

Year 8 Geography Knowledge Organiser 1



<p>1. Spell it</p> <p>Prepare for a spelling test of key words. Your teacher will misspell the words and you have to try to correct them.</p>	<p>2. Quiz it</p> <p>Prepare for a quiz in your next lesson – all of the answers to the test are in the knowledge organiser.</p>	<p>3. Sort it</p> <p>Organise the information somehow e.g. sort it into physical or human geography, or cause and effect.</p>
<p>4. Challenge somebody</p> <p>Use the knowledge organiser to make a quiz or test for a classmate (e.g. a word jumble).</p>	<p>5. Ask for help</p> <p>Underline any words or terms you don't know or understand in the knowledge organiser – ask a teacher at school or someone at home.</p>	<p>6. Investigate it</p> <p>Find out more about something in the knowledge organiser that your teacher has asked you to investigate.</p>
<p>7. Think and draw</p> <p>Create something visual to help you learn the information. For example, a mind map, spider or flow diagram.</p>	<p>8. Improve it</p> <p>Add extra ideas, facts, and details to the knowledge organiser. Be ready to share it with the rest of the class.</p>	<p>9. Use it</p> <p>Use the information in your knowledge organisers to help answer a question your teacher has given you.</p>

Revision Guide

Year 8 Geography

Topic: Asia

<i>What will you study?</i>	<i>How is it linked to other topics you will study?</i>	<i>How is it linked to what you will study in GCSE Geography ... and beyond?</i>
A range of physical, human and environmental geography based with a focus on Russia, India, China and the Middle East region	You will study large scale ecosystems (biomes) in year 9 You will study cold environments and deserts this year.	At GCSE you will study ecosystems of the planet and people of the planet topics.

Knowledge box

1) There are 48 countries in Asia that are recognised by the United Nations	9) The biggest lake in Asia is called the Caspian Sea. The coastline of the Caspian Sea is shared by five countries: Russia, Turkmenistan, Kazakhstan, Azerbaijan and Iran.
2) More than 4.4 billion people live on the continent of Asia, thus making it the most populous continent.	10) The Gobi desert is the largest desert in Asia, and the fifth largest desert in the world. This is a cold desert where the temperatures can be very low and sometimes even snow can occur.
3) The largest country in Asia by landmass is Russia - even though roughly 40% of the country is on the European continent.	11) The Middle East region is in western Asia – it contains 18 countries including Iran, Turkey and Saudi Arabia.
4) China is the largest country in Asia and the world by population.	12) The largest cities in the Middle East are Tehran, Istanbul, Baghdad, Riyadh, Jeddah and Ankara.
5) The largest city in Asia is Shanghai in China. With more than 24 million inhabitants Shanghai is also the largest city in the world by population (Tokyo has the largest metropolitan area).	13) Russia is the largest country in the world and has a population of around 143 million people
6. The smallest country in Asia is the Maldives, and the largest is Borneo.	14) The name 'India' is derived from the river Indus.
7. The longest river in Asia is the Yangtze River in China. At 3,915 miles long, it is the third longest river in the world after the Amazon and the Nile.	15) India is the 2nd most populous country in the world, after China. India has a total area of 3,287,263 sq km.
8. The highest mountain in Asia is Mount Everest (8,849 metres). Everest is located in the Himalayan mountain range. The Himalayas (between Nepal and China) are the world's highest mountains.	16) 1.4 billion people live in China. Beijing, with 21.7 million inhabitants, is China's capital city.

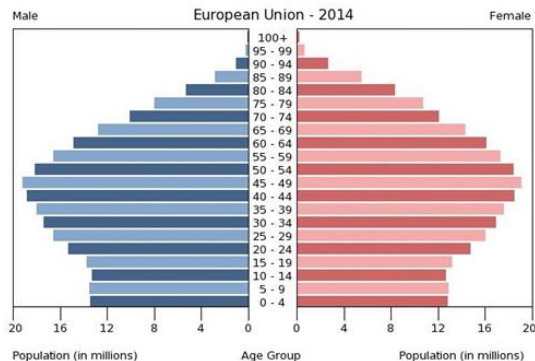
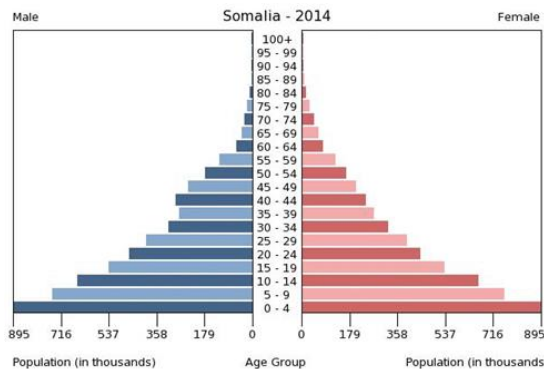


Topic: Population

Year 8 Geography

What will you study?	How is it linked to other topics you will study?	How is it linked to what you will study in GCSE Geography?
You will study how and why the global population has changed over time. Different countries have different population structures, and some countries face challenges of having ageing populations. You will also examine the population-resource debate.	You will study population issues in Asia at the start of Year 8. Later this year you will study migration and settlement. Population is linked to environmental issues you will study in Year 9.	Population is an important topic in GCSE Geography: 'People of the UK' (Paper 1) & 'People of the World' (Paper 2)

Knowledge box



1. People are unevenly distributed (spread out) around the world (including in the UK).	8. Population structure means the 'make up' or composition of a population – how it is divided up between males and females of different age groups.
2. The current global population is around 7.7 billion people.	9 Population structure is usually shown using a population pyramid.
3. Population density = total population ÷ total land area in km ²	10. The fertility rate is the average number of babies born per woman.
4. Births - usually measured using the birth rate (number of live births per 1,000 of the population per year).	11. Life expectancy is the average age a person can expect to live in a place or country.
5. Deaths - usually measured using the death rate (number of deaths per 1,000 of the population per year).	12. Developing countries tend to have a high number of young people, whilst many advanced countries have an ageing population.
6. The difference between the birth rate and the death rate of a country or place is called the natural increase. Natural Increase is calculated by subtracting the death rate from the birth rate.	13. Countries such as Japan and Italy have rising life expectancy and very low birth rates, leading to an ageing population structure.
7. A few countries (with very low birth rates) are experiencing a natural decrease in population – this includes Italy, Japan and Russia.	14. There are 2 major contributors to the idea of the balance between population and resources: pessimistic (doom and gloom) of Thomas Malthus and the optimism (the glass is half full!) attitudes of Esther Boserup.

Topic: Cold Environments

Year 8 Geography

What will you study?	How is it linked to other topics you will study?	How is it linked to what you will study in GCSE Geography?
You will study glaciers and ice sheets – how they form and how they work to shape the landscape. You will learn about ice ages and how they affected the UK, including the features they left behind.	Some of the processes you will study (e.g. abrasion) are the same as those associated with rivers, which you studied in Year 7. You will also use your map reading skills to identify glacial features on OS maps.	The distribution of upland areas and glaciated areas in the UK is the first topic studied in 'Landscapes of the UK' (Paper 1)

Knowledge box

1. Ice covers about 10 per cent of the Earth's surface. This ice is in the form of glaciers, ice caps and ice sheets. Most ice is found in Antarctica.	13. Plucking – melted water at the base and sides of the glacier freeze onto the surrounding rock. As the glacier moves, the rock which is embedded in the ice is pulled away.
2. Most ice is found at extreme latitudes (closer to the Poles). In the northern hemisphere, most ice is found within the Arctic Circle (about 66.5 degrees north of the Equator).	14. Abrasion – the bits of rock which are embedded in the ice from plucking and freeze-thaw weathering scrape and grind against the rock at the base and sides of the glacier, wearing it away.
3. About 20,000 years ago, ice covered much of the continent of Europe, including most of the United Kingdom.	15. Corries or Cirques are armchair-shaped hollows with a steep back wall. They occur in highland areas. They are also known as cwms .
4. A glacier is a large mass of ice, often shaped like a river that flows very slowly, under the force of gravity. Glaciers grow and shrink with seasonal changes in temperature.	16. Aretes are a jagged ridge, which is formed when two corries lie side by side.
5. Ice spreads out during glacial periods and gets smaller during warmer inter-glacials .	17. A pyramidal peak is formed when three or more corries are formed back to back.
6. Today, ice is found in highland areas such as the Alps, and in the far north and south (e.g. the Arctic and Antarctic)	18. As glaciers move downhill, they change V-shaped river valleys into U-shaped valleys or glacial troughs .
7. An ice sheet is a thick layer of ice that covers more than 50,000 sq km. It completely covers the landscape, including mountains and valleys.	19. When ice starts to melt, or retreat, it leaves behind the rocks and sediment it has been carrying. This is called moraine .
8. As more and more snow falls, it is compacted so the bottom layers become ice .	20. Erratics – these are large boulders dumped by the melting ice. They may seem out of place as they have been transported from a different area.
9. A glacier is a system . There is a zone of accumulation where snow is added This is normally at the start of a glacier in a highland area.	21. Altitude – for every 100 metres of altitude (he(Eight above sea level) temperature falls by one degree Celsius.
10. Near the end, or snout, of a glacier ice may melt. This is the zone of ablation and is more likely to occur in warm summer months.	22. In 1839, explorer Sir James Clark Ross became the first person to recognise that Antarctica was a continent.
11. Antarctica is a continent around the South Pole . It remains the last pristine wilderness in the world.	23. The Halley Research Station is the UK science station based in Antarctica.
12. The snow petrel, Orca, Adelle penguin and Weddel seals are examples of animal species found in Antarctica.	24. Today, there are 30,000 Evenki people living in Siberia (Central and Eastern Russia). Some Evenki people live a traditional nomadic life, dependent on the reindeer for food, clothing and materials to build their chumm (tents)

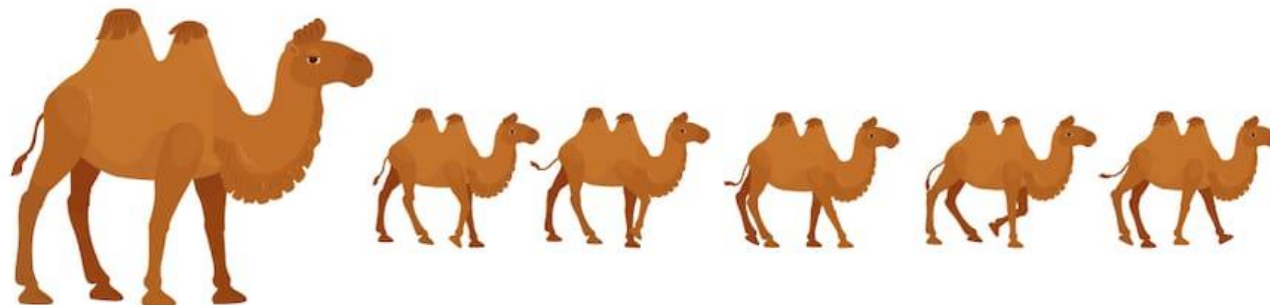
Topic: Arid Environments

Year 8 Geography

What will you study?	How is it linked to other topics you will study?	How is it linked to what you will study in GCSE Geography?
You will study deserts – where they are, and their characteristics. You will study the natural processes in deserts and the landforms produced. You will also look at how animals, plants and people have adapted to live in desert environments.	You have already studied Asia which has large areas of desert e.g. the Gobi Desert and the deserts of the Middle East. Many of the desert processes (e.g. erosion and transportation) you have studied as part of your Rivers unit in Year 7.	At GCSE level, you will study 'Ecosystems of the Planet' in preparation for paper 2 'The World Around Us'

Knowledge box

1. Deserts have extreme temperatures . During the day the temperature may reach 50°C, when at night it may fall to below 0°C.	10. The Atacama in Chile is the most arid desert in the world.
2. Deserts have less than 250 mm of rainfall per year . The rain can be unreliable .	11. The Sahara is the largest hot desert, covering 9 million km ² .
3. Semi-arid deserts (often on the fringes of the desert) have between 250-500 mm of rainfall per year.	12. Desert animals like camels are adapted to survive in hot deserts. For example, they have slit-like nostrils and two rows of eyelashes to help keep the sand out. They do not store water in their humps!
4. Hyper-arid deserts (often found in the middle of a large areas of desert) are extremely dry – they have under 100 mm of rainfall per year.	13. Deserts landscapes are shaped by different geomorphological processes , including: weathering, erosion, transportation and deposition .
5. The presence of high pressure creates cloud-free conditions.	14. Water erosion has helped to form different desert landforms, including mesas, buttes and inselbergs .
6. Hot deserts are mostly located at the Tropic of Cancer & Tropic of Capricorn between 20° and 35° north and south of the Equator.	15. Sand dunes are transported by the wind by suspension, saltation and creep . Some dunes move up to 100 metres per year!
7. Hot deserts have limited numbers of plants and animals that are able to survive.	16. There are different types of sand dune, including barchans , and star dunes .
8. Plants with adaptations which allow them to live in hot and dry conditions are called xerophytic . Adaptations allow plants to survive.	17. A yardang is a ridge and furrow landscape. Wind abrasion concentrates on weak rock; leaving harder material upstanding.
9. Some plants are succulents and store the water in leaves, stems or roots. One example is the cactus.	18. Deserts are not deserted – millions of people live in in modern desert cities such as Las Vegas or Dubai. Some, like the Bedouin , are traditionally nomadic .



Topic: Settlement, Migration and Tourism

Year 8 Geography

<i>What will you study?</i>	<i>How is it linked to other topics you will study?</i>	<i>How is it linked to what you will study in GCSE Geography?</i>
You will study settlements and the reasons they have grown up where they are. You will also study why people migrate (move) from place to place.	You have studied Population – Settlement (where people live) is very closely linked to this.	Migration and Urban Trends are important elements of both 'People of the UK' (Paper 1) and 'People of the Planet' (Paper 2)

Knowledge box

1. A settlement is a place where people live. It may be as small as a single house in a remote area or as large as a mega city (with more than 10 million people)	13. The reason a settlement was built is known as its function . e.g. Southampton is a port .
2. A settlement may be permanent or temporary – an example of a temporary settlement might be a refugee camp.	14. Market Town – Watford was originally a market town – it still holds a regular market today.
3. The piece of land upon which a settlement is built is the settlement site .	15. Resort – Southport was a popular Victorian seaside resort, although it now has many functions, and is a commuter settlement for Liverpool.
4. Wet point sites – these are sites with a good water supply. e.g. close to a spring or river.	16. The number and type of services that a settlement provides usually increases with their size.
5. Dry point sites – these are sites away from the risk of flooding e.g. Ely in Cambridgeshire.	17. If we group settlements according to their size and services provided, this is known as a settlement hierarchy .
6. Defensive sites – these are often on higher ground so that, in the past, enemies could be seen from a distance, or in a meander loop.	18. High-rise, high density buildings are usually found in the CBD (Central Business District) of a city.
7. Aspect – settlements may be found on the sunny side of a deep valley. This is common in settlements in the Alps.	19. The inner city area is next to the CBD and has mainly terraced houses in a grid like pattern. These were originally built to house factory workers (many of these factories have now closed down)
8. Gap Towns – Lincoln is situated in a gap between two areas of higher ground.	20. An urban area is a built-up area such as a town or city. A rural area is an area of country side or village.
9. Resources – these are important for industry e.g. villages such as Aberfan (Wales) is close to coal reserves.	21. Urbanisation is an urban trend which means an increase in the proportion of people living in urban areas compared to rural areas.
10. Bridging Point – settlements with 'ford' in their name often grew close to where a river could be crossed e.g. Watford on the River Colne.	22. Migration means the movement of people from one place to another (either within a country or from one country to another)
11. Trading Centres – often settlements grew where natural route ways and rivers meet, which helps the development of roads, railways and canals.	23. Push factors are the reasons people move away from an area (e.g. war or famine). Pull factors are the positive reasons that draw people into an area (e.g. better jobs and healthcare)
12. The situation of a settlement is its position in relation to the surrounding human and physical features.	24. Tourism is travel for pleasure either within your own country or to another country.

Topic: Rocks, Soils and Volcanoes

Year 8 Geography

What will you study?	How is it linked to other topics you will study?	How is it linked to what you will study in GCSE Geography?
You will study different types of rocks and the processes that have helped to form them. You will also learn about how rocks continue to be changed and the importance of soil. You will find out about volcanoes and how they can be both a help and a hazard.	You will study earthquakes in your 'Restless Earth' unit in Year 9 – earthquakes and volcanoes often occur in the same locations due to the movements of the earth's tectonic plates. You will also find out about huge volcanoes known as 'supervolcanoes'.	The links between geology (rock types) and the landscape are an important element of 'Landscapes of the UK' (Paper 1)

Knowledge box

1. The study of rocks is known as geology . Rocks are made of different minerals such as feldspar and quartz.	10. Soil is made up of a mixture of weathered rock and organic (living) material.
2. Igneous rocks are those made from magma (melted rock) which has cooled and hardened e.g. granite and basalt.	11. A soil profile is a diagram showing the different layers (horizons) of the soil e.g. topsoil, subsoil etc.
3. Sedimentary rocks are those which have been carried by rivers and then deposited in the ocean in layers e.g. sandstone and limestone.	12. Mass Movement is the movement of rock downhill as a result of gravity. This might be gradual (e.g. soil creep) or sudden (e.g. landslide)
4. Metamorphic rocks are those which have been changed by great heat and/or pressure (but not melted) e.g. marble and slate.	13. A volcano is a vent (hole) in the earth's crust, through which lava, steam and ash are emitted.
5. A landform is a natural feature of the earth's surface e.g. mountain, hill, valley.	14. Shield volcanoes are gently sloping and usually erupt frequently but fairly gently with thin fluid lava.
6. Weathering is the breakdown of rocks by the action of sun, rain, temperature changes and living things (plants and burrowing animals)	15. Composite volcanoes are steep sided – they erupt infrequently but explosively with thick sticky lava.
7. Mechanical (physical) weathering is the breakdown of rocks by physical forces e.g. changes in temperature or pressure.	16. Magma is very hot, molten (melted) rock under the ground – when it reaches the surface, it is known as lava .
8. Chemical weathering is the breakdown of rocks by water and involves a chemical change in the rocks.	17. Volcanoes can be a hazard – e.g. pyroclastic flow (an avalanche of hot rocks, ash and poisonous gases) and mudflows.
9. Biological weathering is the breakdown of rocks by the action of burrowing animals and plant roots.	18. Volcanoes can also provide many benefits such as fertile soils, tourism and geothermal energy (heat energy from the ground)

