YEAR 3				
Project 2: Rocks, Relics & Rumbles	***Big Question: How would I survive a natural disaster?***			
	National Curriculum	**Skills**	**Knowledge**	**Vocabulary**
	Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle. Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/ Greenwich Meridian and time zones (including day and night). Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European	Name and describe the types, appearance and properties of rocks. Name and describe properties of the Earth's four layers. Describe the activity of plate tectonics and how this has changed the Earth's surface over time (continental drift). Name and locate significant volcanoes and plate boundaries and explain why they are important. Describe the parts of a volcano or earthquake. Locate significant places using latitude and longitude. Classify, compare and contrast different types of geographical feature. Describe how a significant geographical activity has changed a landscape in the short or long term. Explain the physical processes that cause	There are three main types of rock found in the Earth's crust. They are sedimentary, igneous and metamorphic. Sedimentary rocks are made from sediment that settles in water and becomes squashed over a long time to form rock. They are often soft, permeable, have layers and may contain fossils. Igneous rocks are made from cooled magma or lava. They are usually hard, shiny and contain visible crystals. Metamorphic rocks are formed when existing rocks are heated by the magma under the Earth's crust or squashed by the movement of the Earth's tectonic plates. They are usually very hard and often shiny. The Earth is made of four different layers. The inner core is made mostly of hot, solid iron and nickel, and the outer core is made of liquid iron and nickel. The mantle is made of solid rock and molten rock called magma. The crust is a thin layer of solid rock that is broken into large pieces called tectonic plates. These pieces move very slowly across the mantle. The crust of the Earth is divided into tectonic plates that move. The place where plates meet is called a plate boundary. Plates can push into each other, pull apart or slide against each other. These movements can create mountains, volcanoes and earthquakes. Significant volcanoes include Mount Vesuvius in Italy, Laki in Iceland and Krakatoa in Indonesia. Significant earthquake-prone areas include the San Andreas Fault in North America and the Ring of Fire, which runs around the edge of the Pacific Ocean and is where many plate boundaries in the Earth's crust converge. Over three-quarters of the world's earthquakes and volcanic eruptions happen along the Ring of Fire. A volcano is an opening in the Earth's surface from which gas, hot magma and ash can escape. They are usually found at meeting points of the Earth's tectonic plates. When a volcano erupts, liquid magma collects in an underground magma chamber. The magma pushes through a crack called a vent and bursts out onto the Earth's surface. Lava, hot ash and mudslides from volcanic eruptions can cause severe damage. Latitude is the distance north or south of the equator and longitude is the distance east or west of the Prime Meridian. Geographical features created by nature are called physical features. Physical features include beaches, cliffs and mountains. Geographical features created by humans are called human features. Human features include houses, factories and train stations. Significant geographical activity includes earthquakes and volcanic eruptions. These are known as natural disasters because they are created by nature, affect many people and cause widespread damage.	active aftershock continent decaying dormant earthquake epicentre erode extinct fault line lava magma magnitude molten palaeontologist prehistoric Richter scale seismograph tectonic plate tsunami vent volcanic eruption

	country, and a region within North or South America. Understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time. Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world.	earthquakes and volcanic eruptions. Use the eight points of a compass to locate a geographical feature or place on a map.	Volcanic eruptions and earthquakes happen when two tectonic plates push into each other, pull apart from one another or slide alongside each other. The centre of an earthquake is called the epicentre. The eight points of a compass are north, south, east, west, north-east, north-west, south-east and south-west.	
Project 4: Through the Ages	Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.	Describe the type and purpose of different buildings, monuments, services and land, and identify reasons for their location.	Services include banks, post offices, hospitals, public transport and garages. Land use types include leisure, housing, industry, transport and agriculture.	arable farming Beaker folk blacksmith Bronze Age Celtic Celts hillfort Iron Age Mesolithic Millennia Neolithic settlement Palaeolithic settlement Stone Age torc

Project 5: Urban Pioneers	***Big Question: What makes a city a city?***			
	Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies. Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied. Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.	Analyse primary data, identifying any patterns observed. Analyse maps, atlases and globes, including digital mapping, to locate countries and describe features studied. Describe the type and characteristics of settlement or land use in an area or region. Use four-figure grid references to describe the location of objects and places on a simple map.	Primary data includes information gathered by observation and investigation. Maps, globes and digital mapping tools can help to locate and describe significant geographical features. Different types of settlement include rural, urban, hamlet, town, village, city and suburban areas. A city is a large settlement where many people live and work. Residential areas surrounding cities are called suburbs. A four-figure grid reference contains four numbers. The first two numbers are called the easting and are found along the top and bottom of a map. The second two numbers are called the northing and are found up both sides of a map. Four-figure grid references give specific information about locations on a map.	capital city depot district graffiti hamlet industry landmark monument mural pioneer port residential suburb urban

YEAR 4				
Project 4: Misty Mountain, Winding River	***Big Question: How are rivers and mountains formed?***			
	National Curriculum	**Skills**	**Knowledge**	**Vocabulary**
	Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America. Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.	Describe and compare aspects of physical features. Study and draw conclusions about places and geographical features using a range of geographical resources, including maps, atlases, globes and digital mapping. Use four or six-figure grid references and keys to	A physical feature is one that forms naturally and can change over time due to physical processes, such as erosion and weathering. Physical features include rivers, forests, hills, mountains and cliffs. An aspect of a physical feature might be the type of mountain, such as dome or volcanic, or the type of forest, such as coniferous or broad-leaved. An atlas is a collection of maps and information that shows geographical features, topography, boundaries, climatic, social and economic statistics of an area. A six-figure grid reference contains six numbers and is more precise than a four-figure grid reference. The first three figures are called the easting and are found along the top and bottom of a map. The second three figures are called the northing and are found up both sides of a map. Six-figure grid references give detailed information about locations on a map.	agriculture altitude base contamination contour deposition dome mountain dredge economy elevation erosion fault block mountain fold mountain

	Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world. Understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time. Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities. Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water. Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how	describe the location of objects and places on a map. Explain how the physical processes of a river, sea or ocean have changed a landscape over time. Name, locate and explain the importance of significant mountains or rivers. Explain ways that settlements, land use or water systems are used in the UK and other parts of the world. Identify, describe and explain the formation of different mountain types. Identify the topography of an area of the UK using contour lines on a map. Create a detailed study of geographical features including hills, mountains, coasts and rivers of the UK. Use specific geographical vocabulary and diagrams to explain the water cycle. Describe altitudinal zonation on mountains. Collect and analyse primary and secondary data, identifying and analysing patterns and suggesting reasons for them.	Rivers, seas and oceans can transform a landscape through erosion, deposition and transportation. Significant mountain ranges include the Himalayas, Urals, Andes, Alps, Atlas, Pyrenees, Apennines, Balkans and Sierra Nevada. Significant rivers include the Mississippi, Nile, Thames, Amazon, Volga, Zambezi, Mekong, Ganges, Danube and Yangtze. Land uses include agricultural, recreational, housing and industry. Water systems are used for transport, industry, leisure and power. Mountains form over millions of years. They are made when the Earth's tectonic plates push together or move apart. Mountains are also formed when magma underneath the Earth's crust pushes large areas of land upwards. There are five types of mountain: fold, fault-block, volcanic, dome and plateau. Topography is the arrangement of the natural and artificial physical features of an area. Significant rivers of the UK include the Thames, Severn, Trent, Dee, Tyne, Ouse and Lagan. Significant mountains and mountain ranges include Ben Nevis, Snowdon, Helvellyn, Pen y Fan, the Scottish Highlands and the Pennines. Water cannot be made. It is constantly recycled through a process called the water cycle. The four stages of the water cycle are evaporation, condensation, precipitation and collection. During the water cycle, water changes state due to heating and cooling. Altitudinal zonation describes the different climates and types of wildlife at different altitudes on mountains. Examples include forests that grow at low altitudes and support a wide variety of plants and animals, tundra that is found at higher altitudes and supports plants and animals that are adapted to harsher environments, and the summits of mountains, which are usually covered in ice and snow and don't support any life. Secondary data includes information gathered by geographical reports, surveys, maps, research, books and the internet.	habitat industry leisure lower course meander middle course minerals mouth peak plateau plate boundaries ridges sediment settlement recreational source summit topography trade transportation upper course valley

	some of these aspects have changed over time. Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.			
Project 5: Blue Abyss	Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night). Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied. Are competent in the geographical skills needed to: collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes; interpret a range of sources of geographical information; communicate geographical information in a variety of ways.	Identify the location of the Tropics of Cancer and Capricorn on a world map. Study and draw conclusions about places and geographical features using a range of geographical resources, including maps, atlases, globes and digital mapping. Investigate a geographical hypothesis using a range of fieldwork techniques.	The Tropic of Cancer is 23 degrees north of the equator and Tropic of Capricorn is 23 degrees south of the equator. An atlas is a collection of maps and information that shows geographical features, topography, boundaries, climatic, social and economic statistics of an area. Fieldwork techniques, such as sketch maps, data collection and digital technologies, can provide evidence to support and answer a geographical hypothesis.	abyss adaptation algae bioluminescence biomes barometric pressure climate cnidarian conservation coral crustacean depth echinoderm exoskeleton midnight zone mollusc organism pollution pressure species sunlight zone trench Tropic of Cancer Tropic of Capricorn twilight zone

YEAR 5				
	National Curriculum	**Skills**	**Knowledge**	**Vocabulary**
Project 1: Stargazers	Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.	Analyse and compare a place, or places, using aerial photographs. atlases and maps.	Aerial photography is used in cartography, land-use planning and environmental studies. It can be used alongside maps to find out detailed information about a place, or places.	Science driver (see science LTO)
Project 3: Alchemy Island	***Big Question: How would you navigate Alchemy Island?***			
	Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world.	Use compass points, grid references and scale to interpret maps, including Ordnance Survey maps, with accuracy.	Compass points can be used to describe the relationship of features to each other, or to describe the direction of travel. Accurate grid references identify the position of key physical and human features.	alchemist alchemy axis citadel compass co-ordinates gorge grid reference human features key panning physical features plot portal route scale soliloquy symbols terrain tor traverse
Project 4: Sow, Grow & Farm	***Big Question: Should we only buy locally and seasonally sourced food?***			
	Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.	Describe in detail the different types of agricultural land use in the UK. Construct or carry out a geographical enquiry by gathering and analysing a range of sources. Explain how the topography and soil type	Agricultural land use in the UK can be divided into three main types, arable (growing crops), pastoral (livestock) and mixed (arable and pastoral). An allotment is a small piece of land used to grow fruit, vegetables and flowers. A wide variety of crops are farmed in the UK, such as wheat, barley, oats, potatoes, other vegetables, fruits and oilseed rape. A wide variety of livestock are reared on farms in the UK, such as sheep, dairy cattle, beef cattle, poultry and pigs. A geographical enquiry can help us to understand the physical geography (rivers, coasts, weather and rocks) or human geography (population changes, migration, land use, changes to inner city, urbanisation, developments and tourism) of an area and the impacts on the surrounding environment.	agricultural allotment alpine arable biomes bulbs carbon footprint chemical pesticides citrus climate zones coniferous continents

	Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle. Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world. Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities.	affect the location of different agricultural regions. Use compass points, grid references and scale to interpret maps, including Ordnance Survey maps, with accuracy. Describe how soil fertility, drainage and climate affect agricultural land use. Name and locate the world's biomes, climate zones and vegetation belts and explain their common characteristics. Identify and describe some key physical features and environmental regions of North and South America and explain how these, along with the climate zones and soil types, can affect land use. Identify some of the problems of farming in a developing country and report on ways in which these can be supported. Describe and explain the location and purpose of transport networks across the UK and other parts of the world.	The topography of an area intended for agricultural purposes is an important consideration. In particular, the topographical slope or gradient plays a large part in controlling hydrology (water) and potential soil erosion. Compass points can be used to describe the relationship of features to each other, or to describe the direction of travel. Accurate grid references identify the position of key physical and human features. Soil fertility, drainage and climate influence the placement and success of agricultural land. The Earth has five climate zones: desert, equatorial, polar, temperate and tropical. A biome is a large ecological area on the Earth's surface, such as desert, forest, grassland, tundra and aquatic. Biomes are often defined by a range of factors, such as temperature, climate, relief, geology, soils and vegetation. North America is broadly categorised into six major biomes: tundra, coniferous forest, grasslands (prairie), deciduous forest, desert and tropical rainforest. South America has a vast variety of biomes, including desert, alpine, rainforest and grasslands. Farming challenges for developing countries include poor soil, disease, drought and lack of markets. Education, fair trade and technology are ways in which these challenges can be reduced. Transport networks can be tangible, such as rails, roads or canals, or intangible, such as air and sea corridors. These networks link places together and allow for the movement of people and goods. Transport networks are usually built where there is a high demand for the movement of people or goods. They run between places where journeys start or finish, such as airports, bus stations, ferry terminals or railway stations.	contour lines deciduous drainage drought ecological economic excessive tillage fair trade fertilise food miles geology global warming gradient harvesting import intensive irrigation monoculture network nutritional origin parliament pastoral peasantry polar prairie processed processing reared rebellion revolt seasonality soil drainage soil fertility temperate treason tropical tundra vegetation belt

Project 5: Beast Creator	Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies. Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.	Summarise geographical data to draw conclusions. Analyse and compare a place, or places, using aerial photographs. atlases and maps.	Geographical data, such as demographics or economic statistics, can be used as evidence to support conclusions. Aerial photography is used in cartography, land-use planning and environmental studies. It can be used alongside maps to find out detailed information about a place, or places.	Science driver (see science LTO)

YEAR 6				
	National Curriculum	**Skills**	**Knowledge**	**Vocabulary**
Project 2: Britain at War	Understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time.	Explain interconnections between two or more areas of the world.	Geographical interconnections are the ways in which people and things are connected. The Axis Powers were Germany (led by Adolf Hitler), Italy (led by Benito Mussolini) and Japan (led by Emperor Hirohito). The Allied Powers were Great Britain (led by Neville Chamberlain and then Winston Churchill), the Soviet Union (led by Joseph Stalin) and the United States (led by Franklin D Roosevelt and then Harry S Truman). Members of the British Commonwealth of Nations also fought for the Allied Powers.	History driver (see history LTO)
Project 3: Frozen Kingdoms	***Big Question: Could polar bears be homeless by 2053?***			
	Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies. Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America. Identify the position and significance of latitude, longitude,	Use grid references, lines of latitude and longitude, contour lines and symbols in maps and on globes to understand and record the geography of an area. Describe the climatic similarities and differences between two regions. Identify the position and explain the significance of latitude, longitude, equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, the Arctic and	A geographical area can be understood by using grid references and lines of latitude and longitude to identify position, contour lines to identify height above sea level and map symbols to identify physical and human features. Climate is the long-term pattern of weather conditions found in a particular place. Climates can be compared by looking at factors including maximum and minimum levels of precipitation and average monthly temperatures. The Northern Hemisphere is the part of Earth that is to the north of the equator. The Southern Hemisphere is the part of Earth that is to the south of the equator. The Prime Meridian is the imaginary line from the North Pole to the South Pole that passes through Greenwich in England and marks 0° longitude, from which all other longitudes are measured. Representing, analysing, concluding, communicating, reflecting and responding are helpful strategies to answer geographical questions.	Antarctic Circle Arctic Circle atmosphere boreal forest conservationist deforestation expedition fossil fuels glacier global warming horizon iceberg indigenous latitude longitude natural resources Northern Hemisphere precipitation

	Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night). Are competent in the geographical skills needed to: collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes; interpret a range of sources of geographical information; communicate geographical information in a variety of ways. Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle. Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water. Understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time.	Antarctic Circles, the Prime (or Greenwich) Meridian and time zones (including day and night). Ask and answer geographical questions and hypotheses using a range of fieldwork and research techniques. Compare and describe physical features of polar landscapes. Explain how climate change affects climate zones and biomes across the world. Describe the distribution of natural resources in an area or country. Explain how humans function in the place they live. Present a detailed account of how an industry, including tourism, has changed a place or landscape over time.	The Arctic is a sea of ice surrounded by land and located at the highest latitudes of the Northern Hemisphere. It extends over the countries that border the Arctic Ocean, including Canada, the USA, Denmark, Russia, Norway and Iceland. Antarctica is a continent located in the Southern Hemisphere. Antarctica does not belong to any country. Physical features typical of the Arctic and Antarctic regions include glaciers, icebergs, ice caps, ice sheets, ice shelves and sea ice. Climate change is the long-term change in expected patterns of weather that contributes to the melting of polar ice caps, rising sea levels and extreme weather. Climate change is caused by global warming. Human activity, such as burning fossil fuels, deforestation, habitat destruction, overpopulation and rearing livestock, all contribute to global warming. Natural resources include food, minerals (aluminium, sandstone and oil) energy sources (water, coal and gas) and water. The distribution of and access to natural resources, cultural influences and economic activity are significant factors in community life in a settlement. Tourism is an industry that involves people travelling for recreation and leisure. It has had an environmental, social and economic impact on many regions and countries.	Prime Meridian Southern Hemisphere time zone treacherous tundra

History Festival: Hola Mexico	Identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night). Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world. Describe and understand key aspects of human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water.	Identify the position and explain the significance of latitude, longitude, equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, the Arctic and Antarctic Circles, the Prime (or Greenwich) Meridian and time zones (including day and night). Use lines of longitude and latitude or grid references to find the position of different geographical areas and features. Explain how humans function in the place they live.	The Northern Hemisphere is the part of Earth that is to the north of the equator. The Southern Hemisphere is the part of Earth that is to the south of the equator. The Prime Meridian is the imaginary line from the North Pole to the South Pole that passes through Greenwich in England and marks 0° longitude, from which all other longitudes are measured. Invisible lines of latitude run horizontally around the Earth and show the northerly or southerly position of a geographical area. Invisible lines of longitude run vertically from the North to the South Pole and show the westerly or easterly position of a geographical area. The distribution of and access to natural resources, cultural influences and economic activity are significant factors in community life in a settlement.	
Project 4: Darwin's Delights	Use the eight points of a compass, four and six-figure grid references, symbols and key to build their knowledge of the United Kingdom and the wider world. Are competent in the geographical skills needed to: collect, analyse & communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes; interpret a range of sources of geographical information; communicate geographical information in a variety of ways. Understand the processes that give rise to key physical & human geographical features of the world, how these are interdependent & how they bring about spatial variation & change over time.	Use lines of longitude and latitude or grid references to find the position of different geographical areas and features. Ask and answer geographical questions and hypotheses using a range of fieldwork and research techniques. Explain interconnections between two or more areas of the world.	Invisible lines of latitude run horizontally around the Earth and show the northerly or southerly position of a geographical area. Invisible lines of longitude run vertically from the North to the South Pole and show the westerly or easterly position of a geographical area. Representing, analysing, concluding, communicating, reflecting and responding are helpful strategies to answer geographical questions. Geographical interconnections are the ways in which people and things are connected.	History driver (see history LTO)