



Topic: Destination: Our Earth

Year: 5

Term: 1

Background Information

- Use maps to find the location of the world's countries (and major cities), focusing on Europe.
- Name and locate counties and cities of the United Kingdom, geographical regions, their identifying human and physical characteristics and land-use patterns; and understand how some of these aspects have changed over time.
- Notice that some forces need contact between 2 objects, but magnetic forces can act at a distance.
- Observe how magnets attract or repel each other and attract some materials and not others.
- Describe magnets as having 2 poles.
- Predict whether 2 magnets will attract or repel each other, depending on which poles are facing.

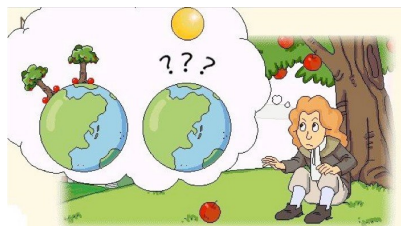
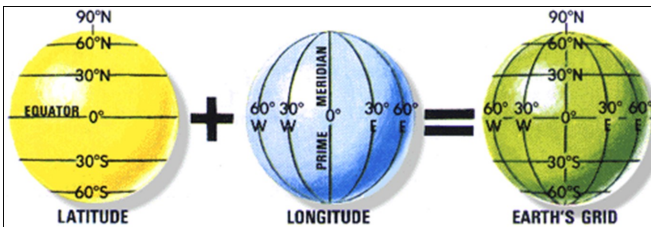
Interesting facts

- There are 7 continents (Europe, Africa, Asia, Antarctica, Australia, North America and South America).
- Latitude and longitude lines form an imaginary grid over the Earth's surface. Lines of latitude run horizontally and are at equal distances to each other (= parallel lines). Lines of longitude run vertically and meet at the North and South Poles.
- The Equator is at the centre of the lines of latitude and is at 0°. South of the Equator is the Southern Hemisphere; north of the Equator is in the Northern Hemisphere
- Key lines are: the Equator (0°), the Tropic of Cancer (23°N) and the Tropic of Capricorn (23°S), Arctic Circle (66.5°N) and the Antarctic Circle (66.5°S).
- Longitude is the location of a place East or west of the Meridian line and is measured in degrees East/West.
- There are different types of forces that affect the movement of an object. They may be balanced or unbalanced.
- Unsupported objects are pulled towards the centre of the Earth because of the force of gravity. Gravity, which was discovered by Isaac Newton, is measured in Newtons using a Newton meter.
- Air and water resistance are forces that oppose the direction of movement to slow moving objects down.
- Differing amounts of friction are created between different surfaces. Friction can be useful or unhelpful.

Key Vocabulary

Equator	An imaginary line of latitude equidistant from the North and South Poles.
Lines of latitude	Imaginary lines that run horizontally in parallel lines across the globe.
Lines of longitude	Imaginary lines that run vertically in parallel lines across the globe.
Northern/Southern hemisphere	The top/bottom halves of the Earth.
Air resistance	A force that slows down moving objects in the air.
Balanced force	2 forces acting in opposite directions on an object, and equal in size. The object stays still or continues moving at the same speed and in the same direction.
Unbalanced force	Causes a change in the motion of the object to which the force is applied
Gravity	A force that pull everything to the centre of the Earth.
Force	A push or a pull.
Friction	Friction happens when 2 surfaces come into contact with each other.
Mass	A measure of the amount of matter in an object- usually measured in grams (g) or kilograms (kg).
Newton meter	Also known as a force meter– used to measure the strength of a force.
Water resistance	A force that slows down moving objects in the water.
Weight	This is the force of gravity (in Newtons).

Diagrams / Timelines / Photos



Know how to / Activity

- Use an atlas to locate the 7 continents of the World.
- Visit BBC Bitesize and watch some of the class clips for KS2 forces (E.g. 'What is gravity?')
- Can you find out interesting facts about Isaac Newton? (a local scientist/mathematician).
- Following our lesson on air resistance, try to make your own parachute with recycled materials at home.