

Landscapes and Europe - composites and components

Lesson 1:	Lesson 2:	Lesson 3:	Lesson 4:	Lesson 5:	Lesson 6:
<p>WALT: Describe the Location of Europe</p> <p>Understand that Europe is one of the seven continents.</p> <p>Know that the UK is part of Europe.</p> <p>Be able to locate Europe and European countries on a map.</p> <p>Know that Europe is the 3<sup>rd</sup> largest continent by population and makes up just under 10% of the world's population.</p> <p>Know that Europe is the 6<sup>th</sup> largest continent by area of land, only bigger than Australia.</p>	<p>WALT: Identify and describe the human features of Europe in relation to population</p> <p>Understand that population is the people or animals that live in an area.</p> <p>Know that Europe is the 3<sup>rd</sup> largest continent by population and makes up just under 10% of the world's population.</p> <p>Know the 3 largest countries in Europe.</p> <p>Know the smallest city and biggest island in Europe.</p> <p>Understand that the UK is the 3<sup>rd</sup> largest country by population in Europe with Germany and Russia being higher.</p> <p>Know that population is concentrated into large cities such as London, Berlin and Paris.</p>	<p>WALT: identify and locate the primary rivers in Europe</p> <p>Understand that a river is a large natural stream of water flowing into a sea, lake or another river.</p> <p>Know that there are 5 primary rivers.</p> <p>Be able to name and locate Volga, Danube, Rhine, Elbe and Loire rivers in their respective countries.</p> <p>Know that a source is where a river begins.</p> <p>Know the sources of the 5 primary rivers.</p> <p>Know that Europe has numerous other rivers that are important such as the Thames, Seine and Rhone.</p>	<p>WALT: locate Europe's major mountain ranges</p> <p>Know the location of some of Europe's major mountain ranges:</p> <ul style="list-style-type: none"> <li>• Pyrenees</li> <li>• Alps</li> <li>• Scottish Highlands</li> </ul> <p>Know Europe has many mountain ranges.</p> <p>Know the highest mountain in Europe is Mount Elbrus in Russia.</p> <p>The highest peak in the Alps is Mont Blanc.</p>	<p>WALT: describe the physical features of European mountains and mountain ranges.</p> <p>Know that the top of the mountain is called the summit.</p> <p>Know that the bottom of the mountain is called the base/foot.</p> <p>Know that how high and how tall a mountain is are two different things.</p> <p>Understand that how tall mountains are is a measure from base to summit.</p> <p>Understand that how high mountains are is a measure from sea level to summit.</p> <p>Know that some very tall mountains aren't very high because a lot of the base is under the ocean.</p>	<p>WALT: describe the physical process of weathering.</p> <p>Know that weathering is a natural process not caused by humans.</p> <p>Understand that weathering is where rocks and minerals are broken down by nature into smaller pieces.</p> <p>Understand that the weather (which includes, wind, ice, rain and snow) causes weathering.</p> <p>Know how each different kind of weather causes weathering (e.g. ice being less dense than water, so expanding and causing cracks etc.)</p> <p>There are two types of weathering: mechanical and chemical. Mechanical is natural.</p>

Lesson 7:	Lesson 8:	Lesson 9:	Lesson 10:	Lesson 11:	Lesson 12:	Lesson 13:
<p>WALT: explain some of the human processes that contribute to chemical weathering</p> <p>There are two types of weathering: mechanical and chemical. Chemical is often caused by humans.</p> <p>Explain some of the main ways that humans contribute to chemical weathering such as burning fossil fuels.</p> <p>Know that the outer layers of rocks can be worn away by acids caused by chemical reactions.</p> <p>Understand that chemical weathering doesn't just affect natural rock but statues too.</p>	<p>WALT: identify the physical features of a river.</p> <p>Know that a river begins at a source.</p> <p>Know that a river ends at the mouth.</p> <p>Understand that a river runs through a channel which is a river bed between two banks.</p> <p>Know that for larger rivers, there are also often floodplains shaped by floods.</p> <p>Know that rivers flow downwards, often from mountains and through valleys.</p>	<p>WALT: identify safe ways of crossing a river and give examples of bridges crossing the primary rivers of Europe</p> <p>Understand that crossing a river safely is often done by crossing bridges.</p> <p>Understand the importance of bridges and how they have connected us.</p> <p>Explain why bridges are placed where they are.</p> <p>Explain how bridges can sometimes be more than a functional construction.</p>	<p>WALT: Describe the physical process of plate tectonics.</p> <p>Understand the Earth is made up of multiple layers: crust, mantle, outer core and inner core.</p> <p>Understand that the earth's crust and upper mantle are split further into plates.</p> <p>Understand that the plates move, crumple and dive and this causes earthquakes, tsunamis and the formation of mountains.</p> <p>Know where some of the main plate boundaries are and that these are called fault lines.</p>	<p>WALT: Describe the physical process that forms volcanoes and name some examples.</p> <p>Know that volcanoes/mountains are a natural creation formed from the movements in the earth's crust.</p> <p>Understand that plate tectonics form volcanoes and mountains by moving towards one another and colliding.</p> <p>Know that Mount Vesuvius was formed by the movement of plate tectonics and this is what caused its famous eruption.</p> <p>Name some examples of plate tectonics causing mountain ranges such as the Balkans/Andes.</p>	<p>WALT: Describe the physical process that creates fold mountains and name some examples.</p> <p>Know that volcanoes/mountains are formed from the movements in the earth's crust.</p> <p>Understand that plate tectonics form volcanoes and mountains by moving towards one another.</p> <p>Know that fold mountains are created where two or more of earth's tectonic plates are pushed together.</p> <p>Understand that the process that forms fold mountains happens over millions of years.</p> <p>Know that the Himalayas, Andes and Alps are all examples of fold mountains.</p>	<p>WALT: Describe the physical process that creates block mountains and name some examples.</p> <p>Know that volcanoes/mountains are formed from the movements in the earth's crust.</p> <p>Understand that plate tectonics form volcanoes and mountains by moving towards one another.</p> <p>Know that block mountains are created when a slab of land breaks off and is forced up as two of Earth's tectonic plates pull/push.</p> <p>Know that this happens over millions of years.</p> <p>Famous block mountains include the Sierra Nevada in California and the Harz Mountains in Germany.</p>

Maps - composites and components

Lesson 1:	Lesson 2:	Lesson 3:	Lesson 4:	Lesson 5:	Lesson 6:
<p>WALT: Locate and label the equator and the tropics</p> <p>Understand that the equator is a line of latitude around the Earth</p> <p>Know that the equator is a line that splits the Northern and Southern hemispheres.</p> <p>Understand that climate varies depending on the location's proximity to the equator.</p> <p>Know the location of the Tropics of Cancer and Capricorn</p> <p>Understand that the climate is warm and wet in the tropics.</p>	<p>WALT: Describe the climate in the tropics</p> <p>Understand that the climate is warm and wet all year round in the tropics.</p> <p>Know that the climate is warm and wet in the tropics because it is close to the equator.</p> <p>Know that tropical rainforests like those in Brazil are located within the tropics.</p> <p>Know the locations of at least 2 tropical rainforests.</p>	<p>WALT: explain what the prime meridian is and identify the western and eastern hemispheres.</p> <p>Understand that the prime meridian is a line of longitude around the earth.</p> <p>Know that the prime meridian runs through Greenwich in London.</p> <p>Understand that, like the North and South hemispheres, we have Eastern and Western which are on either side of the prime meridian</p> <p>Know some of the main countries in the East and West hemispheres.</p>	<p>WALT: identify the names of the lines used to describe any place on Earth.</p> <p>Know that lines of longitude run vertically.</p> <p>Know that lines of latitude run horizontally.</p> <p>Understand that we can create imaginary lines of latitude and longitude to locate any point on the Earth.</p> <p>Know our own latitude and longitude for:</p> <p>Know that above the equator is positive and below is negative.</p> <p>Know that west of the prime meridian is negative, and east is positive.</p>	<p>WALT: Apply knowledge of map techniques to describe the locations of places.</p> <p>Use a compass and lines of latitude and longitude to find locations on a map.</p> <p>Be able to estimate the location of lines of latitude and longitude based on the numbers themselves.</p> <p>Know the 4 basic compass points, N E S W.</p> <p>Know the 8 points of a compass NE SE SW NW.</p>	<p>WALT: relate knowledge of lines of longitude to time zones.</p> <p>Know that there are 24 different time zones around the world.</p> <p>Know that each time zone has a 1h difference.</p> <p>Understand that we use Greenwich mean time (GMT).</p> <p>Know that there is an international date line and this is located roughly half way around the world from the Greenwich meridian (GMT).</p> <p>Know that the longitudinal lines for time zones aren't always exactly straight.</p>

Earthquakes, volcanoes and the water cycle - composites and components

Lesson 1:	Lesson 2:	Lesson 3:	Lesson 4:	Lesson 5:	Lesson 6:	Lesson 7:
<p>WALT: Identify the structure of the Earth.</p> <p>Know the Earth has an inner and outer core, a mantle and a crust.</p> <p>Know the crust is the rocky surface of the Earth.</p> <p>Know the crust floats on top of the mantle.</p> <p>Know the crust has 'cracks' in it so it is in pieces.</p> <p>Know these pieces are called tectonic plates.</p>	<p>WALT: describe what tectonic plates are and locate the main plate boundaries.</p> <p>Know that a tectonic plate is a piece of the Earth's crust.</p> <p>Know these plates move very slightly.</p> <p>Know that the points where two plates meet are called boundaries.</p> <p>Know where plate boundaries are.</p> <p>Understand that the UK is not close to any plate boundaries and we therefore don't have strong earthquakes.</p>	<p>WALT: explain what happens when tectonic plates move and describe the 3 main movements.</p> <p>Know that tectonic plates move very slightly (a few cm a year).</p> <p>Understand that there are 3 movements for tectonic plates:</p> <ul style="list-style-type: none"> <li>• Away from each other</li> <li>• Towards each other</li> <li>• Side by side</li> </ul> <p>Know that each movement has a different effect.                      Away = ridge formation                      Towards = earthquakes/forms volcanoes                      Side by side = earthquakes</p>	<p>WALT: locate the Pacific Ring of Fire and describe its geographical location.</p> <p>Know that most volcanoes are located in the Pacific Ring of Fire.</p> <p>Know the Ring of Fire is located around the edge of the Pacific plate.</p> <p>Know some of the countries that Ring of Fire passes near or through.</p> <p>Know the Ring of Fire is about 25,000 miles long.</p> <p>Know there are 452 volcanoes around the Ring of Fire.</p>	<p>WALT: Describe how plate tectonics gives rise to the Pacific Ring of Fire</p> <p>Know that the Pacific Ring of Fire is where the Pacific plate meets many other plates.</p> <p>Know that the Pacific plate colliding with other plates caused collisions which created the volcanoes.</p> <p>Know that subduction is the process where one plate is pushed below another.</p> <p>Know that during subduction the heat and pressure forms mountains and volcanoes.</p>	<p>WALT: compare areas that have examples of the lowest and highest intensity volcanoes</p> <p>Know areas which have low and high intensity volcanoes.</p> <p>Know that some earthquakes and volcanoes are more violent than others.</p> <p>Know that some earthquakes and some volcanoes can cause natural disasters.</p> <p>Know Hawaiian volcanoes erupt with low explosivity.</p> <p>Know ultra-Plinian volcanoes erupt rarely but with high explosivity.</p>	<p>WALT: locate areas of natural disasters caused by earthquakes and volcanoes</p> <p>Know that earthquakes/volcanoes can cause natural disasters.</p> <p>Know the location of the 2004 Boxing Day tsunami.</p> <p>Know the location of the 1906 San Francisco earthquake.</p> <p>Know the location of the eruption of Mount Vesuvius.</p> <p>Understand these locations in relation to the Ring of Fire and plate boundaries.</p>

Lesson 8:	Lesson 9:	Lesson 10:	Lesson 11:	Lesson 12:	Lesson 13:	Lesson 14:
<p>WALT: identify the extent of the area affected by the 2004 Boxing Day tsunami and explain the impact.</p> <p>Know that a tsunami is caused by an earthquake.</p> <p>Know that the 2004 Boxing Day tsunami occurred in India.</p> <p>Know that the earthquake measured 9.3 on the Richter scale.</p> <p>Know the Richter scale is used to measure the strength of earthquakes.</p> <p>Know that the tsunami waves were 30 metres high.</p>	<p>WALT: describe the scale for measuring the magnitude and intensity of earthquakes and volcanoes.</p> <p>Know that we measure earthquakes in magnitude and the scale is the <b>Richter</b> scale.</p> <p>Know that we measure volcanoes using the Volcanic Explosivity Index (VEI).</p> <p>Know VEI ranges from 0 - 8.</p> <p>Know micro earthquakes are less than 2 on the scale.</p> <p>Know that meteoric earthquakes measure 10+.</p> <p>Know that meteoric means sudden and extremely strong.</p>	<p>Volcanoes and earthquakes quiz and time to provide additional teaching on any concepts requiring additional input.</p>	<p>WALT: explain the 5 steps of the water cycle.</p> <p>Know the water cycle is a physical process that happens on the surface of the Earth and in its atmosphere.</p> <p>Know the names of the 5 steps of the water cycle.</p> <p>Understand the water cycle is a continuous process.</p> <p>Know that the water cycle happens all over the world.</p>	<p>WALT: explain what clouds are and how they are formed.</p> <p>Know that a cloud is a large group of water droplets.</p> <p>Know that clouds are formed when water evaporates.</p> <p>Understand that clouds are when the evaporated water condenses high up in the cooler air.</p> <p>Know that only lower clouds give precipitation.</p> <p>Know that rain, snow, sleet and hail falling from clouds is called precipitation (not just rain).</p>	<p>WALT: identify and describe the nature of the different types of cloud.</p> <p>Know the 3 main types of cloud: Stratus Cumulus Cirrus</p> <p>Know that stratus clouds are dark and featureless which creates grey skies.</p> <p>Know that cumulus clouds are puffy.</p> <p>Know that cirrus clouds are thin and wispy.</p> <p>Know the names of variations of these clouds (cumulonimbus, cirrocumulus etc.)</p> <p>Know that cumulonimbus clouds produce thunder and lightning storms.</p>	<p>Water Cycle unit quiz and time to provide additional teaching on any concepts requiring additional input.</p>

Transportation and trade - composites and components

Lesson 1:	Lesson 2:	Lesson 3:	Lesson 4:	Lesson 5:	Lesson 6:	Lesson 7:
<p>WALT: explain what the terms transportation, congestion and pollution mean.</p> <p>Know that transportation is the movement of people or things from place to place.</p> <p>Know that congestion is extremely crowded with traffic.</p> <p>Know that pollution is a poisonous or dirty substance.</p> <p>Know that congestion and pollution and congestion occur mostly in cities.</p> <p>Know that pollution and congestion in cities needs to be managed.</p>	<p>WALT: list the main types of transport used in cities and their advantages/disadvantages.</p> <p>Know that cities use a variety of transport methods.</p> <p>Know that some cities make it more difficult for commuters to use certain transport methods.</p> <p>Know the 4 main kinds of transport in cities: Public transport Bicycles Cars Goods vehicles</p> <p>Understand that there are positives and negatives about each method of transport.</p> <p>Understand that some cities manage congestion and pollution by limiting private transport.</p>	<p>WALT: describe ways in which London is trying to reduce transport congestion and pollution.</p> <p>Know that congestion and pollution and congestion occur mostly in cities.</p> <p>Know that pollution and congestion in cities needs to be managed.</p> <p>Understand that some cities manage congestion and pollution by limiting private transport.</p> <p>Know that London has the congestion charge.</p> <p>Know that air pollution in cities can cause breathing difficulties.</p> <p>Know that some cities, London especially, provide cycle lanes to reduce pollution.</p>	<p>WALT: understand why people travel within the UK and the types of travel they use.</p> <p>Know that people in the UK travel for personal or business reasons.</p> <p>Know that transport within the UK includes road, rail, air and water.</p> <p>Know that roads are most frequently used.</p> <p>Know that rail travel is a popular option, usually for commuting.</p> <p>Understand why air travel is least popular to travel within the UK.</p> <p>Know that there are lots of smaller footpaths, tracks and bridleways.</p>	<p>WALT: identify the advantages and the disadvantages of different types of travel.</p> <p>Know that people in the UK travel for personal or business reasons.</p> <p>Know that transport within the UK includes road, rail, air and water.</p> <p>Understand that there are advantages and disadvantages to each type of travel.</p>	<p>WALT: identify and mark on different methods of transit on a map of the UK.</p> <p>Know that there are many different routes and methods of transit in the UK.</p> <p>Know the locations of main roads such as the M1.</p> <p>Know the different map symbols for each kind of road.</p> <p>Know and mark on a map: A motorway A main road A secondary road A minor road A railway A bridleway A cycle path An airport A canal</p>	<p>WALT: understand the reasons for international travel and the different forms of transport used.</p> <p>Know that international travel is the transport of people or goods between different countries.</p> <p>Know that different methods of transport are faster or slower.</p> <p>Know that almost all international travel causes pollution and it needs to be managed.</p> <p>Know that trade and tourism are the main reasons for international travel.</p>

Lesson 8:	Lesson 9:	Lesson 10:	Lesson 11:	Lesson 12:	Lesson 13:	Lesson 14:
<p>WALT: identify the advantages and disadvantages of forms of international transport and explain how the disadvantages can be managed.</p> <p>Know that almost all international travel causes pollution and it needs to be managed.</p> <p>Know and describe the main advantages and disadvantages of:  Air travel  Sea freight  Passenger ships  Rail  Roads</p> <p>Understand that different forms of international travel are used for different reasons and some cause more pollution than others.</p> <p>Know the Panama/Suez canals have managed one of the disadvantages of sea freight by making the journey shorter.</p> <p>Understand how each of the five main international transport methods can be managed (e.g. greener aeroplanes, cleaning exhaust fumes, higher speed trains and electric vehicles).</p>	<p>WALT: define and identify natural resources.</p> <p>Know that international trade is the exchange of goods and services between countries.</p> <p>Know that natural resources are the land, forests, energy sources and minerals existing naturally.</p> <p>Know that natural resources are often traded between countries.</p> <p>Know that each natural resource occurs more commonly in different parts of the world.</p> <p>Know that countries earn money by exporting goods to other countries.</p> <p>Know that humans are reliant on many natural resources for survival.</p>	<p>WALT: describe some of the uses of natural resources.</p> <p>Know that natural resources are the land, forests, energy sources and minerals existing naturally.</p> <p>Know that humans are reliant on many natural resources for survival.</p> <p>Know the seven most common natural resources: water, oil, forests, rocks, minerals, soils, animals.</p> <p>Understand how these natural resources are vital to our survival in different ways.</p> <p>Know that in the UK, we import many natural resources that we can't find here such as oil.</p>	<p>WALT: explain why international trade in natural resources is important.</p> <p>Know that humans are reliant on many natural resources for survival.</p> <p>Know that many natural resources people need do not naturally occur in their own countries.</p> <p>Know that countries earn money by selling their natural resources to other countries.</p> <p>Know that countries import natural resources from overseas.</p>	<p>WALT: Locate on a map where most of the world's oil is produced and where most of copper and nickel is mined.</p> <p>Know that oil is a natural resource.</p> <p>Know that oil is an important natural resource for fuel.</p> <p>Know that the Middle East is the largest producer of oil.</p> <p>Know that oil also comes from Russia and the US but in lesser quantities.</p> <p>Know that nickel and copper are both metals used for making batteries.</p> <p>Understand that the demand for nickel and copper has increased along with the use of electric cars.</p> <p>Know that most nickel and copper is exported from Chile.</p>	Fieldwork	