



# St. Stephen's C.E. Primary School

## Aspire to Greatness



For we are the handiwork of God, created in Christ Jesus to do good works, which God prepared in advance for us to do." Ephesians 2:10

### LKS2 – Cycle A – Summer – Global Zones – Longitude and Latitude

#### Intent

The children will learn about lines of Latitude and Longitude. This will include locating and having an understanding of the climatic zones, biomes and time zones of the world and the physical and human features that are determined by these zones. This will be supported by mapping skills stated in the grids below.

**Key vocabulary :** Latitude, longitude , compass, grid referencing, the equator, tropic of Cancer, tropic of Capricorn, Arctic Circle, Antarctic Circle, countries, continents, seas, oceans, Tropic Zone, Temperate Zone , Frigid Zone , biome, ecosystem, Aquatic, desert, forest, grassland, rainforest and tundra , Greenwich, London, Greenwich mean time, Prime Meridian , east and west.

Year 5 Key Learning – Global Zones	Lesson	Assessment
Can describe key aspects of climatic zones	1, 6	
Can describe key aspects of biomes /vegetation zones	2,6	
Can describe key aspects of time zones	4,5,6	
Can 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 night and day )	1,4	
Can use lines of latitude and longitude in an atlas or on a globe	1-6	
Can use a wide range of maps, atlases, globes and digital maps to locate countries and features studied	1-6	
Can use 8 cardinal points	1-6	
Can use latitude and longitude in an atlas or on a globe	1-6	
Can use 4 figure coordinates	1-6	
Can describe key features of Greenwich	3,4	
Can use more precise geographical language relating to the physical and human concepts	1-6	
Greater depth – Ask and answer question that are more causal e.g Why is that happening in that place? Could it happen here? what happened in the past to cause that ? How is it likely to change in the future?	1-6	

Year 6 Key Learning – Global Zones	Lesson	Assessment
Can describe and understand key aspects of climatic zones	1	
Can describe and understand key aspects of biomes /vegetation zones	2	

Can describe and understand key aspects of time zones	4,5,6	
Can 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 night and day )	1,4	
Can Interpret and use thematic maps	1,2	
Can use a wide range of maps, atlases, globes and digital maps to locate countries and features studied	1-6	
Can begin to understand the differences between maps	1-6	
Can choose the most appropriate map / globe for a specific purpose	1-6	
Can use 8 cardinal points	1-6	
Can use 6 figure coordinates	1- 6	
Can read and compare map scales	1-6	
Can describe and understand features of Greenwich	3,4	
Can communicate geographical information in a variety of ways including through maps, diagrams, numerical and quantitative skills and writing at increasing length	1-6	
Can use more precise geographical language relating to the physical and human concepts	1-6	
Greater depth – Ask and answer question that are more causal e.g Why is that happening in that place? Could it happen here? what happened in the past to cause that ? How is it likely to change in the future?	1-6	

### **LI : To understand and identify the lines of latitude on a globe**

Autobiography of Sir George Biddell Airy' by George Airy.

Revise locating the USA, the Biomes, the Grand Canyon and deserts from the previous unit.

Learn what lines of Latitude are <https://www.bbc.co.uk/bitesize/topics/zvsfr82/articles/zd4rmfr>

Look at a globe and a world map. Using the map skills in the assessment grid identify the key continents, oceans and seas. Then identify the main lines of latitude – the equator, tropic of cancer, Tropic of Capricorn, Arctic Circle and Antarctic Circle. Identify the countries and seas which it passes

Watch <https://www.youtube.com/watch?v=5tC800xOFEk>

This will tell the children how these main lines of latitude split up the climatic zones

On a blank World map place the continents, oceans , main lines of latitude and climate zones.

Learn about the human and physical features of each climatic zone – Tropic Zone, Temperate Zone and the Frigid / Polar Zone. Research each of these zones

Tropic Zone –

Temperate Zone –

Frigid Zone –

Year 5 - Use differentiated texts and the children answer questions about each of the zone.

Year 6 – Research the different zones and create a class display of the information collected and presented by different groups.

## **L2 : To Know about the six different biomes / vegetation belts in the world**

**Autobiography of Sir George Biddell Airy' by George Airy.**

Revise continents, oceans seas, lines of latitude, eight points of the compass, six figure grid referencing, climate zones and human and physical features of each zone.

Revise what a Biome is ? <https://www.bbc.co.uk/bitesize/topics/z849q6f/articles/zvsp92p>

A natural area of plants and animals with an ecosystem.

Identify the six main biomes on a world map <https://www.twinkl.co.uk/resource/t2-g-327-interactive-world-biomes-map-powerpoint>

Aquatic biome , desert biome, forest biome, grassland biome , rainforest biome and tundra biome

Place on a blank world map.

Know the climatic zones of each Biome – complete the first part of the work sheet

<https://content.twinkl.co.uk/resource/18/e8/t3-g-92-world-biomes-and-climate-zones-activity-sheet-ver-4.pdf?token=exp=1596118353~acl=%2Fresource%2F18%2Fe8%2Ft3-g-92-world-biomes-and-climate-zones-activity-sheet-ver-4.pdf%2A~hmac=728e755f169f0a0fb8dccb8c1df5fed78aa99a4cd3393e7913392a756200127e>

Identify the human and physical features of the different biomes

Aquatic – [https://www.ducksters.com/science/ecosystems/marine\\_biome.php](https://www.ducksters.com/science/ecosystems/marine_biome.php)

Desert – [https://www.ducksters.com/science/ecosystems/desert\\_biome.php](https://www.ducksters.com/science/ecosystems/desert_biome.php)

Forest – [https://www.ducksters.com/science/ecosystems/temperate\\_forest\\_biome.php](https://www.ducksters.com/science/ecosystems/temperate_forest_biome.php)

Grassland-

[https://www.ducksters.com/science/ecosystems/grasslands\\_biome.php#:~:text=Grasslands%20are%20wide%20expanses%20of,summer%20and%20a%20cold%20winter.](https://www.ducksters.com/science/ecosystems/grasslands_biome.php#:~:text=Grasslands%20are%20wide%20expanses%20of,summer%20and%20a%20cold%20winter.)

Rainforest –

[https://www.ducksters.com/science/ecosystems/rainforest\\_biome.php#:~:text=As%20you%20might%20have%20guessed,also%20very%20humid%20and%20warm.](https://www.ducksters.com/science/ecosystems/rainforest_biome.php#:~:text=As%20you%20might%20have%20guessed,also%20very%20humid%20and%20warm.)

Tundra - [https://www.ducksters.com/science/ecosystems/tundra\\_biome.php](https://www.ducksters.com/science/ecosystems/tundra_biome.php)

Year 5 and 6 -Research about the different biomes. Can use a jigsaw approach.

Year 6 - Then complete the second part of the worksheet.

## **L3: To locate Greenwich in London.**

**Share read, 'Autobiography of Sir George Biddell Airy' by George Airy.**

Revise continents, oceans seas, lines of latitude, eight points of the compass, six figure grid referencing, climate zones, biomes and human and physical features of each zone.

On a world map identify the British Isles and London

Look at a map of London and locate Greenwich. Look at images ( on the internet ) and video clips of Greenwich. <https://www.youtube.com/watch?v=gC11Snr0kdo>

Learn about the geography and features of Greenwich ie lying on the banks of the Thames. <https://kids.kiddle.co/Greenwich>

Year 5 – write a poster to promote and persuade people to come to Greenwich

Year 6 - Write a tourist leaflet about Greenwich

#### **L4: know what a line of longitude is**

Share read, 'Autobiography of Sir George Biddell Airy' by George Airy.

Revise continents, oceans seas, lines of latitude, eight points of the compass, six figure grid referencing, climate zones, biomes and human and physical features of each zone. Revise where London and Greenwich are.

Re-cap what they know about lines of latitude and the arctic circle, the tropic of cancer and the equator.

Learn that there are also on a globe lines of longitude.

<https://www.bbc.co.uk/bitesize/topics/zvsfr82/articles/zd4rmfr>

Identify the line of longitude that passes through the UK. Understand that its source is Greenwich in London

Learn the term 'Greenwich mean time'. Learn about the prime meridian.

<https://kids.britannica.com/kids/article/prime-meridian/601382>

Trace the prime meridian over the globe and identify the countries and seas which it passes and make a note of them . Understand that the time is the same in each of those countries.

Year 5 and 6 : Why was Greenwich chosen to be the centre of the Earth?

Year 5 - Make predictions and test simple ideas.

Year 6 - Research and debate the question.

#### **L5: know that lines of longitude are coordinates for navigation**

Share read, 'Autobiography of Sir George Biddell Airy' by George Airy.

Revise continents, oceans seas, lines of latitude, eight points of the compass, six figure grid referencing, climate zones, biomes and human and physical features of each zone. Revise where London and Greenwich are and lines of longitude.

Learn about lines of longitude running from pole to pole. Learn that the lines are spread east and west from the prime meridian.

Ask and answer differentiated questions about countries, features and marine features on different lines of longitude, for example, 30 degrees East and 30 degrees west.

Learn that countries tend to use this to set their times. Learn that 12:00 in one country is at a different time to another country. <https://www.bbc.co.uk/bitesize/topics/zvsfr82/articles/zjk46v4>

Look at a time in the UK, for example, 2pm and look at what time it is in different countries East and West.

Complete time zone work sheet <https://www.tes.com/teaching-resource/time-zones-6419756>

and differentiate where needed.

### **L6: know that some countries have different time zones.**

Share read, 'Autobiography of Sir George Biddell Airy' by George Airy.

Revise continents, oceans seas, lines of latitude, eight points of the compass, six figure grid referencing, climate zones, biomes and human and physical features of each zone. Revise where London and Greenwich are and lines of longitude and time zones

Learn about Russia. Locate it on globes, maps and on atlases. ( using mapping skills from grid )

Look at the lines of latitude and the lines of longitude that pass through Russia. Understand that this means that in one country there are many time zones. Identify and locate different cities in Russia and the different time zones.

Learn that Canada and the USA also have different time zones.

Discuss the question? Would it be better if we all had the same time?

### **Assessment Task**

Share read, 'Autobiography of Sir George Biddell Airy' by George Airy.

Revise continents, oceans seas, lines of latitude, eight points of the compass, six figure grid referencing, climate zones, biomes and human and physical features of each zone. Revise where London and Greenwich are and lines of longitude and time zones

Year 5 - Name the main lines of latitude ,three climatic zones and six biomes

Year 6 – Identify on a map the main lines of latitude, three climatic zones and six biomes

Year 5 – Four figure grid referencing

Year 6 – Six figure grid referencing

Using lines of latitude and longitude, identify some features/places/locations in the oceans such as: Falkland Islands; Hawaii; St Helena; the Cape of Good Hope etc.

<b>Year 5</b>	<b>Working below Age Related Expectations</b>	<b>Working at Age Related Expectations</b>	<b>Working Above Age Related Expectations</b>
<b>Initials of Children</b>			
<b>Percentage</b>			

<b>Year 6</b>	<b>Working below Age Related Expectations</b>	<b>Working at Age Related Expectations</b>	<b>Working Above Age Related Expectations</b>
<b>Initials of Children</b>			
<b>Percentage</b>			