Tudor Court Primary

Curriculum Map – Cycle 4

12th May 2025 – 22nd July 2025

Learning Power Focus: Collaboration
Year 5

Inspire – Challenge - Succeed

Key Knowledge:

- Earth spins on its axis as it travels round the sun and journeys through space. It takes 24 hours for Earth to complete one rotation.
- Half of the world will be facing towards the sun at any one time, experiencing light and heat (day), and half of the world will be facing away from the sun, experiencing darkness (night). Because Earth spins to the east, places to the east will be experiencing a later part of the day than places to the west. This is why we need time zones.
- The world is split into 24 meridians, which are lines of longitude that run from the North Pole to the South Pole. Each meridian is 15° apart and is the centre of a time zone. There are 24 time zones because there are 24 hours in a day.
- The Prime (or Greenwich) Meridian is an imaginary line that divides the Earth into the eastern and western hemispheres. It is the starting point for all the other meridians. Its position is 0° and it runs through Greenwich, England.
- All times around the world are taken from the Prime Meridian. The time at the Greenwich Meridian is known as Greenwich Mean Time (GMT). The other time zones are labelled GMT + or GMT - to show how many hours they are ahead of, or behind, GMT.
- It takes Earth almost exactly a year to complete one full rotation (orbit) of the sun. As Earth orbits the sun, the tilt of Earth on its axis leans one half of Earth further towards, or further away from, the sun. The top half, above the Equator, is the Northern Hemisphere and the bottom half, below the Equator, is the Southern Hemisphere. The hemisphere tilted towards the sun receives greater warmth for longer periods for one day, and the hemisphere tilted away from the sun receives less warmth for shorter periods of time for one day.
- There is less obvious seasonal change around the Equator because the Equator is more consistently tilted towards the sun all year round. The boundaries of the equatorial area are marked by the Tropic of Cancer to the north and the Tropic of Capricorn to the south.
- The polar regions experience the most differences in daylight and warmth, as the effect of their tilt is much more pronounced.
- Climate is an average of weather conditions in a place over a 30-year period. Climate is affected by latitude, distance from the Equator, altitude, and terrain. Areas of the world with similar climates can be mapped as climate zones.
- The climate determines the vegetation of an area. Vegetation belts are areas where certain species of plant grow. Some animals eat plants, therefore the species of plants that grow in a vegetation belt determines what animals live there.
- Biomes are large areas that share similar climates, vegetation belts and animal species. They also include aquatic areas.

Overall Outcome:

You are a world explorer preparing a guidebook to help new travellers understand the Earth's geography and climate. Create a **travel guide** (poster, leaflet, or booklet) that explains: The important lines on the world map (Equator, Tropics of Cancer and Capricorn, Prime Meridian). Where the Northern and Southern Hemispheres are. Why time zones exist and how they work. What causes the seasons to change? The five major climate zones of the world. A comparison of different climate zones, using real examples of countries.

Coherence

Links to prior geography knowledge:

- Weather/seasons and hot/cold places (Y1)
- Mapping the World (Y2)

Links to future geography topics:

- Biomes – Rainforests and Climate Change/Sustainability (Y6)

Links to other subjects:

- Science – Earth and Space objectives (Y5)
- Mathematics – Data, time

Topic: Latitude, Longitude, Hemispheres and Mapping: Time and Climate Zones.

Enquiry Question: Why do we have lines on the world map?

Key Concepts: Place, space, scale, human and physical features and processes, connectedness/interdependence

Key Vocabulary (New in bold):

Axis, rotation, orbit, tilt, latitude, longitude, Tropic of Cancer, Tropic of Capricorn, Meridian, Prime/Greenwich Meridian, GMT/Greenwich Mean Time, biome, vegetation belt, tropical, aquatic

Spin, hour, day, night, clock, climate, time, hemisphere, zone, North Pole, South Pole, Equator, weather, rainfall, temperature, season(s), vegetation, desert, temperate, Mediterranean, degrees

Significant individuals and events:

- 5 June 2025: World Environment Day - **#BeatPlasticPollution**
- June 2025: National Festival of Fieldwork Fortnight –**Fieldwork for Everyone**

Community and Local Links:

- Video call with relatives/friends in other time and climate zones
- Royal Observatory London, Greenwich
- Fieldwork in school grounds, e.g., creating sundials or using an inflatable globe to see the way the sun moves across Earth

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Writing:

Fiction

- Snack Attack

Book Study

Journey to Jo'Burg – *Beverley Naidoo*

Reading:

- Various reading texts

DT:
- Mechanical Systems: Cams

PE:
- Athletics 1
- Games 4

Computing:

- Coding

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Science: Forces

- Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object
- Identify the effects of air resistance, water resistance and friction, that act between moving surfaces
- Recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect

Science: Earth and Space

- Describe the movement of the Earth and other planets relative to the sun in the solar system
- Describe the movement of the moon relative to the Earth
- Describe the Sun, Earth and moon as approximately spherical bodies
- Use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky

Maths:

- Unit 8: Fractions (Fractions)
- Unit 9: Converting units (Number and place value)
- Unit 10: Angles (Geometry)

RE:

- Living: What difference does it make to believe in Ahimsa, Grace and Ummah? (cont)
- Expressing: If God is everywhere, why go to a place of worship?

PSHE:

- Relationships
- Changing Me

Music:
- Second Part: Dancing in the Street
- Reflect, Rewind and Replay