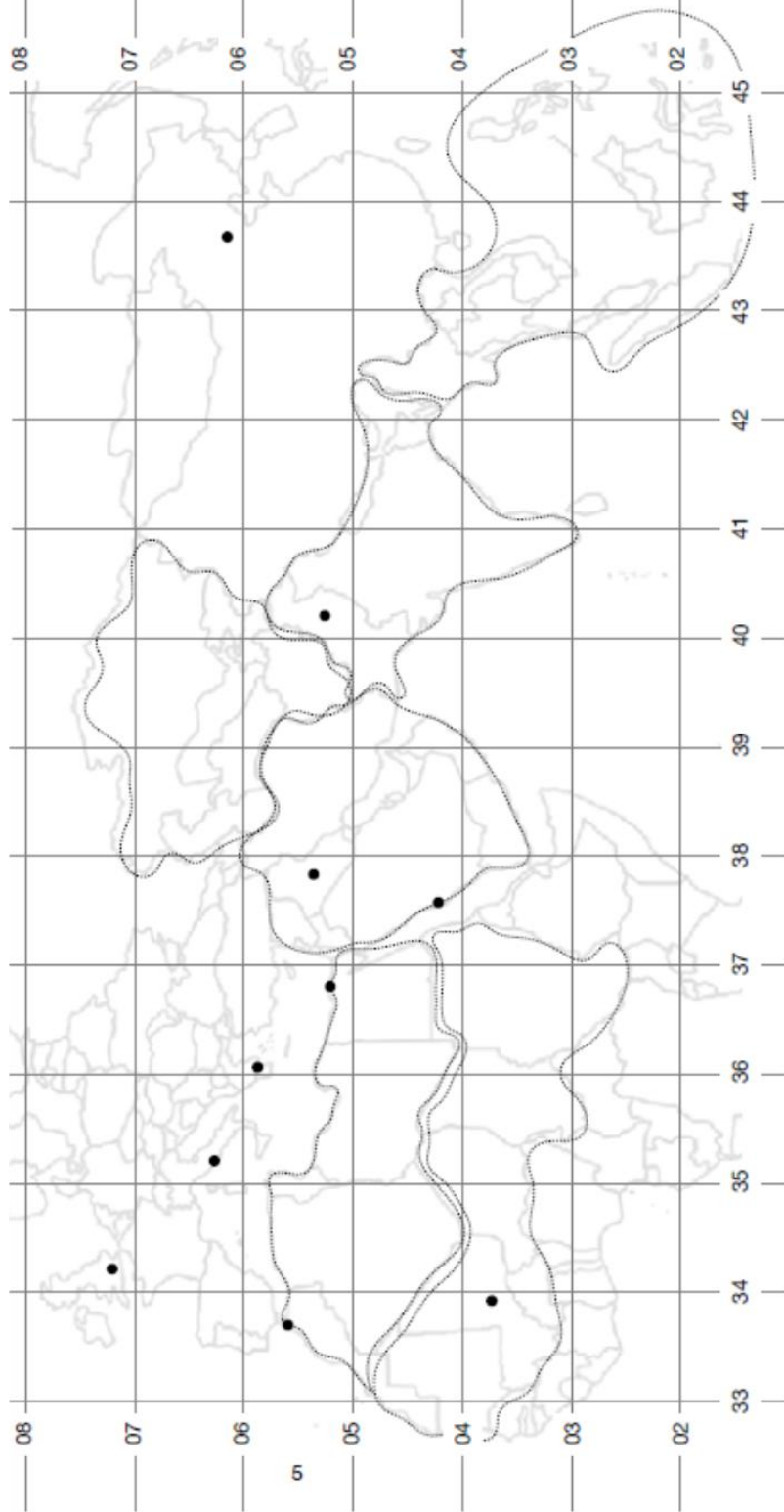
London – 34,07

Mecca – 37,04

Rome – 35,06

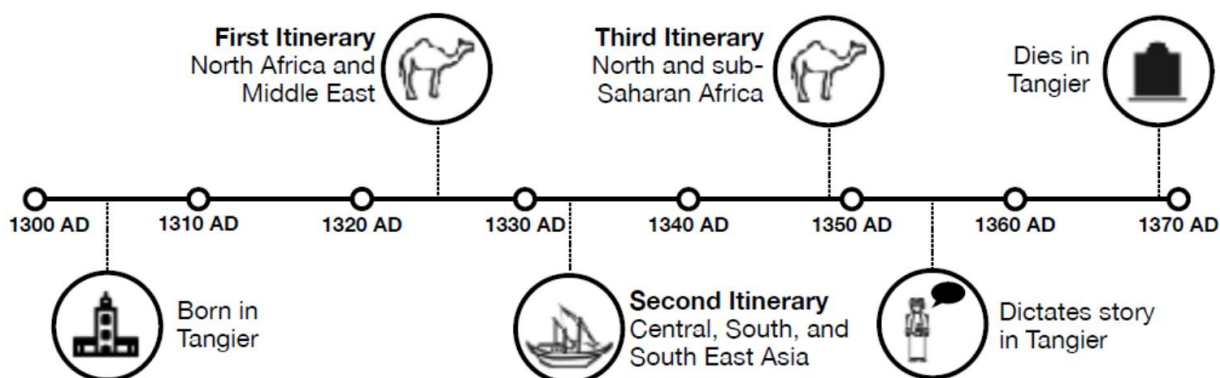
Tangier – 33,05

Timbuktu – 33,03



Like Muhammed al-Idrisi, Ibn Bauta was a Muslim and a North African from the modern country of Morocco. Ibn Battuta was an explorer and a scholar, for over 30 years Ibn Battuta travelled most of the Islamic world and many non-Islamic lands, including Central Asia, South-east Asia, South Asia, and China.

Near the end of his life, Ibn Battuta dictated the story of his life. The book is called Tuhfat an-Nuzzār fi Gharā ib al-Amsār wa Ajā'ib al-Asfār in Arabic which translates to 'A gift to those who contemplate the wonders of cities and the marvels of travelling'. At the time of his death, Ibn Battuta was likely the most well-travelled person in History. He would remain so for another 200 years until Ferdinand Magellan sailed all the way round the Earth, completing the first circumnavigation.

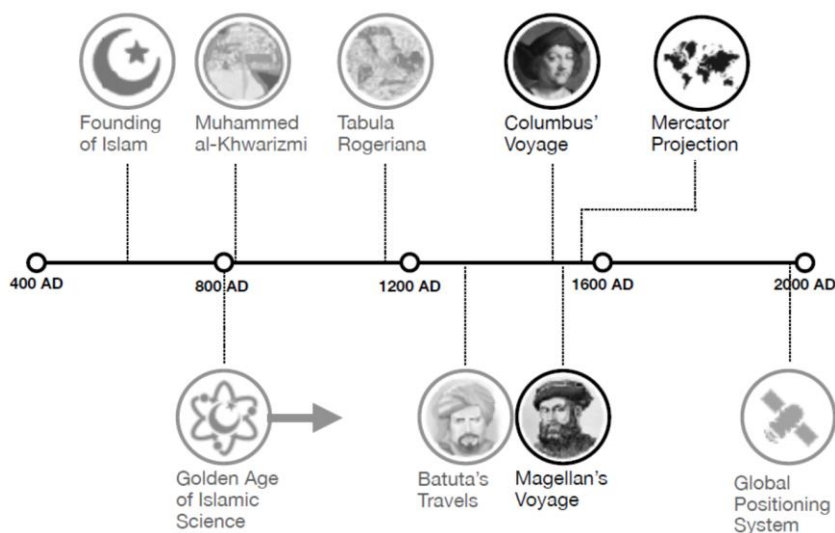


Match the heads and tails

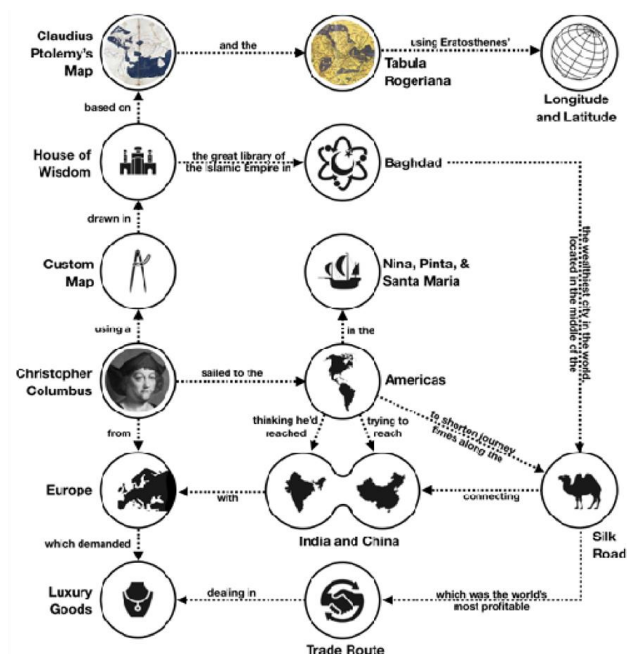
<b>Scholar</b>		She told him what to write
<b>Explorer</b>		She sailed all the way around the Earth
<b>Dictated</b>		They went somewhere no-one had been before
<b>Circumnavigation</b>		He read and studied harder than anyone

Which religion did Muhammed al-Idrisi and Ibn Battuta follow?		Who was the King of Sicily when Muhammed al-Idrisi lived in Palermo?		Which modern country were Mohammed al-Idrisi and Ibn Battuta born in?	
Which region are Mohammed al-Idrisi and Ibn Battuta from?		How did Ibn Battuta write his story?		What is a circumnavigation?	
What does it mean when something is dictated?		What is a scholar?		What does the word explorer mean?	

## Geographers mapped the world



## Columbus and Magellan



Which continent was Christopher Columbus from?		What were the names of the three boats that made the voyage?	
Which continent did Christopher Columbus sail to?		Christopher Columbus had a custom made map, where was it drawn?	
Which country did Christopher Columbus think he'd sailed to?		Which trade route was Christopher Columbus attempting to shorten?	
Which country was Christopher Columbus trying to sail to?		Which places did this trade connect?	

There had been peace across the Middle east, Central Asia, Southern Asia, and South-east Asia for hundreds of years when Columbus set sail. This peace made it possible for people from across Asia to trade with each other.

Silk from China and spices from India were sold to wealthy families in Europe. These trade routes connected people from across the world.

These trade routes were known as the Silk Road because traders bought Silk in China and transported it all the way to Europe for sale.

Trading along the Silk Road made many people very rich. Every city in the middle of a trade route becomes wealthier. The city of Baghdad was in the middle of the Silk Road and the richest city in the world.

The journey from China to Europe took two years along the Silk Roads. Christopher Columbus believed that it would be quicker to sail from Europe to China across the Atlantic.

## Columbus and the Silk Road



Columbus incorrectly thought that the distance he'd need to sail was around 3700km, this is because he believed that...



...each degree of latitude on the map was 56 Roman miles

Actually

Each degree was 56 Arabic miles, longer than Roman miles



...Claudius Ptolemy was correct and Asia covered half the Earth

Actually

Asia is smaller, and only covers one-third of the Earth



...Japan was larger, further East, and closer to the Equator

Actually

Japan is smaller, further North, and further West

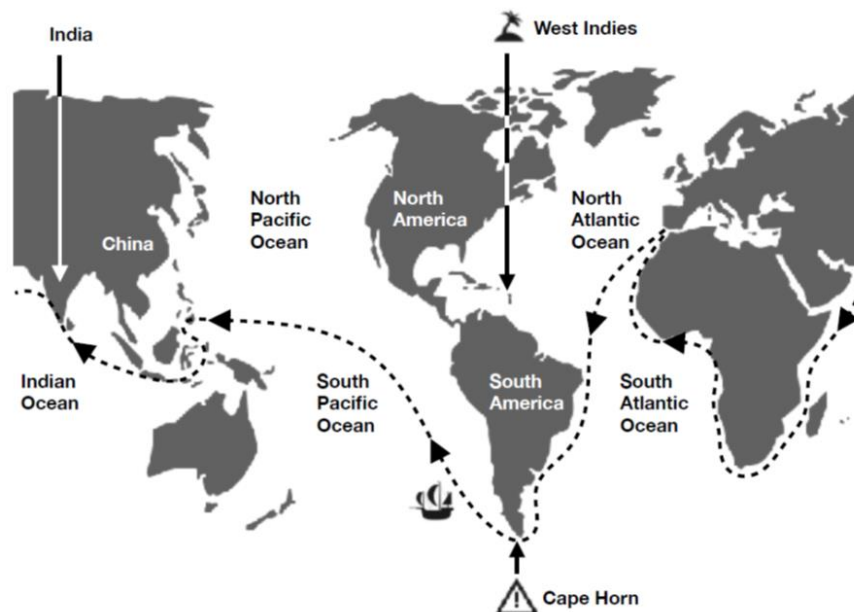


The distance was closer to 20,000km, without discovering America, Columbus and his crew would have starved to death before reaching China.



What was the name of the trade route connecting Europe to China and India?		How far did Columbus think he had to sail?	
How long did it take people to travel along the trade route?		How far did Columbus actually have to sail?	
What was the name of the city in the middle of the trade route?		Why wouldn't Columbus have survived sailing to China?	
Why was Columbus trying to sail to China?			

After Columbus returned, many more sailors set out to voyage to the New World. Columbus spent the remainder of his life arguing that he'd reached India. He was wrong, but we can still see the effect of his misunderstandings today. Columbus referred to the people he'd met as Indians, we still use this term to refer to the native people of North America today. Columbus named the islands he sailed to the 'West Indies' because he'd sailed west and thought he'd arrived in India. We still call these islands the West Indies today.

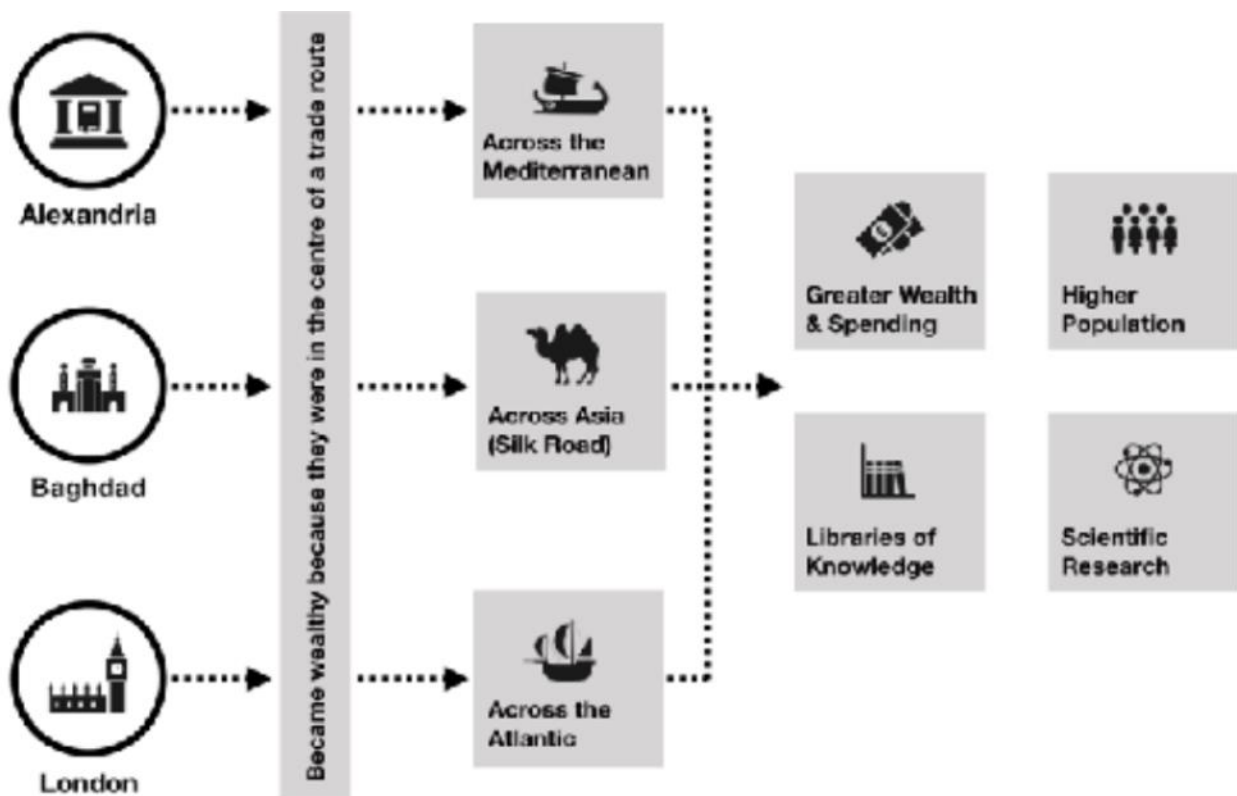


A Spanish Cartographer called Amerigo Vespucci argued with Columbus. He believed that the islands of the West Indies were part of a new separate and unexplored land. He named it America.

Ferdinand Magellan was the first person to sail to India by sea. His voyage was long and hard. Magellan was the first person to sail around the dangerous Cape Horn. This nearly destroyed the ship and killed everyone on board. When Magellan entered the calm ocean on the other side he named it the Pacifico, which means 'peaceful'. We still call it the Pacific Ocean today

Transatlantic
Cartography
Crossing
Enlightenment
Wealthier
Elliptical
Distorted

I love maps. I want to make them when I'm older
Slowly, we had more and more money
I travelled from one side of the Atlantic Ocean to the other
It's shaped like a rugby ball
The shape and appearance is all wrong
We know so much that we didn't know before
Getting there means we'll have to go over the mountains



## Why maps became more accurate

The discovery of the New World led to improvements in cartography. These made it safer and more comfortable to sail across the Atlantic Ocean. Travelling from one side of the Atlantic Ocean to the other is known as a transatlantic crossing.

The transatlantic trade contributed to the golden age of science in Europe. This era was known as the Age of Enlightenment. The maps made during the Age of Enlightenment were better than those that had been made before. Transatlantic crossings needed more accurate maps.

As we have learned, every city in the middle of a trade route becomes wealthier. London and other European cities became the centre of the new transatlantic trade and became much wealthier.

As the cities became wealthier, more money was spent on libraries and on scientific research, this led to an improvement in cartography. The Age of Enlightenment led to the Mercator Projection, just like the Great Library of Alexandria led Eratosthenes to latitude and longitude.

No map is perfect. Every map has problems. The problem is that maps are flat, and the Earth is elliptical. It is impossible to show an ellipsis on a flat sheet of paper perfectly. Cartographers have to choose which they want to show accurately, the location, shape, or size. Whichever one they choose, the other two are distorted.

What happens to cities in the middle of trade routes?	
What word do we use to describe the golden age of science in Europe?	
What crossings meant that maps needed to be more accurate?	
What shape is the Earth?	
What 3 things do cartographers have to choose between?	

## Different map projections – Mercator

The map designed by Geraldus Mercator is called the Mercator Projection, it is the most famous map projection in the world. The Mercator Projection shows location accurately but distorts size and shape.

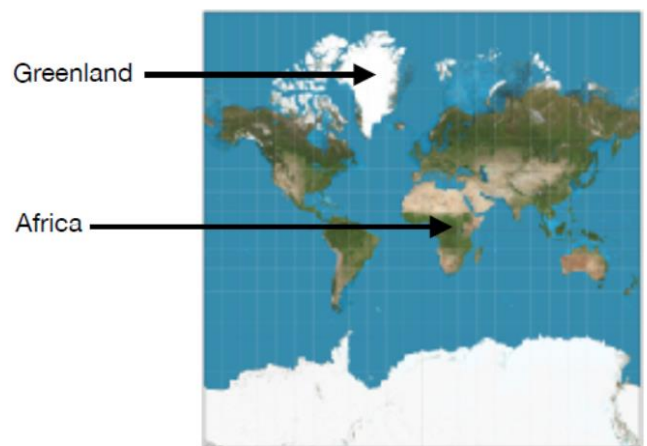
The Mercator Projection is especially useful for sailing. Geraldus Mercator designed it for ships making the transatlantic crossing.

The country of Greenland is smaller than the 54 countries in the continent of Africa. The area of Greenland is 2 million km<sup>2</sup>. The area of Africa is 30 million km<sup>2</sup>. Africa is 14 times larger than Greenland. However, on the Mercator map Greenland looks larger.

The fact that Greenland looks larger on A Mercator Projection has led to many people having misunderstandings about the size of Africa. Many people believe that Africa is smaller than it is.

The Mercator Projection is the most famous map projection in the world, so it is the most commonly used. To help challenge the misunderstandings about the size of countries James Gall and Arno Peters created the Gall-Peters Projection

**The Mercator Projection**



The country of **Greenland**, an island in the Northern Hemisphere near the **Arctic**



The continent of **Africa**, an island of 54 countries around the **Equator**

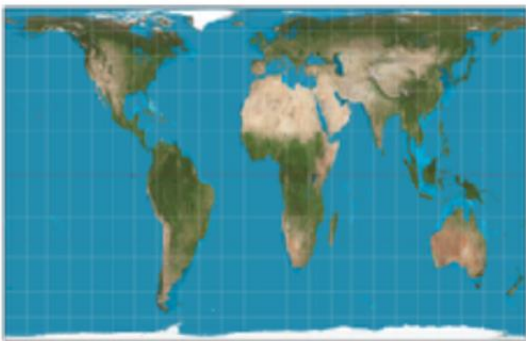
Which of the three options does the Mercator Projection show accurately?		Will the Mercator Projection make Greenland look relatively large?	
Who would find the Mercator Projection useful?		Will the Mercator Projection make the continent of Africa look relatively smaller?	
Does distortion increase with distance from the equator on Mercator Projections?		Measure the length of Greenland and Africa on the Mercator Projection, which is projected as longer?	

## Different map projections – Gall-Peters and Robinson

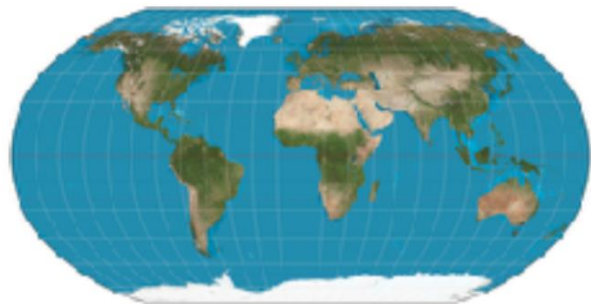
Although the Gall-Peters projection shows the size of countries correctly, it distorts the shape and location of countries.

Cartographers have continued to try and create maps which project the Earth accurately on a global scale. The Robinson projection is an example of a compromise map. The Robinson projection doesn't show shape, size, or location accurately. By not showing any one of the three factors accurately, it reduces the distortion of the other two. The Robinson Map only distorts each of the three factors a little, so it can be considered reasonably accurate.

**The Gall-Peter's Projection**



**The Robinson Projection**



**The Watermann-Butterfly Projection**



Which projection do YOU think is the best? .....

Why? .....

.....

## Check so far:

What is the name of the most famous map projection?		Which sea was named for being in the middle of the land?	
What does the most famous map projection show accurately?		Which Ocean was named for being peaceful?	
What does the most famous map projection distort?		Who made the first circumnavigation of the Earth?	
Which country does Mercator show as being larger than Africa?		Which city was home to the Great Library and Eratosthenes?	
Which trade route was Christopher Columbus trying to cut short?		Which city was home to the House of Wisdom?	
Which country did Columbus think he'd sailed to?		If someone makes a transatlantic crossing which ocean have they crossed?	
Which country was Columbus trying to sail to?		If someone makes a transpacific crossing which ocean have they crossed?	
What is the name of the most famous map projection?		Which sea was named for being in the middle of the land?	

## Geographers use statistics and other data



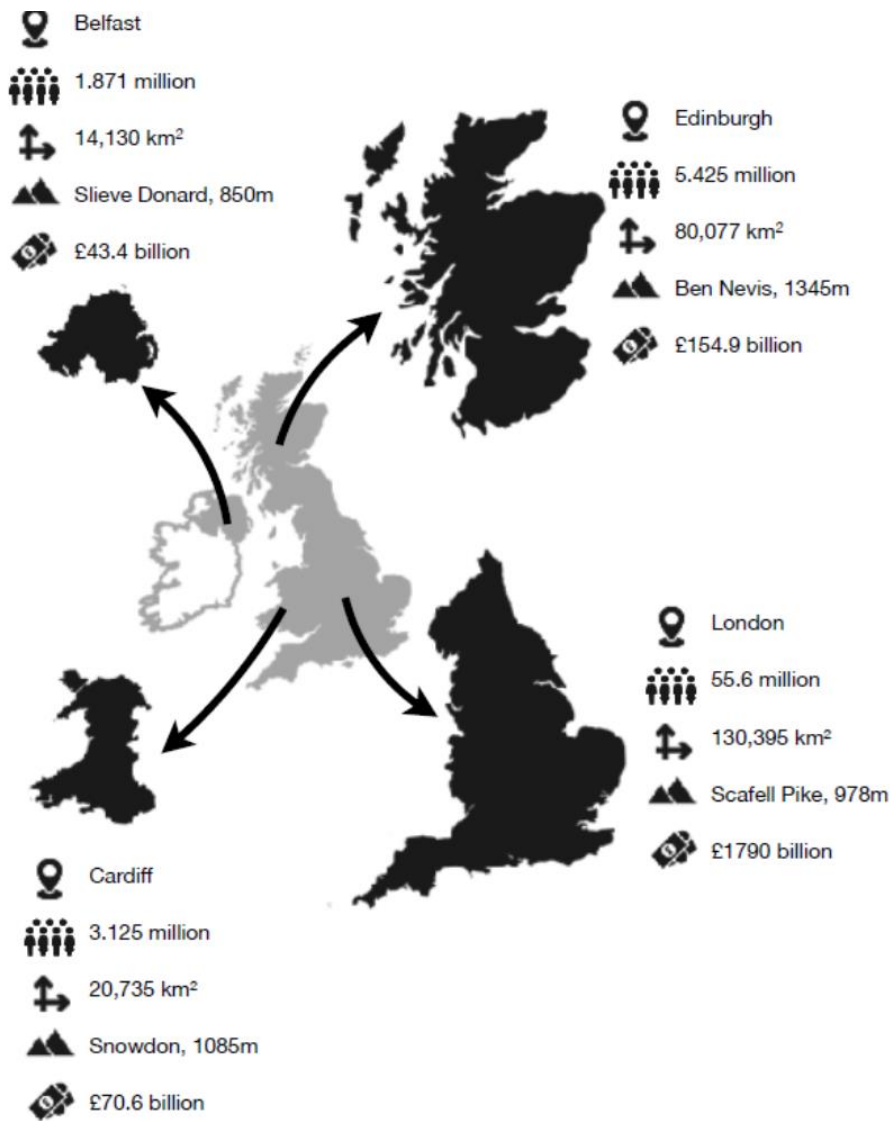
### The United Kingdom

The four countries of England, Northern Ireland, Scotland, and Wales make up the United Kingdom of Great Britain and Northern Ireland.



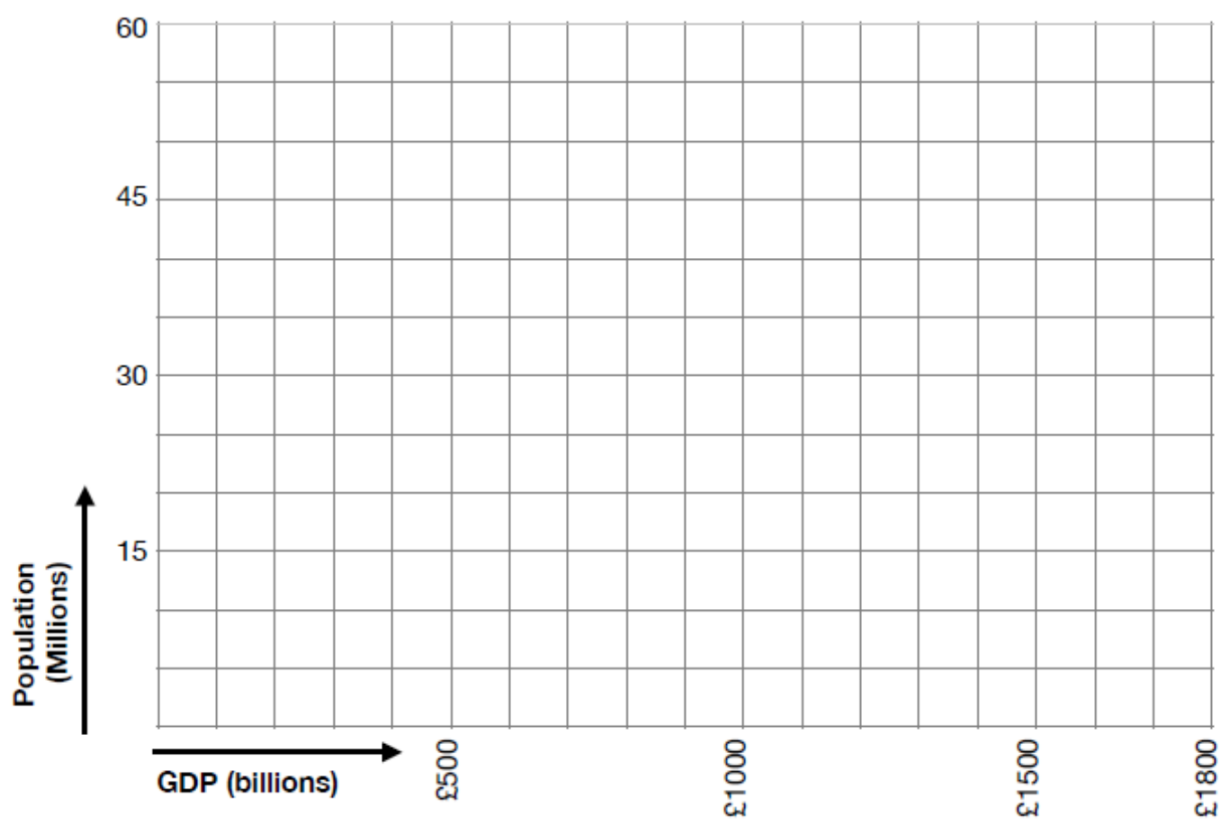
### Gross Domestic Product

One of the ways to measuring the wealth of a country is by calculating the gross domestic product. The gross domestic product is the total of all the things that are sold, and all of the work that is done, in a country, in a single year.



What is the name of the capital of Scotland?		Which country has the largest area?	
Which country is Belfast the capital of?		Which country has the highest mountain?	
Which country is Snowdon in?		Which country has the highest gross domestic product?	
What's the name of the highest mountain in Northern Ireland?		Which country has the smallest population?	

Rank the 4 countries of the United Kingdom in order of gross domestic product	1st	2nd	3rd	4th
Rank the 4 countries of the United Kingdom in order of size of population				



## What other jobs do Geographers do?

Look through the job packs and choose 4 careers that interest you. Fill in the job profiles

Job title:	
Description of tasks/duties	
Education/Experience required	
How Geography important to this role?	

Job title:	
Description of tasks/duties	
Education/Experience required	
How Geography important to this role?	

Job title:	
Description of tasks/duties	
Education/Experience required	
How Geography important to this role?	

Job title:	
Description of tasks/duties	
Education/Experience required	
How Geography important to this role?	

**Time to reflect:**

What do you want to do when you leave school and how is Geography useful to it?

.....

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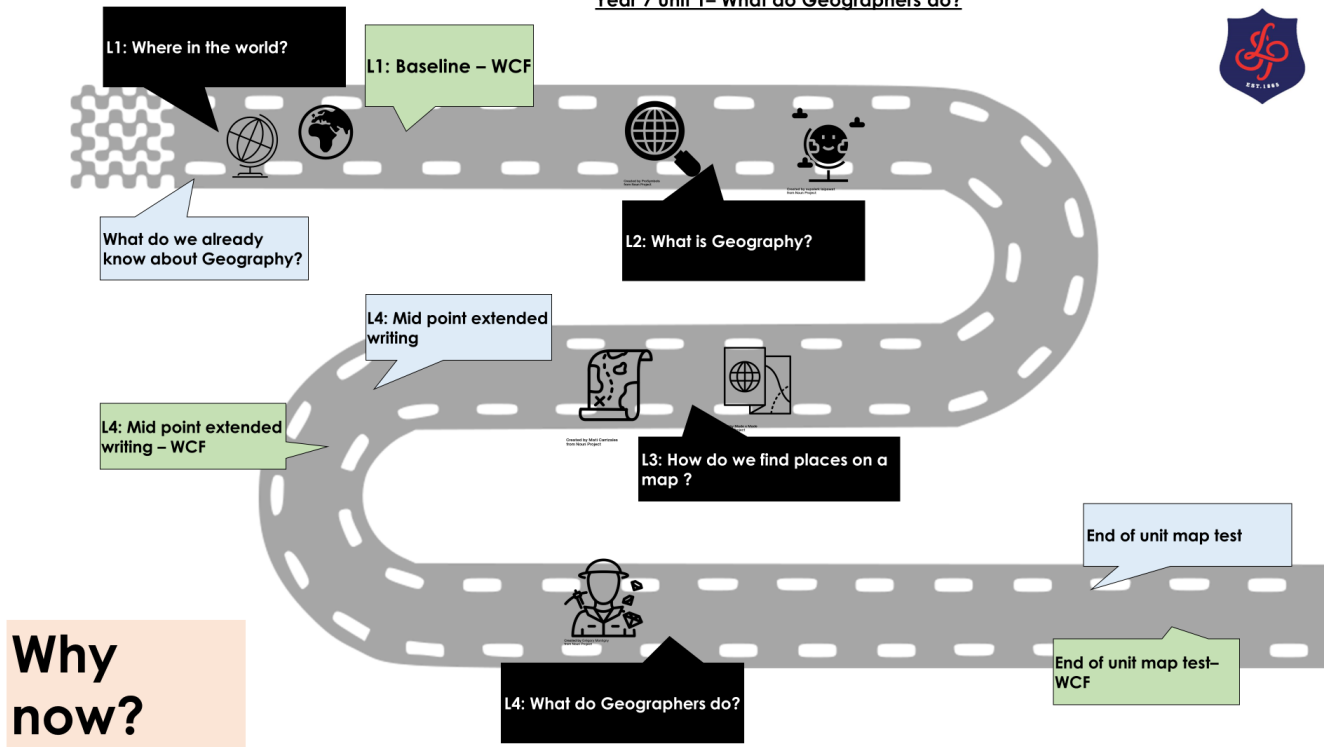
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What have you learned about Geography? Top 3 pieces of information	
Why were you studying this topic? Why is it important?	
Out of the 4 lessons in the journey above, which lesson did you learn the most from?	
What is the 1 key message/ fact that you will remember from this topic?	
When we teach this unit again next year, what else do you think we should teach about? What was missing from this unit?	