

OUR WORLD:

Where on Earth are we?

Unit overview

In an earlier unit, the children used several different representations of the world, or parts of it, without questioning them. In this unit, they will begin to understand the Earth better as a sphere, learning to rotate it mentally in 3-D. They will explore its representation in 2-D maps, and learn about the imaginary lines used (Equator, latitude, longitude, tropics and the International Date Line) to pinpoint global locations.

Knowledge, skills and concepts

In this unit, the children will:

- improve their locational knowledge through identifying 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 day and night)
- practise geographical skills through using maps, atlases, globes and digital/computer mapping to locate features studied
- use the eight points of the compass to build their knowledge of the wider world.

Background information

Different ways of describing a location on the Earth's surface depend on scale. Locally, the children know some compass points and the address defining the location of their home and school. Maps use grid systems, from alpha-numeric to OS grid references. Global Positioning Systems (GPS) use national grid references and angular measurements together with lines of latitude and longitude (imaginary lines drawn on the Earth's surface) to describe precise location on the Earth's surface, forming a geographic coordinate system.

At the start of this unit, in Art or Design & Technology, each child should cover a small round balloon with cling film, then glue tissue paper over it with wallpaper paste and let it dry to save time in Week 2. (See 'Making my own world map'.)

Cross-curricular links

- **English:** writing text for a picture book, or to recount as a story without words (eg Istvan Banyai's 'Zoom' in Week 2); listening to how John Harrison solved the problem of longitude (throughout or following the unit. See www.rmg.co.uk/discover/explore/longitude-found-john-harrison).
- **Maths:** learning about scale (Week 2), direction and compass points (Weeks 1–6); learning about properties of a sphere (Weeks 1–4); time and the 24-hour clock (Weeks 3, 4); angles (Week 2).
- **Science:** seeing the Earth from space (Weeks 2–4), our solar or planetary system.
- **Art & Design:** making a papier-mâché globe (before and throughout the unit); making a 'world map' (Weeks 2–6).
- **Computing:** Use of Google™ Earth; preparing Index for 'World map' (Week 6).
- **Design & Technology:** making a papier-mâché globe (before and throughout the unit); making a 'world map' (Weeks 2–6).

The Big Finish

This unit concludes with children displaying the world map they've created from the globe they have made complete with an Equator, Poles and lines of longitude and latitude. They also provide a key and index, reinforcing the content of this unit. Encourage them to be really creative and to appreciate that maps are works of art.

Map work

This unit focuses on the use of digital/internet and paper maps, atlases and globes with an opportunity for making a map in the Big Finish. Children will be comparing how globes and different types of map represent our world, and see how 3-D reality can become distorted in 2-D representations.

Fieldwork

Fieldwork is not a natural element of this unit. However, classes within reach of London could visit the Prime Meridian at Greenwich (Week 4), which could include a visit to John Harrison's longitude clocks (Week 6).

All children could use maps, GPS or satnav to plan the route, whether walking or driving (for the coach driver) for any planned out-of-school activities, using as many forms of address as appropriate (e.g. street, settlement, county names, postcodes and compass directions), and then follow them during the journey.

Independent learning area

Create a corner where children have access to political and physical globes, atlases and world maps to learn independently. Try to include maps of different projections, historical maps and, if possible, maps not centred on Europe and Africa for children to compare. Ask: *What world map do you think children in Australia use?* Set out non-fiction books, stories and photographic books to inspire children.

Assessment

All children can:

- use world maps, atlases, globes and digital/computer mapping
- describe the relationship between globes and world maps
- locate the Equator, Northern and Southern Hemispheres, Tropics of Cancer and Capricorn, North and South Poles, and Arctic and Antarctic Circles on world maps and globes
- correctly use some of the key vocabulary.

Most children can:

- explain the relationship between globes and maps
- understand the significance of longitude and latitude
- locate the Prime/Greenwich Meridian on a globe and world map
- describe day and night in relation to the Earth's rotation on its own axis
- correctly use most of the key vocabulary.

Some children can:

- understand the significance of the Tropics of Cancer and Capricorn, Arctic and Antarctic Circles, the Prime/Greenwich Meridian
- locate the International Date Line on a globe
- understand day and night
- describe and explain time zones
- correctly use all the key vocabulary.