

## Geography planning

This document sets out an overview of the key sticky knowledge/skills taught through each geography unit



### Our changing world (1&2)

#### Picasso - Year 5/6

#### What are the key geographical features of the Earth?

##### Sticky Knowledge (Substantive)

- 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.
- Latitude and longitude help identify locations in relation to the equator and the Prime Meridian.
- Latitude and longitude are measured in degrees.
- There are five major lines of latitude: Equator, Tropic of Cancer, Tropic of Capricorn, Arctic Circle and Antarctic Circle.

##### Disciplinary Knowledge/skill

- 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.
- Use lines of longitude and latitude or grid references to find the position of different geographical areas and features.

#### What is a 'time zone'?

##### Sticky Knowledge (Substantive)

- The world is split into 24 meridians 15° apart because there is 24 hours in a day and 360° in one rotation.
- The time at Greenwich is called Greenwich Mean Time (GMT). The times are calculated from GMT. Times to the east of the Prime Meridian are ahead of GMT (GMT+), times to the west are behind GMT (GMT-).

##### Disciplinary Knowledge/skill

- Identify the position and explain the significance of the Prime (or Greenwich) Meridian and time zones (including day and night).

#### How does the scale on a map help me to work out the distance between things?

##### Sticky Knowledge (Substantive)

- A scale on a map is written as a ratio.
- Distances on maps can be measured using grid lines, the scale, a ruler, a finger, string and the scale bar.

##### Disciplinary Knowledge/skill

- Use satellite imaging and maps of different scales to find out about key geographical features of the world.

#### Can I describe grid references, contours and symbols on a map?

##### Sticky Knowledge (Substantive)

- Ordnance survey maps use four and six grid references to locate a feature or place.
- Contour lines join points of equal height above sea level and show an area's terrain.
- Ordnance Survey symbols are used to represent different features on the landscape.

##### Disciplinary Knowledge/skill

- 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.

#### What are the earth's natural resources?

##### Sticky Knowledge (Substantive)

##### Disciplinary Knowledge/skill

<ul style="list-style-type: none"> <li>- Earth's natural resources provide everything we need to survive, such as air, water and food. Other natural resources, such as ores and fossil fuels, have also become an essential part of everyday life.</li> <li>- Some of these resources are being used up by humans -</li> </ul>	
<b>What is climate change?</b>	
<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- The climate is the usual weather conditions that occur in a place over a long time.</li> <li>- Climate change affects the water, temperature, greenhouse gases and weather of a biome.</li> <li>- The four main causes of climate change are; burning fossil fuels, deforestation, overpopulation and rearing livestock.</li> </ul>	<ul style="list-style-type: none"> <li>- Explain how climate change affects climate zones and biomes across the world.</li> </ul>
<b>How does climate change affect the weather and people?</b>	
<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- Climate change can intensify natural weather events such as storms, heatwaves, floods, sandstorms and droughts to make them more extreme and more destructive.</li> </ul>	<ul style="list-style-type: none"> <li>- Evaluate the extent to which climate and extreme weather affect how people live.</li> </ul>
<b>What is a trade link?</b>	
<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- Countries worldwide trade with each other. They export and import goods.</li> <li>- 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). <i>Links to D&amp;T 'Food around the world'</i></li> </ul>	<ul style="list-style-type: none"> <li>- Name, locate and explain the distribution of significant industrial, farming and exporting regions around the world.</li> </ul>

<b>Frozen Kingdoms</b> <b>Picasso - Year 5/6</b>	
<b>Where in the world are the 'Frozen Kingdoms'?</b>	
<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- 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.</li> <li>- Latitude and longitude help identify locations in relation to the equator and the Prime Meridian.</li> <li>- Latitude and longitude are measured in degrees.</li> <li>- There are five major lines of latitude: Equator, Tropic of Cancer, Tropic of Capricorn, Arctic Circle and Antarctic Circle.</li> </ul>	<ul style="list-style-type: none"> <li>- 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).</li> </ul>
<b>What is the climate like in the polar regions?</b>	
<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- The Arctic region is sea surrounded by land and the Antarctic is land surrounded by sea.</li> <li>- The Arctic region is an area made up of many parts of the world. It is one of the coldest and driest places on Earth.</li> <li>- People originally from the Arctic are known as indigenous – a well-known group are called Inuits.</li> </ul>	<ul style="list-style-type: none"> <li>- Identify the position and explain the significance of the Arctic and Antarctic Circles.</li> </ul>

<ul style="list-style-type: none"> <li>- Antarctica is a continent and is the coldest and windiest place on earth and so there are very few land animals and plants.</li> <li>- No human has ever lived in the Antarctic.</li> </ul>	<ul style="list-style-type: none"> <li>- Describe the climatic similarities and differences between two regions.</li> </ul>
<b>What is a polar day and a polar night?</b>	
<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- The polar regions experience the largest differences in daylight, as the effect of Earth's tilt is much more pronounced.</li> <li>- When the Earth tilts towards the Sun it create near-constant daylight, known as polar day or Midnight Sun.</li> <li>- When the Earth tilts away from the Sun it creates near-constant darkness, known as polar night.</li> </ul> <p><i>Science link – Earth and Space Cycle A Autumn B</i></p>	<ul style="list-style-type: none"> <li>- Explain the reasons for the polar night and polar day.</li> </ul>
<b>How are polar oceans different to other oceans on Earth?</b>	
<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- The Arctic Ocean is located around the North Pole within the Arctic Circle within the Northern Hemisphere.</li> <li>- The Southern Ocean surrounds the continent of Antarctica and the Antarctic Circle in the Southern Hemisphere.</li> <li>- The Arctic ocean is the smallest and shallowest of the Earth's five oceans and the Southern Ocean is the second smallest.</li> <li>- The polar oceans are significantly colder than other world oceans. Sea ice, glaciers and icebergs are typical physical features of both oceans unlike the other oceans of the Earth.</li> </ul>	<ul style="list-style-type: none"> <li>- Ask and answer geographical questions.</li> <li>- Explain how the presence of ice makes the polar oceans different to other oceans on Earth.</li> </ul>
<b>What is the landscape like in the polar regions?</b>	
<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- The six main physical features of a polar landscape are; iceberg, glacier, mountain, ice field, tundra and boreal forest.</li> </ul>	<ul style="list-style-type: none"> <li>- Compare and describe physical features of polar landscapes.</li> </ul>
<b>What is climate change and how does it affect the polar regions?</b>	
<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- Climate change effects the water, temperature, greenhouse gases and weather of a biome.</li> <li>- The four main causes of climate change are: burning fossil fuels, deforestation, habitat destruction, overpopulation and rearing livestock.</li> </ul>	<ul style="list-style-type: none"> <li>- Explain how climate change affects climate zones and biomes across the world.</li> </ul>
<b>What are natural resources and how are they used by us?</b>	
<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- Natural resources include food, minerals (aluminium, sandstone and oil) energy sources (water, coal and gas) and water.</li> <li>- The Arctic is incredibly rich in natural resources. This includes oil and gas, metals and minerals, fish, wood and freshwater and hydropower.</li> </ul>	<ul style="list-style-type: none"> <li>- Describe the natural resources in an area or country.</li> </ul>
<b>Who lives in the Arctic and what is life like?</b>	
<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>

<ul style="list-style-type: none"> <li>- Climate and extreme weather can affect the size and nature of settlements, shelters and buildings, diet, lifestyle, jobs, clothing, transport and transportation links and the availability of natural resources.</li> <li>- The distribution of and access to natural resources, cultural influences and economic activity are significant factors in community life in a settlement.</li> </ul>	<ul style="list-style-type: none"> <li>- Explain how humans function in the place they live.</li> </ul>
<b>Should tourists visit Antarctica?</b>	
<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- 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.</li> </ul>	<ul style="list-style-type: none"> <li>- Ask and answer geographical questions and hypotheses using a range of fieldwork and research techniques (including analysing information, drawing conclusions and communicating).</li> </ul>

## Investigating Our World (1&2)

### Picasso - Year 5/6

#### How do we use ordnance survey maps?

<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- We can use map symbols, six-figure grid references and compass directions to analyse and compare places and features on Ordnance Survey and other maps.</li> <li>- Cardinal and inter-cardinal compass points can be used to describe the relationship of features to each other.</li> </ul>	<ul style="list-style-type: none"> <li>- Analyse and compare a place, or places, using aerial photographs, atlases and maps.</li> <li>- Use compass points, grid references and scale to interpret maps, including Ordnance Survey maps, with accuracy.</li> <li>- Scale is the relationship between the size of an object on a map and its size in real life.</li> <li>- Follow a route in our local area using maps and compass points.</li> </ul>

#### What is a 'contour line'?

<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- The geographical term 'relief' describes the difference between the highest and lowest elevations of an area.</li> <li>- Contour lines show the elevation of the land, joining places of the same height above sea level.</li> <li>- 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.</li> </ul>	<ul style="list-style-type: none"> <li>- Identify elevated areas, depressions and river basins on a relief map.</li> </ul>

#### What is a 'time zone'?

<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- The Prime (or Greenwich) Meridian is an imaginary line dividing the Earth into eastern and western hemispheres.</li> <li>- The time at Greenwich is called Greenwich Mean Time (GMT).</li> <li>- Each time zone that is 15 degrees to the west of Greenwich is another hour earlier than GMT and each time zone 15 degrees to the east is another hour later.</li> </ul>	<ul style="list-style-type: none"> <li>- Identify the location and explain the function of the Prime (or Greenwich) Meridian and different time zones (including day and night).</li> </ul>

### What is a 'climate zone'?

#### Sticky Knowledge (Substantive)

- Climate zones are areas with distinct climates, weather patterns, latitude, plants and animals.

#### Disciplinary Knowledge/skill

- Name and locate the world's biomes, climate zones and vegetation belts and explain their common characteristics.

### What is a 'vegetation belt'?

#### Sticky Knowledge (Substantive)

- Vegetation belts are areas where certain species of plant grow.

#### Disciplinary Knowledge/skill

- Name and locate the world's biomes, climate zones and vegetation belts and explain their common characteristics.

### What is a biome?

#### Sticky Knowledge (Substantive)

- Biomes are large areas that share similar climates, vegetation belts and animal species. They also include aquatic areas.

#### Disciplinary Knowledge/skill

- Name and locate the world's biomes, climate zones and vegetation belts and explain their common characteristics.

### Can we use data to tell us about the world?

#### Sticky Knowledge (Substantive)

- The seven continents vary in size, shape, location, population and climate.  
- Demographic and economic data can help geographers to draw conclusions about a place.

#### Disciplinary Knowledge/skill

- Identify and describe the similarities and differences in physical and human geography between continents.  
- Summarise geographical data to draw conclusions.

### What do we know about capital cities?

#### Sticky Knowledge (Substantive)

- Name, locate and describe major world cities.

#### Disciplinary Knowledge/skill

- Name and locate some world cities.

### What is a motorway and do we need them?

#### Sticky Knowledge (Substantive)

- A motorway is a main road built for fast travel over long distances, allowing people and goods to move quickly around the country.  
- In the UK, motorways run north to south and east to west across the country.  
- Motorways connect towns and cities and provide transport links between other transport networks for example airports and ferry ports.

#### Disciplinary Knowledge/skill

- Describe and explain the location, purpose and use of transport networks across the UK. (Link to Year 3/4 project Interconnected World about railway networks and waterways)

### What is a settlement and how can they be grouped/described?

#### Sticky Knowledge (Substantive)

- Settlement hierarchy is a way of grouping and ranking settlements according to their type, significance, number and size.  
- A hamlet is at the bottom of the hierarchy and a capital city at the top.

#### Disciplinary Knowledge/skill

- Describe how the characteristic of a settlement changes as it gets bigger (settlement hierarchy).

## What typical features and evidence can we find to identify and classify our locality at school?

Sticky Knowledge (Substantive)	Disciplinary Knowledge/skill
<ul style="list-style-type: none"> <li>- Name some typical features found in a village settlement.</li> <li>- Collect data about the local area including population, local amenities, housing, transport links etc.</li> </ul> <p><i>Links to Local history – train crash</i></p>	<ul style="list-style-type: none"> <li>- Use evidence found in photographs, maps, data etc. to draw conclusions about a local area.</li> </ul>

## Sow, Grow and Farm Picasso - Year 5/6

### What types of farming do we have in the UK and why are they different?

Sticky Knowledge (Substantive)	Disciplinary Knowledge/skill
<ul style="list-style-type: none"> <li>- Agricultural land use in the UK can be divided into three main types, arable (growing crops), pastoral (livestock) and mixed (arable and pastoral).</li> <li>- Farming is affected by the climate (typical weather), topography (shape of the land) and soil type of the farm's location.</li> </ul>	<ul style="list-style-type: none"> <li>- Describe in detail the different types of agricultural land use in the UK.</li> <li>- Explain how the topography and soil type affect the location of different agricultural regions.</li> </ul>

### Can we use maps to find farms in our local area?

Sticky Knowledge (Substantive)	Disciplinary Knowledge/skill
<ul style="list-style-type: none"> <li>- We can use Ordnance Survey maps of our local area to find out about local farm land.</li> </ul>	<ul style="list-style-type: none"> <li>- Use information/evidence from the map to predict what type of farms are in our local area.</li> <li>- Use contour lines, map symbols and geographical features to explain their reasoning.</li> </ul>

### What is the impact of modern farming?

Sticky Knowledge (Substantive)	Disciplinary Knowledge/skill
<ul style="list-style-type: none"> <li>- Arable (growing crops), pastoral (raising livestock), mixed (arable and pastoral) are the three main types of farming in the UK.</li> <li>- Intensive farming in the past has resulted in the loss of habitats.</li> </ul>	<ul style="list-style-type: none"> <li>- Research and describe different farming practices in the UK and how these can have positive and negative effects on natural habitats.</li> </ul>

### Why is farmland where it is? (Visit to a local farm)

Sticky Knowledge (Substantive)	Disciplinary Knowledge/skill
<ul style="list-style-type: none"> <li>- Soil fertility, drainage and climate influence the placement and success of agricultural land.</li> </ul>	<ul style="list-style-type: none"> <li>- Describe how soil fertility, drainage and climate affect agricultural land use.</li> </ul>

### What is a climate zone and how do they affect farming around the world?

Sticky Knowledge (Substantive)	Disciplinary Knowledge/skill
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- Climate zones are areas with distinct climates, weather patterns, latitude, plants and animals. Each of these affect the type of farming/crops in the region.	- Name and locate the world's biomes, climate zones and vegetation belts and explain their common characteristics.
<b>What is farming like in North and South America?</b>	
<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- North America is broadly categorised into six major biomes.</li> <li>- South America includes a broad equatorial zone in the north to a narrow sub-Arctic zone in the south.</li> <li>- Changes to the weather and climate (temperature, weather patterns and precipitation) can affect land use.</li> </ul>	<ul style="list-style-type: none"> <li>- 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.</li> <li>- Explain how the climate affects land use.</li> </ul>
<b>Why is California a good place to grow citrus fruit?</b>	
<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- Soil fertility, drainage and climate influence the placement and success of agricultural land.</li> <li>- The soil and climate of California make it ideal for growing citrus fruits.</li> </ul>	<ul style="list-style-type: none"> <li>- Describe how soil fertility, drainage and climate affect agricultural land use.</li> </ul>
<b>Is it easy for farmers in Peru who grow coffee?</b>	
<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- Developing countries such as Peru offer farming opportunities due to a tropical climate and rich soils but also face challenges such as lack of farming technology, labour shortages, fluctuating prices and transport issues.</li> </ul>	<ul style="list-style-type: none"> <li>- Identify some of the problems of farming in a developing country and report on ways in which these can be supported.</li> </ul>
<b>How far has food travelled?</b>	
<b>Sticky Knowledge (Substantive)</b>	<b>Disciplinary Knowledge/skill</b>
<ul style="list-style-type: none"> <li>- Transport networks link places together and allow for the movement of people and goods.</li> <li>- The journey that food travels from producer to consumer is measured in food miles.</li> </ul>	<ul style="list-style-type: none"> <li>- Describe and explain the location, purpose and use of transport networks across the UK and other parts of the world.</li> </ul>