

## Key Vocabulary...

Compass Directions	Can be 4, 8 or 16-point. The most basic form being North, East, South and West.
Contour Line	A line on a map joining points of equal height above or below sea level.
Distance	The length of the space between two points, usually measured in metres, kilometres or miles.
Four Figure Grid References	A four figure grid reference points you towards a particular square on a map. On all OS maps these squares represent one square kilometre.
Six Figure Grid References	Six figure grid references allow you to be more accurate with a location than a 4 figure grid reference. Harder to get the hang of, but an essential tool for geographers
The Ordnance Survey	A government agency that are responsible for mapping. They create a number of maps at different scales used originally by the armed forces, and then as accurate maps of the whole country, as well as overseas. Often referred to as OS Maps.
Location	A particular place or position.
Map	A diagrammatic representation of an area of land or sea showing physical features, cities, roads, etc.

Symbols are useful for lots of reasons including, space saving on a map, multi-lingual (all languages can understand them), saves time, clear.

### TOURIST INFORMATION

	Camp site
	Caravan site
	Garden
	Golf course or links
	Information centre, all year / seasonal
	Nature reserve
	Parking, Park and ride, all year / seasonal
	Picnic site
	Selected places of tourist interest
	Telephone, public / motoring organisation
	Viewpoint
	Visitor centre
	Walks / Trails
	Youth hostel

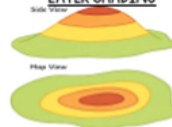
### COMPASS POINTS



### HEIGHT AND RELIEF

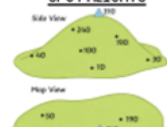
**RELIEF** the difference between the highest and lowest heights of an area.  
**TOPOGRAPHY** the surface features of the earth like hills, mountains, valleys etc.

#### LAYER SHADING



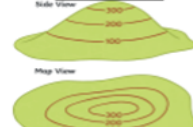
Areas of different heights are shown using different colours. A key is used to show how high the land is.

#### SPOT HEIGHTS



The exact height of a place above the ground is measured and written onto a map.

#### CONTOUR LINES



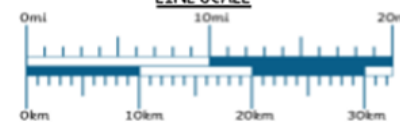
Contour lines are lines on a map which join up places of the same height. Everywhere along a contour line is the same height.

**Homework Project:** Design and build an Island. Your task is to design and create your own model Island. You can create this from anything you like - rubbish, lego, clay, foam, sponges, cardboard - Whatever you have at hand. **Assessment Criteria** - You need to include : Grid References, Scale, Compass Star, Map Symbols and a Key. The best will be displayed in the Humanities Department and featured on Twitter.

## SCALE AND DISTANCE

OS maps have a scale. On some smaller maps, 1cm on the map equals 250m in real life. On some larger maps, 1cm on the map equals 500m. Different maps might have different scales, so check on your map to find its scale.

### LINE SCALE



Using a line scale on a map is as easy as using a ruler. The important thing to remember is that a line scale shows measurements in km and the measurements on a ruler are in cm.

### WORD SCALE

One centimeter on the map represents 3 kilometers on the ground. (1cm = 3 km)

Using the scale above, if we measure the distance on a map between two places with our ruler. The measurement is 4cm. We then have to multiply that measurement by 3 to calculate that the real distance between the two places is 12km.

## 4 FIGURE GRID REFERENCES

Along the edges of each map there are numbers. These numbers help you work out where a location is on a map. Northings are numbers that go from bottom to top, Eastings go from left to right.



The first two numbers give the eastings.

32 26

The second two numbers give the northings.

Remember... eastings then northings!

Along the corridor and up the stairs!

## 6 FIGURE GRID REFERENCES

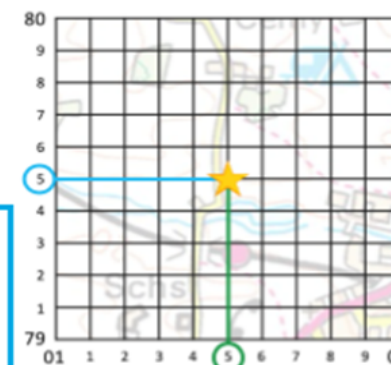
We can use six-figure grid references to find an exact location within a grid square, so they are much more accurate. The grid square is divided into tenths.

**Example:**

015 795

The first three numbers give the easting which includes the number of tenths.

The last three numbers give the northing which includes the number of tenths.



## WHERE IS THE UK?



The United Kingdom (UK) is an Island country located in the continent of Europe, it is made up of four countries: England, Scotland, Northern Ireland and Wales.

## THE UK



## ATLAS SKILLS

There are generally three main types of maps shown in an atlas:



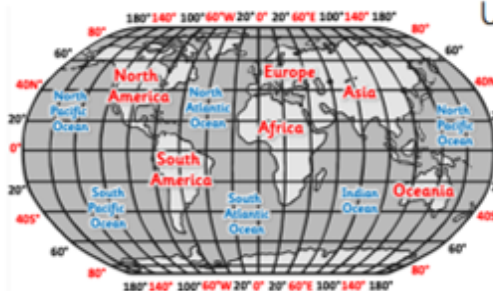
**PHYSICAL MAPS** these show topography/relief (the shape of the land) and other physical features such as rivers and lakes:

**POLITICAL MAPS** these show country borders, cities, transport links etc.

**THEMATIC MAPS** these show information such as climate data, agriculture types etc.

## LONGITUDE AND LATITUDE

Unlike grid lines where we go along the corridor and the stairs, here we go **UP** and **ACROSS**



### LATITUDE

Flat lines. Flat-itudel!

### LONGITUDE

Long lines – up and down

1. What are the 3 ways we can show height on a map?
2. How can we measure distance on a map?
3. Give two reasons why we use map symbols?

Name the map symbol.



PO



Sch



## Questions

Why do we use 6 figure grid references instead of 4?

What careers do map skills help with?

Challenge- Using the template you have been given create your own 2D map with 10 questions your partner has to answer testing their map skills.



## Key Vocabulary...

<b>Borough</b>	a town or district
<b>Contrast</b>	2 things that are different to each other e.g. a town and the countryside
<b>Diverse</b>	showing a great deal of variety or differences
<b>Census</b>	An official count of the population. The most recent Census occurred in 2021.
<b>Demographic</b>	relating to the structure of populations.
<b>Issue</b>	An important topic or problem for debate or discussion.
<b>Population</b>	The number of people who live in a place.

### Population of Atherton:

Year	2001	2011	2020
Population	65,950	70,542	73,596

The population density is approximately 4542 per km.

### History of Atherton

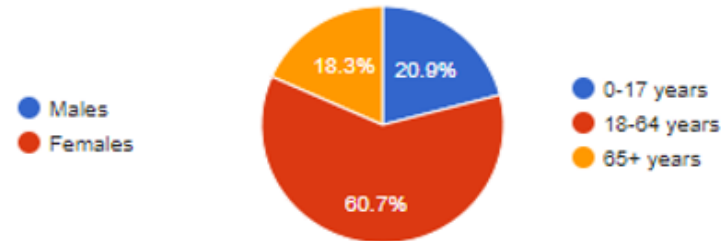
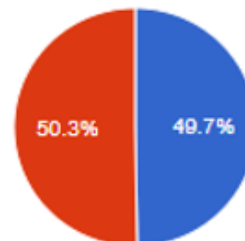
Atherton was a settlement called Chowbent from the 13<sup>th</sup> century. Atherton gets its name from the Atherton Family built the local manor and owned much of the local land from 1415. Atherton's main industries since the 14<sup>th</sup> century have been coal mining, nail and bolt production and cotton mills. The last mine closed in Atherton in 1966 and the last cotton mill closed in 1999. Today a lot of the jobs in Atherton are retail.



This is a picture showing the Laburnum cotton mill in Atherton 1929

## Location of Atherton

Atherton is located in Wigan, Greater Manchester, Northwest England, UK, Europe.



Demographics of Atherton's Population

### How are we connected to Greater Manchester

In Atherton we are connected to Greater Manchester through a range of public transport such as trains, buses and cycle routes. We visit other places in Greater Manchester for lots of reasons including: shopping, to see friends and family, for education, jobs, restaurants, cinema etc.



## Location of Brixton



Brixton is an area in Lambeth, south London. London is the capital city of England located in the south east of the country.

## Tasks...

1. Describe the location of Atherton. Come up with a way to remember this!
2. Think about the times you have travelled across Greater Manchester. Where were you going? Why were you going? How did you get there?
3. Imagine you lived in Atherton 100 years ago. Where do you work? What is your life like?
4. Why is it good to have a diverse population?
5. Look at the image of Brixton, how is this high street different to Atherton's?
6. Compare the population demographics of Atherton and Brixton. Which is the most diverse? What evidence backs this up?
7. Why is it important as a geographer to understand the place you are from?

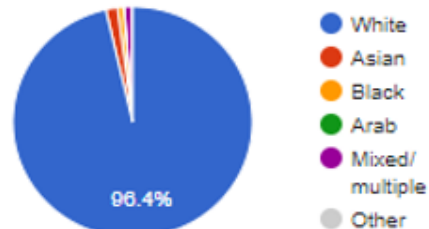
Do you research..... Research another place in the UK. Where is it located? How is it similar or different to Atherton, Greater Manchester and/ or Brixton.



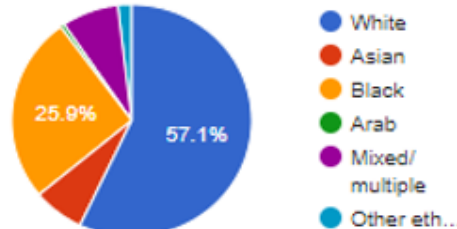
## History of Brixton

Brixton is mainly residential with a prominent street market and retail sector. It is a multi-ethnic community, with a large percentage of its population of black people because of the Windrush era (migration from the Caribbean to the UK in 1948).

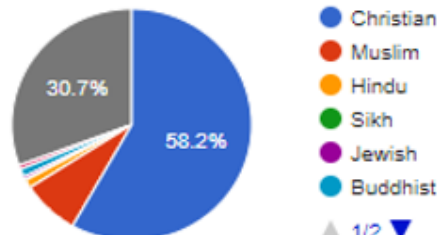
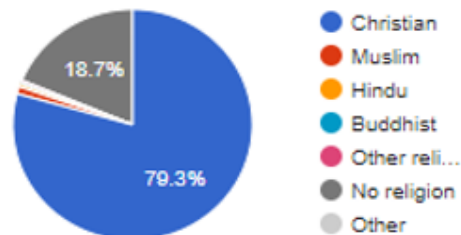
## Compare the diversity of Atherton and Brixton



Atherton



Brixton



## Prepare for your extended write

Question: 'Compare and contrast Atherton to another area in the UK you have studied'

1. BUG the question by boxing the command word and underlining the content you need to write about.
2. List the key vocabulary you will use.
3. Create a plan of what you would write in each paragraph.
4. Practice writing your answer from memory.

## Homework Activity...

You need to create a booklet, poster or video to inform people on your local area.

You need to include lots of key pieces of information -Location, size, population, climate, major towns/cities close by, culture, food, landmarks as well as loads of interesting facts about the area.







## Key Vocabulary...

<b>Urbanisation</b>	Urbanisation is the increase in the proportion of people living in towns and cities.
<b>Migration</b>	The movement of humans from one place to another. This can be locally or globally
<b>Refugee</b>	Refugees are people who must leave their home area for their own safety or survival.
<b>Slum</b>	Slums refer to informal settlements in urban areas that are densely populated
<b>Sustainable</b>	Sustainable means that a process or state can be maintained/stays the same or at a certain level for as long as is wanted.
<b>Future generations</b>	Future generations are the generations of people to come in the future, after the currently living generations of humans.

## Where shall we go?

Industrialisation in the 1800's in Britain caused cities to grow because, factories began to be built and needed workers. People then wanted to live close to their work place and this caused cities and towns to grow rapidly. Liverpool and Manchester were two of these cities.

## Key concepts...




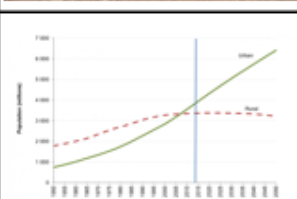
<b>Urban area</b>		An urban area is a city or town. Urban areas are very developed, meaning there is a density of human structures such as houses, commercial buildings, roads, bridges, and railways.
<b>Rural area</b>		A rural area is an open swath of land that has few homes or other buildings, and not very many people. A rural areas population density is very low. Usually the countryside.
<b>Push factor</b>		Push factors are those that force the individual to move voluntarily, and in many cases, they are forced because the individual risk something if they stay. Push factors may include conflict, drought, famine, or extreme religious activity.
<b>Pull factor</b>		Pull factors are those factors in the destination country that attract the individual or group to leave their home.

## Into the future...

By 2050 the world's population is expected to reach 9.8 billion. Nearly 70 percent of this booming population, (6.7 billion people) are projected to live in urban areas. National geography state there are 10 key ideas to think about to keep our growing population sustainable for future generations.



## Picture this...

<b>Dhavari-Slum in Mumbai, India</b>	
<b>Wealth Inequality - Rio De Janeiro, Brazil</b>	
<b>Refugee camp, Syria</b>	
<b>Graph Showing urban population</b>	

## Deeper Learning...

Counter urbanisation is when large numbers of people move from urban areas into surrounding countryside or rural areas.

Rural to urban migration is the movement of people from the countryside to towns and cities.

## Dharavi Fact File



1. Dharavi has an annual economy of over USD 650 million.
2. It has a population of around 600,000 people
3. 60% of the families have lived there for 60 years.
4. In the 18th century Dharavi was an island
5. Many businesses in Dharavi generate million-dollar incomes.
6. Products made in Dharavi are sourced and sold globally (NY, Europe, SE Asia etc.).
7. Dharavi is a major tourism location in Mumbai and a big chunk of junior film artists come from Dharavi.

A problem of rapid **rural to urban migration** is the development of **squatter settlements**. In **Mumbai** the squatter settlement of **Dharavi** is now home to over 1 million people. Dharavi lies between two railway lines and is one of the biggest squatter settlements in the world. The squatter settlement is unplanned and has the following characteristics:

- Overcrowded and noisy.
- Houses are made from cardboard, wood, corrugated iron, plastic sheeting and metal from oil drums.
- Lack of sanitation, clean drinking water and open sewers
- Pollution and disease are common.
- Thousands of workshops and people employed in the **informal job sector**.

## RAGP Tasks...

List two different pull factors.

List two different push factors.

Describe the industrial revolution and explain how it led to the development of cities.

How will urbanization impact the environment?

Explain what life would be like to grow up in a slum.

Explain what challenges governments will have in the future with populations rising.

How has Masdar City created a sustainable city?

What challenges exist within a slum like Dharavi?

## Prepare for your extended write...

**Question:** Evaluate the **reasons** why you would/would not want to live in a slum.

1. BUG the question by boxing the command word and underlining the content you need to write about.
2. List the key vocabulary you will use.
3. Create a plan of what you would write in each paragraph.
4. Practice writing your answer from memory.

## Homework Task...

Design your own sustainable city of the future. Draw and label the features of your 2D or 3D model and explain how it will help keep the people and environment safe for future generations.

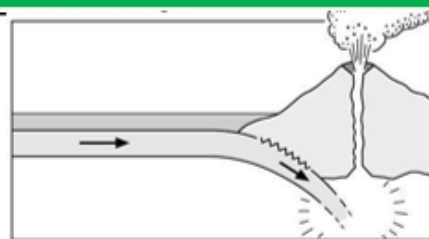


## Key Vocabulary...

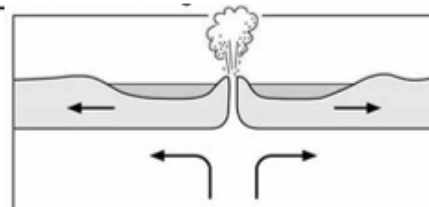
<b>Natural hazard</b>	Natural hazards are extreme natural events that can cause loss of life, extreme damage to property and disrupt human activities.
<b>Earthquake</b>	An earthquake is the shaking and vibration of the Earth's crust due to movement of the Earth's plates
<b>Volcano</b>	A <b>volcano</b> is an opening in Earth's crust that allows molten rock from beneath the crust to reach the surface
<b>Impacts</b>	How the natural hazards effects people, the economy or the environment
<b>Three Ps</b>	Prediction, protection and preparation
<b>Aid</b>	Aid is assistance given from one country to another.

## Key plates...

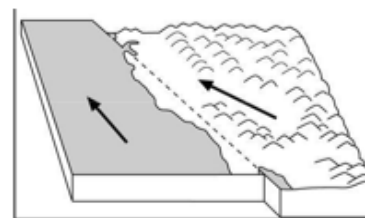
**Destructive plate margin**- two plates moving towards each other



**Constructive plate margin**- two plates moving away from each other



**Conservative plate margin**- two plates sliding past each other



## Deeper Learning...

As we know earthquakes are very difficult to predict. How can we make it safe for all countries and not just HICs during an earthquake.

## The BIG questions..

Explain how aid can be a huge help to LICs after a tectonic hazard.

## The eruption of Vesuvius on 24th and 25th August 79 AD

## Picture this...



The eruption caught the local population of Pompeii and Herculaneum utterly unprepared. Although at the same time, as we now know in retrospect, all the tell-tale signs were there to warn them.

It was the first time Mount Vesuvius had erupted for 1,800 years.

The pyroclastic flow (molten and ash) moved down the mountain as fast as 450 miles per hour and was hot as 999°C.

Mount Vesuvius is thought to be one of the most dangerous volcanoes in the world and is the only active volcano on the mainland of Europe.

Mount Vesuvius erupted most recently in 1944, but it wasn't as powerful as in 79AD. It has a history of having a catastrophic eruption every 2,000 years or so... and it is almost 2,000 years since 79AD...

## A long time ago...



**Continental drift** describes one of the earliest ways geologists thought continents moved over time. This map displays an early "supercontinent," Pangea, which eventually moved to form the continents we know today.

### Case study: earthquake

Haiti lies right on the **boundary** of the Caribbean and North American plates. There was slippage along a **conservative plate boundary** that runs through Haiti. On 12 January 2010, a magnitude 7 earthquake hit Haiti at 16:53 local time. The earthquake's **epicenter** was 25 km west of Port-au-Prince, the capital.

### Social impacts of the earthquake (effects on people)

- 3 million people affected.
- Over 220,000 deaths.
- 300,000 injured.
- 1.3 million made homeless.
- Several hospitals collapsed.

### Economic impacts of the earthquake (effects on money and jobs)

- 30,000 commercial buildings collapsed.
- Businesses destroyed.
- Damage to the main clothing industry.
- Airport and port damaged.



### Response to the earthquake

Haiti is a very poor country without the money and **resources** to redevelop. Because there were few **earthquake-resistant buildings**, the devastation was massive. Many buildings simply collapsed or were damaged beyond repair.

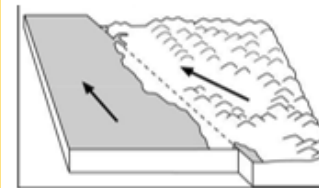
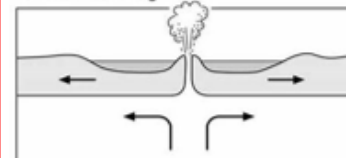
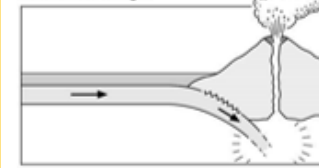
### Primary responses

- Neighbouring Dominican Republic provided **emergency water** and **medical supplies** as well as heavy machinery to help with search and rescue underneath the rubble, but most people were left to dig through the rubble by hand.
- Emergency **rescue teams** arrived from a number of countries, eg Iceland.
- **GIS** was used to provide satellite images and maps of the area, to assist aid organisations.

### Secondary responses

- Money was pledged by organisations and governments to assist in rebuilding, but only slow progress had been made after one year.
- After one year, there were still 1,300 camps.
- Small farmers are being supported - so crops can be grown.
- Schools are being rebuilt.

Using the diagrams below describe the movements of the plates and explain the hazard this could create, use labels in your answer.



### Questions

1. How do countries respond to a tectonic hazard?
2. Explain the economic factors of a tectonic hazard?
3. Explain why it is important to plan for a tectonic hazard and give examples of planning methods.

Challenge: Compare and contrast the social and environmental impacts of a tectonic hazard in an LIC and HIC.