Year 5/6 – Cycle A – Geography (Investigating Our World)		
National Curriculum Objectives	**Sticky Knowledge**	**Vocabulary**
• 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. *Describe and explain the location, purpose and use of transport networks across the UK and other parts of the world.* • 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. *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. *Summarise geographical data to draw conclusions.* • The Earth has five climate zones: desert, Mediterranean, polar, temperate and tropical. Mountains have variable climates depending on altitude. 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. *Name and locate the world's biomes, climate zones and vegetation belts and explain their common characteristics.*	• The scale on a map gives the relationship between the size of an object on the map and its size in real like. • The time is different in different countries around the world and it is split into 24 meridians. • Capital cities are usually the seat of a countries government. They are large settlements with a wide range of human features and transport links and are usually a centre for business and trade. • A biome is a large ecosystem that has characteristic features, such as the climate and landscape: aquatic, desert, forest, grassland and tundra. • Settlement hierarchy is a way of grouping and ranking settlements according to their type, significance, number and size. The main settlement types are: capital city, city, town, village and hamlet.	Climate, ecosystem, life expectancy, population density, topography. I can statements: • I can describe the scale on a map as that which gives the relationship between the size of an object on the map and its size in real like. • I can explain the time is different in different countries around the world and it is split into 24 meridians. • I can describe capital cities as usually being the seat of a countries government. They are large settlements with a wide range of human features and transport links and are usually a centre for business and trade. • I can describe a biome as a large ecosystem that has characteristic features, such as the climate and landscape: aquatic, desert, forest, grassland and tundra. • I can explain that a settlement hierarchy is a way of grouping and ranking settlements according to their type, significance, number and size. The main settlement types are: capital city, city, town, village and hamlet.

• Industries can make their manufacturing processes more sustainable and better for the environment by using renewable energy sources, reducing, reusing and recycling and sharing resources. *Identify and explain ways that people can improve the production of products without compromising the needs of future generations.* • Major cities around the world include London in the UK, New York in the USA, Shanghai in China, Istanbul in Turkey, Moscow in Russia, Manila in the Philippines, Lagos in Nigeria, Nairobi in Kenya, Baghdad in Iraq, Damascus in Syria and Mecca in Saudi Arabia. *Name, locate and describe major world cities.* • Relative location is where something is found in comparison with other features. *Describe the relative location of cities, counties or geographical features in the UK in relation to other places or geographical features.* • The Prime (or Greenwich) Meridian is an imaginary line that divides the Earth into eastern and western hemispheres. The time at Greenwich is called Greenwich Mean Time (GMT). Each time zone that is 15 degrees to the west of Greenwich is another hour earlier than GMT. Each time zone 15 degrees to the east is another hour later. *Identify the location and explain the function of the Prime (or Greenwich) Meridian and different time zones (including day and night).* • 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. *Use compass points, grid references and scale to interpret maps, including Ordnance Survey maps, with accuracy.* • The geographical term 'relief' describes the difference between the highest and		

lowest elevations of an area. Relief maps show the contours of land based on shape and height. Contour lines show the elevation of the land, joining places of the same height above sea level. They are usually an orange or brown colour. Contour lines that are close together represent ground that is steep. Contour lines that are far apart show ground that is gently sloping or flat. *Identify elevated areas, depressions and river basins on a relief map.* • The seven continents (Africa, Antarctica, Asia, Australia, Europe, North America and South America) vary in size, shape, location, population and climate. *Identify and describe the similarities and differences in physical and human geography between continents.* • Settlements come in many different sizes and these can be ranked according to their population and the level of services available. A settlement hierarchy includes hamlet, village, town, city and large city. *Describe how the characteristic of a settlement changes as it gets bigger (settlement hierarchy).*		
Prior Learning	**Key Question(s):**	**Future Learning**
• Human features can be interconnected by function, type and transport links. • An atlas is a collection of maps and information that shows geographical features, topography, boundaries, climatic, social and economic statistics of an area. • Secondary data includes information gathered by geographical reports, surveys, maps, research, books and the internet. • 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	• What does the scale on a map represent? • Is time the same in all countries around the world? • What are Capital cities used for? • What is a biome? Can you name them? • What types of settlement are there?	• The distribution of and access to natural resources, cultural influences and economic activity are significant factors in community life in a settlement. • Satellite images are photographs of Earth taken by imaging satellites. • Data helps us to understand patterns and trends but sometimes there can be variations due to numerous factors (human error, incorrect equipment, different time frames, different sites, environmental conditions and unexplained anomalies). • 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.

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. • The environment produces natural resources. Humans use some natural resources to make energy. Some natural resources cannot be replaced, like coal or oil. They are non-renewable. Some, like wind or flowing water, are renewable sources of energy. • The North American continent includes the countries of the USA, Canada and Mexico as well as the Central American countries of Guatemala, Honduras, Nicaragua, Costa Rica and Panama. The South American continent includes the countries of Brazil, Argentina, Chile, Colombia, Peru, Venezuela, Uruguay, Ecuador, Bolivia and Paraguay. • 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. • Topography is the arrangement of the natural and artificial physical features of an area. • The Tropic of Cancer is 23 degrees north of the equator and Tropic of Capricorn is 23 degrees south of the equator. • The four cardinal directions are north (N), east (E), south (S) and west (W), which are at 90° angles on the compass rose. The four intercardinal (or ordinal) directions are halfway between the cardinal directions: north-east (NE), south-east (SE), south-west (SW) and north-west (NW). • 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		• Natural resource management (NRM) manages natural resources, including water, land, soil, plants and animals. It recognises that people rely on healthy landscapes to live and aims to create sustainable ways of using land now and in the future. • Geographical interconnections are the ways in which people and things are connected. Explain interconnections between two or more areas of the world. • A geographical pattern is the arrangement of objects on the Earth's surface in relation to one another. • 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. • 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. • 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.

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. • 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. • Rivers, seas and oceans can transform a landscape through erosion, deposition and transportation.		
Teaching Ideas		

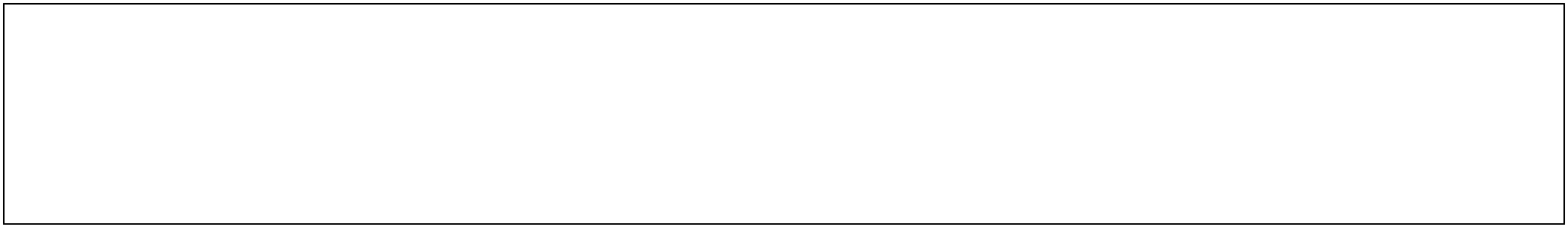
Year 5/6 – Cycle A – Geography (Sow, Grow and Farm)		
National Curriculum Objectives	**Sticky Knowledge**	**Vocabulary**
• Transport networks can be tangible, such as rails, roads or canals, or intangible, such as air and sea corridors. These networks link places together and allow for the movement of 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. *Describe and explain the location, purpose and use of transport networks across the UK and other parts of the world.* • 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. *Describe in detail the different types of agricultural land use in the UK.* • Changes to the weather and climate (temperature, weather patterns and precipitation) can affect land use. Farmers living in different countries adapt their farming practices to suit their local climate and landscape. *Explain how the climate affects land use.* • Soil fertility, drainage and climate influence the placement and success of agricultural land. *Describe how soil fertility, drainage and climate affect agricultural land use.*	• Farming is the business of growing crops and rearing livestock; there is arable farming, pastoral farming and mixed farming. • During the Second World War there were food shortages and rationing. The Dig for Victory campaign encouraged people to grown fruit and vegetables on open land. • Plants can reproduce in one or two ways: sexual reproduction and asexual reproduction. • The world is divided into five main climate zones: polar, temperate, Mediterranean, desert, tropical zones and mountains. • Consumers in the UK have come to expect that they can buy most foods all year round, regardless of the season meaning food is transported all over the globe creating food miles.	Carpel, climate, fertiliser, irrigation, livestock, pesticide, stamen. I can statements: • I can describe farming as the business of growing crops and rearing livestock; there is arable farming, pastoral farming and mixed farming. • I can explain that during the Second World War there were food shortages and rationing. The Dig for Victory campaign encouraged people to grown fruit and vegetables on open land. • I can identify that plants can reproduce in one or two ways: sexual reproduction and asexual reproduction. • I can identify that the world is divided into five main climate zones: polar, temperate, Mediterranean, desert, tropical zones and mountains. • I can explain that consumers in the UK have come to expect that they can buy most foods all year round, regardless of the season meaning food is transported all over the globe creating food miles.

• Geographical data, such as demographics or economic statistics, can be used as evidence to support conclusions. *Summarise geographical data to draw conclusions.* • 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. *Construct or carry out a geographical enquiry by gathering and analysing a range of sources.* • 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. *Explain how the topography and soil type affect the location of different agricultural regions.* • 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. *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.* • The Earth has five climate zones: desert, Mediterranean, polar, temperate and tropical. Mountains have variable climates depending on altitude. 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. *Name and locate the world's biomes, climate zones and vegetation belts and explain their common characteristics.* • Relative location is where something is found in comparison with other features. *Describe the relative location of cities, counties or geographical features in the UK in relation to other places or geographical features.* • 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. *Use compass points, grid references and scale to interpret maps, including Ordnance Survey maps, with accuracy.* • The seven continents (Africa, Antarctica, Asia, Australia, Europe, North America and South America) vary in size, shape, location, population and climate. *Identify and describe the similarities and differences in physical and human geography between continents.* • 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. *Identify some of the problems of farming in a developing country and report on ways in which these can be supported.*		
Prior Learning	**Key Question(s):**	**Future Learning**
• Human features can be interconnected by function, type and transport links. • Land uses include agricultural, recreational, housing and industry. Water systems are used for transport, industry, leisure and power. • Climatic variation describes the changes in weather patterns or the average weather conditions of a country or continent.	• What is farming? What types of farming are there? • What happened to food growing during the Second World War? • How do plants reproduce? • How is the world divided up into based on climate? • What are food miles and why are they used?	• The distribution of and access to natural resources, cultural influences and economic activity are significant factors in community life in a settlement. • Natural resources include food, minerals (aluminium, sandstone and oil) energy sources (water, coal and gas) and water. • Climate and extreme weather can affect the size and nature of settlements, shelters and buildings, diet, lifestyle (settled or nomadic), jobs, clothing, transport and transportation links and the availability of natural resources.

• 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. Use specific geographical vocabulary and diagrams to explain the water cycle. • Secondary data includes information gathered by geographical reports, surveys, maps, research, books and the internet. • Fieldwork techniques, such as sketch maps, data collection and digital technologies, can provide evidence to support and answer a geographical hypothesis. • Rivers transport materials in four ways. Solution is when minerals are dissolved and carried in the water. Suspension is when fine, light material is carried. Saltation is when small pebbles and stones are carried along the riverbed. Traction is when large boulders and rocks are rolled along the riverbed. • Different types of soil include clay, sandy, silty and loamy. • 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. • 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		• Physical processes that can affect a landscape include erosion by wind, water or ice; the deposition of stone and silt by water and ice; land movement, such as landslides and tectonic activity, such as earthquakes or volcanic eruptions. • Data helps us to understand patterns and trends but sometimes there can be variations due to numerous factors (human error, incorrect equipment, different time frames, different sites, environmental conditions and unexplained anomalies). • Representing, analysing, concluding, communicating, reflecting and responding are helpful strategies to answer geographical questions. • The polar oceans are significantly colder than other world oceans. This influences the presence of sea ice, glaciers and icebergs. Explain how the presence of ice makes the polar oceans different to other oceans on Earth. • 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. • A geographical pattern is the arrangement of objects on the Earth's surface in relation to one another. • 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. • 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. • North America, Europe and East Asia are the main industrial regions of the world due to a range of factors (access to raw

mountains, which are usually covered in ice and snow and don't support any life. • ignificant 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. • Topography is the arrangement of the natural and artificial physical features of an area. • The four cardinal directions are north (N), east (E), south (S) and west (W), which are at 90° angles on the compass rose. The four intercardinal (or ordinal) directions are halfway between the cardinal directions: north-east (NE), south-east (SE), south-west (SW) and north-west (NW). • 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. • 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.		materials, transportation, fresh water, power and labour supply).
Teaching Ideas		



Year 5/6 – Cycle B – Geography (Our Changing World)		
National Curriculum Objectives	**Sticky Knowledge**	**Vocabulary**
• The distribution of and access to natural resources, cultural influences and economic activity are significant factors in community life in a settlement. *Explain how humans function in the place they live.* • Climate and extreme weather can affect the size and nature of settlements, shelters and buildings, diet, lifestyle (settled or nomadic), jobs, clothing, transport and transportation links and the availability of natural resources. *Evaluate the extent to which climate and extreme weather affect how people live.* • Physical processes that can affect a landscape include erosion by wind, water or ice; the deposition of stone and silt by water and ice; land movement, such as landslides and tectonic activity, such as earthquakes or volcanic eruptions. *Describe the physical processes, including weather, that affect two different locations.* • Satellite images are photographs of Earth taken by imaging satellites. *Use satellite imaging and maps of different scales to find out geographical information about a place.* • Data helps us to understand patterns and trends but sometimes there can be variations due to numerous factors (human error, incorrect equipment, different time frames, different sites, environmental conditions and unexplained anomalies). *Analyse and present increasingly complex data, comparing data from different sources and suggesting why data may vary.* • Representing, analysing, concluding, communicating, reflecting and responding are helpful strategies to answer	• The time at the Prime Meridian is known as Greenwich Mean Time, abbreviated to GMT. • Times around the world are calculated based from the Prime Meridian. • The climate is the usual weather conditions that occur in a place over a long time and climate change has increased the Earth's temperature by 1°. • Climate change is causing extreme weather events worldwide, including severe storms, cyclones, floods, sandstorms, heatwaves and droughts. • Countries worldwide export and import fossil fuels, metal ores, food and manufactured products, what they export depends on the availability of what they have.	Export, import, global warming, topography. I can statements: • I can describe the time at the Prime Meridian is known as Greenwich Mean Time, abbreviated to GMT. • I can explain that times around the world are calculated based from the Prime Meridian. • I can explain that the climate is the usual weather conditions that occur in a place over a long time and climate change has increased the Earth's temperature by 1°. • I can describe Climate change as causing extreme weather events worldwide, including severe storms, cyclones, floods, sandstorms, heatwaves and droughts. • I can explain that Countries worldwide export and import fossil fuels, metal ores, food and manufactured products, what they export depends on the availability of what they have.

geographical questions. *Ask and answer geographical questions and hypotheses using a range of fieldwork and research techniques.* • 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. *Explain how climate change affects climate zones and biomes across the world.* • Natural resource management (NRM) manages natural resources, including water, land, soil, plants and animals. It recognises that people rely on healthy landscapes to live and aims to create sustainable ways of using land now and in the future. *Explain the significance of human-environment relationships and how natural resource management can protect natural resources to support life on Earth.* • A geographical pattern is the arrangement of objects on the Earth's surface in relation to one another. *Describe patterns of human population growth and movement, economic activities, space, land use and human settlement patterns of an area of the UK or the wider world.* • 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. *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). • 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. *Use lines of longitude and latitude or grid references to find the position of different geographical areas and features.* • 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. *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.* • North America, Europe and East Asia are the main industrial regions of the world due to a range of factors (access to raw materials, transportation, fresh water, power and labour supply). *Name, locate and explain the distribution of significant industrial, farming and exporting regions around the world.*		
Prior Learning	**Key Question(s):**	**Future Learning**
• 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	• What is the Prime Meridian? • How are times worked out around the world? • What is climate and how has the Earth's temperature changed due to climate change? • What is climate change causing? • What is trade around the world like?	•

finish, such as airports, bus stations, ferry terminals or railway stations. • Changes to the weather and climate (temperature, weather patterns and precipitation) can affect land use. Farmers living in different countries adapt their farming practices to suit their local climate and landscape. • Soil fertility, drainage and climate influence the placement and success of agricultural land. • 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. • Geographical data, such as demographics or economic statistics, can be used as evidence to support conclusions. • 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. • The Earth has five climate zones: desert, Mediterranean, polar, temperate and tropical. Mountains have variable climates depending on altitude. 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. • Industries can make their manufacturing processes more sustainable and better for the environment by using renewable energy sources, reducing, reusing and recycling and sharing resources. • Relative location is where something is found in comparison with other features.		

• The Prime (or Greenwich) Meridian is an imaginary line that divides the Earth into eastern and western hemispheres. The time at Greenwich is called Greenwich Mean Time (GMT). Each time zone that is 15 degrees to the west of Greenwich is another hour earlier than GMT. Each time zone 15 degrees to the east is another hour later. • 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. • The geographical term 'relief' describes the difference between the highest and lowest elevations of an area. Relief maps show the contours of land based on shape and height. Contour lines show the elevation of the land, joining places of the same height above sea level. They are usually an orange or brown colour. Contour lines that are close together represent ground that is steep. Contour lines that are far apart show ground that is gently sloping or flat. • 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.		

Teaching Ideas

Year 5/6 – Cycle B – Geography (Frozen Kingdoms)		
National Curriculum Objectives	**Sticky Knowledge**	**Vocabulary**
• The distribution of and access to natural resources, cultural influences and economic activity are significant factors in community life in a settlement. *Explain how humans function in the place they live.* • Natural resources include food, minerals (aluminium, sandstone and oil) energy sources (water, coal and gas) and water. *Describe the distribution of natural resources in an area or country.* • Climate and extreme weather can affect the size and nature of settlements, shelters and buildings, diet, lifestyle (settled or nomadic), jobs, clothing, transport and transportation links and the availability of natural resources. *Evaluate the extent to which climate and extreme weather affect how people live.* • Satellite images are photographs of Earth taken by imaging satellites. *Use satellite imaging and maps of different scales to find out geographical information about a place.* • Representing, analysing, concluding, communicating, reflecting and responding are helpful strategies to answer geographical questions. *Ask and answer geographical questions and hypotheses using a range of fieldwork and research techniques.* • The polar oceans are significantly colder than other world oceans. This influences the presence of sea ice, glaciers and icebergs. *Explain how the presence of ice makes the polar oceans different to other oceans on Earth.* • 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	The Earth has two polar regions: The Arctic Circle in the Northern Hemisphere and the Antarctic Circle in the Southern Hemisphere. Much of the polar regions is covered with snow and ice all year round and their features include glaciers, ice fields and icebergs. The Arctic region is home to small populations of people and an amazing variety of plants and animals including the polar bear, Arctic Fox and walrus. The Antarctic region has a rich sea life, including the emperor penguin, humpback whale and leopard seal – no people live permanently there. Human activities such as burning fossil fuels and deforestation are releasing gases into the atmosphere that are causing the temperature of the Earth to rise and its climate to change.	Antarctic Circle, Arctic Circle, boreal forest, climate, horizon, indigenous, native, North Pole, polar day, polar night, precipitation, South Pole, tundra. I can statements: • I can identify that the Earth has two polar regions: The Arctic Circle in the Northern Hemisphere and the Antarctic Circle in the Southern Hemisphere. • I can explain that much of the polar regions is covered with snow and ice all year round and their features include glaciers, ice fields and icebergs. • I can describe the Arctic region as being the home to small populations of people and an amazing variety of plants and animals including the polar bear, Arctic Fox and walrus. • I can describe the Antarctic region as having a rich sea life, including the emperor penguin, humpback whale and leopard seal – no people live permanently there. • I can explain human activities such as burning fossil fuels and deforestation are releasing gases into the atmosphere that are causing the temperature of the Earth to rise and its climate to change.

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. *Compare and describe physical features of polar landscapes.* • 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. *Explain how climate change affects climate zones and biomes across the world.* • 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. *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).* • 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. *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.* • 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. *Describe the climatic similarities and differences between two regions.* • North America, Europe and East Asia are the main industrial regions of the world due to a range of factors (access to raw materials, transportation, fresh water, power and labour supply). *Name, locate and explain the distribution of significant industrial, farming and exporting regions around the world.* • 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. *Present a detailed account of how an industry, including tourism, has changed a place or landscape over time.*		
Prior Learning	**Key Question(s):**	**Future Learning**
• 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. • 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.	• What are the two polar regions on Earth and where are they? • Can you describe the polar regions? • How would you describe the Arctic region? • How would you describe the Antarctic region? • How would you describe climate change?	•

• Changes to the weather and climate (temperature, weather patterns and precipitation) can affect land use. Farmers living in different countries adapt their farming practices to suit their local climate and landscape. • 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. • 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. • 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. • 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. • The Earth has five climate zones: desert, Mediterranean, polar, temperate and tropical. Mountains have variable climates depending on altitude. 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. • The Prime (or Greenwich) Meridian is an imaginary line that divides the Earth into eastern and western hemispheres. The		

time at Greenwich is called Greenwich Mean Time (GMT). Each time zone that is 15 degrees to the west of Greenwich is another hour earlier than GMT. Each time zone 15 degrees to the east is another hour later. • The geographical term 'relief' describes the difference between the highest and lowest elevations of an area. Relief maps show the contours of land based on shape and height. Contour lines show the elevation of the land, joining places of the same height above sea level. They are usually an orange or brown colour. Contour lines that are close together represent ground that is steep. Contour lines that are far apart show ground that is gently sloping or flat. • The seven continents (Africa, Antarctica, Asia, Australia, Europe, North America and South America) vary in size, shape, location, population and climate. • 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. • Settlements come in many different sizes and these can be ranked according to their population and the level of services available. A settlement hierarchy includes hamlet, village, town, city and large city.		

Teaching Ideas