

Mendell Primary School

Aspire Challenge Achieve


Medium Term Plan Geography – Spring Term



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| Year Group: 6 | Term: Spring #2 2022 | Teacher: Dionne Sanati / Sarah Wearing | Subject lead: Amy Harris | Overview: World Maps To be able to use a 6 grid map reference, Longitude, latitude Tropics Cancer, Capricorn Time zones | Key End Points: By the end of this unit children will be able to: - Use a 6 grid map reference to identify a location on a World map - Understand how longitude and latitude are used to locate places - To name and locate the Tropics of Cancer and Capricorn and explain their relevance - To know why different countries can have different time zones | |
| Links to other learning: | Relevant Prior Learning: Y1-Y5 Mapping skills Example – Yr5 capital cities | Relevant Future Learning: Y7 - | High Quality Text: | Risk Assessment: | Misconceptions: Sense of scale of the size of the Americas – pupils may think they are not much bigger than the UK from comparing them on a world map. The climate of North/South America is the same – there is great variation within and between continents. | Teacher CPD: - Digimaps webinar: https://youtu.be/1BqiSSOyRPs - CPD notes found in resources folder |

| <u>Learning Intention</u> | <u>Lesson Outline (key questions in colour)</u> | <u>Resources</u> | <u>Vocabulary</u> | <u>Lowest 20% Adaptations</u> |
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| 1 I can use a 6 digit grid reference to locate places within the UK | <p>This is a Geography lesson. Geography is the study of places and relationships between people and their environments.</p> <p>Explain to the pupils that the skills we are going to learn today are how to use atlases, globes and maps that have a range of scales to help us think like a geographer and locate key places on maps of the UK.</p> <p>Ask the children to explain how we use a 4-grid map reference (taught in Yr3). Show the area around school using Digimaps (ensure zoom level is set to only show 4 grid reference). All Ordnance Survey (OS) maps have a grid overlay which usually shows a 1km square. These grids are numbered. The numbers running West to East on the map are called Eastings and the numbers that run South to North are called Northings. The first two digits of the 4-grid reference are the Easting and the second two digits are the Northings (remember the phrase 'Along the corridor and up the stairs'). This grid reference shows the bottom left corner of the square.</p> <p>Ask the children what they think would change if we were to use a 6-grid reference instead. Each square is now broken down further into a 10x10 grid. Why do the children think we might use a 6 grid rather than a 4 grid? This extra number helps us to pinpoint a location on the map to within 100m rather than a 1km square.</p> <p>Using 6 figure grid references is for pinpointing a particular feature accurately, but how do we know where in the country to begin looking? The National Grid splits the country into much bigger squares (each of which is 100km across). These squares are identified using 2 letters (See resources PowerPoint). Challenge the children to find the National Grid letters for the four capital cities of the UK (recap prior learning from Y1). Search for the capital city (search box) and then zoom out until you can see the National Grid reference). Children to record their answers in their books.</p> <p>Demonstrate to the children how to find the 6-digit reference (drawing tools) for a given place and how to search for a place based on a given 6-digit reference. Use the school as an example and show that it can be found at SJ350 815.</p> <p>Using Digimaps, challenge the children to find the 6-digit grid reference for their houses. Children to record their house address along with the 6-digit grid reference in their books.</p> | Laptops / Ipads DigiMaps | 4-digit grid reference 6-digit grid reference Ordnance Survey Eastings Northings | Additional adult to pre-teach skills needed to use an Digimaps |

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| | | <p>Why do we need to be able to locate places accurately on a map? Not only to find places when we are travelling to them but also if people are in need of help it helps rescuers to find them (mountain rescue)</p> <p>Using Digimaps, children locate the following places and then find the 6-digit grid reference for them.</p> <ul style="list-style-type: none"> • The mouth of the River Dee (memory flash point – Yr4 rivers) • Ben Nevis (memory flash point – Yr4 mountains) • Giant’s Causeway • Summit of Snowdon (memory flash point – Yr4 mountains) <p>In their books, children explain what they have learned and describe why being able to accurately locate a place on a map is important (can they give more than one reason).</p> | | | |
| 2 | I can use longitude and latitude to locate places in the world | <p>This is a Geography lesson. Geography is the study of places and relationships between people and their environments.</p> <p>Explain to the pupils that the skills we are going to learn today are to use atlases, globes and maps at a range of scales to help us think like a geographer and locate key places on a map of the World.</p> <p>Recap the previous lesson – 4 and 6 digit grid references. Explain to the children that only United Kingdom (memory flash point – which countries are in United Kingdom) uses the National Grid reference system. Do the children know what is used for the rest of the World ?</p> <p>Introduce the terms ‘latitude’ and ‘longitude’. Explain that World maps display lines of latitude and longitude and use degrees as the unit of numbering. Lines of latitude and longitude are referred to by individuals, such as sailors and pilots, to identify exactly where they are and to help them navigate around the world.</p> <p>Demonstrate lines of latitude and longitude on Digimaps (see lesson resource for CPD and instructions). Demonstrate how to find the coordinates for a given place using Digimaps. Can the children find the latitude and longitude coordinates for their house (use the Map Information tool within Digimaps).</p> <p>Ask the children to explain what the Equator is. An invisible line around the middle of the planet, halfway between the North Pole and South Pole, at 0 degrees latitude. Can the children name any other key lines of latitude?</p> <p>There are four other key lines of latitude: Tropic of Cancer, Tropic of Capricorn, Arctic Circle, Antarctic Circle. The Tropics of Cancer and Capricorn are the invisible lines that circle the globe and mark the boundaries of the Tropics (Cancer – North boundary, Capricorn – South boundary). The Tropics are the only part of the Earth where the Sun sometimes shines straight down. Because the sunlight is so strong, the tropics are generally warmer than other parts of the Earth.</p> <p>Explain to the children that GPS (Global Positioning Systems) work using longitude and latitude coordinates. Watch this video: https://www.bbc.co.uk/bitesize/topics/z2y9wmn/articles/zj3ftrd</p> <p>Can the children list the ways that we use GPS in our everyday lives?</p> | i-pads Laptops Digimaps Atlases Lesson plan2 CPD | <p>World</p> <p>Latitude</p> <p>Longitude</p> <p>Horizontal</p> <p>Vertical</p> <p>Grid reference</p> <p>Grid square</p> <p>Four figure grid reference</p> <p>Six figure grid reference</p> <p>Equator</p> <p>Tropic of Cancer</p> <p>Tropic of Capricorn</p> <p>Arctic Circle</p> <p>Antarctic Circle</p> <p>North Pole</p> <p>South Pole</p> <p>Global Positioning Systems (GPS)</p> | |
| 3 | I can explain why we use time zones and how they work | <p>This is a Geography lesson. Geography is the study of places and relationships between people and their environments.</p> <p>Explain to the pupils that the skills we are going to learn today are to use maps at a range of scales to help us think like a geographer and consider how time zones operate and why they exist.</p> <p>Ask children if they have been on holiday and had to change the time on their watches / phones. In talking partners ask the children to discuss why they might have to do this. Explain that time zones exist because everyone wants the sun to be at its highest point at midday in order to be awake, work and play during the daytime and to sleep during the night. If there was just one time for the whole world, this would not be possible, Earth rotates 15° on its axis every hour, so when it is daylight on one side of the world, at the same moment it is night on the other side.</p> | - What Time Is It? Worksheet - Time Zone Map (printed) - Large globe - Torch - Large elastic band | <p>Time zone</p> <p>Coordinated Universal Time</p> <p>International Date Line</p> <p>Prime Meridian</p> <p>Longitude</p> | |

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| | <p>Demonstrate a full day of daylight around the world by wrapping a large elastic band around a globe from the North Pole to the South Pole. Position the band on one side to travel from Pole to Pole through the Prime Meridian in London; the other side is then on the opposite side of the world at the International Date Line. Shine a torch at the globe at the International Date Line and hold the torch light still as you slowly rotate the globe towards the east, showing where daylight falls first and then passes the lines of longitude from right to left on its full rotation back to the International Date Line.</p>  <p>UTC stands for Coordinated Universal Time and is the standard by which all time across the World is set. Now show the class the Time Zone Map (see resources) and explore how the time zones are plus hours (ahead of UTC) towards the east and minus hours (behind UTC) towards to west.</p> <p>In pairs, give pupils a copy of the What Time Is It worksheet. They should choose a time of day when they undertake a particular activity, for example get out of bed, or have lunch at school. The children draw the correct time for this activity on the clock at the top of their sheet and write beneath it whether it is am or pm, the activity, and their location.</p> <p>Referring to the time zones map, they then work out what time it is for two other locations around the world (these could be suggested by the teacher, or they could choose their own) at the time when they are undertaking their activity. They will need to use basic addition/subtraction. Be mindful of the fact that during certain hours in the UK, time at some places to the west will be in the afternoon/evening of the previous day! For example, at 07.00 on Friday in the UK it will be 23.00 on Thursday in Vancouver, Canada. Likewise, during certain hours in the UK, time at some places to the east will be in the morning of the next day. For example, at 22.00 on Wednesday in the UK it will be 06.00 on Thursday in Beijing, China</p> <p>Challenge: Where in the world are people going to bed right now? Where in the world are people just waking up now?</p> <p>In their books, children explain in their own words why we need time zones and how</p> | | | |
| 4 | <p>This is a Geography lesson. Geography is the study of places and relationships between people and their environments. Children to make podcast using i-Movie to explain what Time Zones are and how they are used.</p> | Ipads | | |