

Year 4 Summer Term Knowledge Organisers



The British Empire



TIMELINE

1497	1558	1570	1600	1807	1876	1939	1954
John Cabot sailed from Bristol to Newfoundland.	Queen Elizabeth I was born/ she paid for exploration of the world.	The Ortellus map was made: the first true map of the world.	The East India Company was formed.	The slave trade was abolished in the British Empire.	Queen Victoria is announced as the Empress of India.	World War II broke out in Europe.	World War II ended and many countries of the empire sought their independence.

Key vocabulary

Empire	A group of countries controlled by one powerful country
Colony	A country that is part of an empire
Commonwealth	A group of countries with a shared government
Slaves	The trading of human beings being taken against their will and treated like goods
Abolished	Something which is prohibited or outlawed in a certain area
Empress	The female leader of an empire
Raj	British sovereignty in India
Sovereignty	Supreme authority or ruler

Did you know? The East India Company was the most powerful company in the world! It had its own coat of arms, own army and controlled the trade of tea.



What is an empire?

An empire is a group of countries that is controlled by one powerful country. These were some of the countries in the British Empire between 16th and 20th century: Australia, Jamaica, South Africa, Tanzania.

General knowledge:

The British Navy played a major part in the country becoming a world power. Conflicts began between the British and other explorers over the valuables of colonies. Queen Elizabeth I invested a lot of money in exploring the world.

The British Empire was founded on the slave trade where people were traded for iron, gold and guns and taken to be sold or traded against their will like objects: many slaves died.

Key desirable imports from the colonies were sugar, tobacco, silk, tea, cotton, rum and spices.

Gandhi campaigned for independence in India.

Knowledge organiser - South America and Rio de Janeiro

What will we be learning?

- The location of South America and its key features.
- The location of South American countries.
- Similarities and differences between Brazil and our own country.
- What daily life in Rio de Janeiro is like.
- South East Brazil's trade links.
- What the advantages and disadvantages were for Brazil in hosting the Olympic Games.

Key facts

The 12 independent countries of South America:

Argentina, Brazil, Bolivia, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay, Venezuela.

Key knowledge

South America's biggest country is Brazil. Here you'll find the Amazon Rainforest, home to a huge number of animals, plants and insects.

Brazil is the world's seventh largest economy. It is rich in natural resources such as Iron ore. They are also one of the largest exporters of coffee, beef, sugar and orange juice.

In the summer of 2016 Brazil hosted the Olympic Games.



Place names	Geographical terms and processes	Locational terms
Brasilia Cerro Aconcagua Lake Titicaca La Paz Sao Paulo Ushuaia	equatorial region manufacturing mining population trade	latitude longitude Northern Hemisphere Southern Hemisphere time zone Tropic of Capricorn Western Hemisphere

Glossary

culture: how a group of people does things as part of their way of life

manufacturing: making things, for example in factories

recreation: enjoyable activities, such as swimming or listening to music

trade: exchanging goods or services, usually for money



Knowledge Organiser: Year 4 - Electricity

Careers connected to electricity:
electrician, electrical engineer



Lesson Sequence



1. Understand electrical appliances and safety



2. Learn about electrical compounds in a series circuit



3. Investigate electrical circuits



4. Explore conductors and insulators



5. Learn about electrical switches



6. Investigate how electrical components can change within a circuit

Key Facts

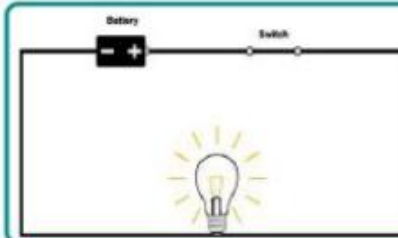
1. A circuit contains a battery (cell), wires and a component that requires electricity to work (bulb, motor or buzzer).
2. Electrical current flows through the wires from the battery (cell) to the bulb, motor or buzzer.
3. A switch can break or reconnect a circuit.
4. A switch controls the flow of the electrical current around the circuit. When the switch is off, the current cannot flow. This is not the same as an incomplete circuit.

Conductors and Insulators

• Materials that allow electricity to pass through to create a complete circuit are called electrical conductors.

• Materials that do not allow electricity to pass through and do not complete a circuit are called electrical insulators.

conductors	
steel	copper
insulators	
wood	plastic



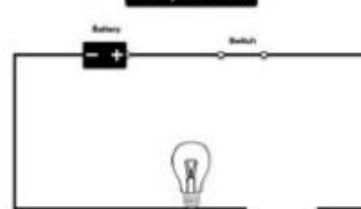
Simple Circuit

A complete circuit is a loop that allows electrical current to flow through wires.

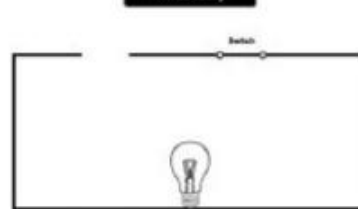
Simple Electrical Circuit

These are complete circuits - they have a battery (cell) and a component (bulb). The wires are placed in the right places of the battery for the circuit to work.

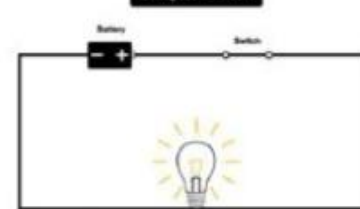
Incomplete Circuit



No Battery

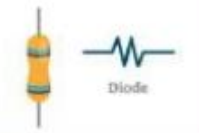
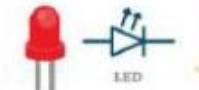


Complete Circuit



These circuits will not work as they are incomplete.

Electrical Components





Lesson Sequence



1. Identify how sound is made



2. Explore how vibrations from sounds travel through a medium to the ear



3. Explore sound insulation



4. Explore volume



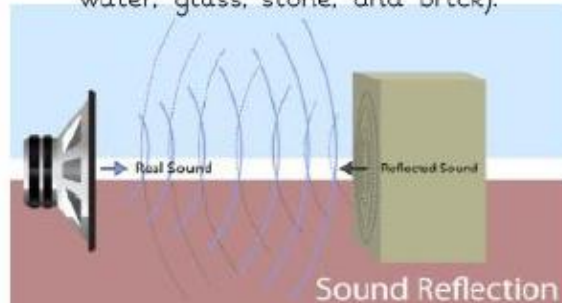
5. Explore pitch



6. Explore sounds

How sounds are made and travel

When objects vibrate, a sound is made. The vibration makes the air around the object vibrate and the air vibrations enter your ear. These are called sound waves. If an object is making a sound, a part of it is vibrating, even if you cannot see the vibrations. Sound waves travel through a medium (such as air, water, glass, stone, and brick).



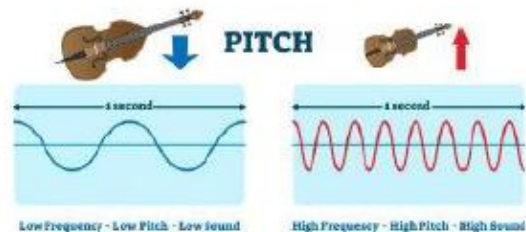
How do we hear?

The sound waves travel to the ear and make the eardrums vibrate. Messages are sent to the brain which recognises the vibrations as sounds.



Pitch

The pitch of a sound is how high or **low** it is. A squeak of mouse has a high pitch. A roar of a lion has a low pitch.



A high pitch sound is made because it has a high frequency. The sound source vibrates many times a second.

Volume

The volume of a sound is how **loud** or **quiet** it is. Quieter sounds have a smaller **amplitude** and less energy (**smaller vibrations**) and louder sounds have a bigger amplitude and more energy. The **closer** we are to a sound source the louder it will be. A train arriving at a station sounds loud. The further away from a sound the fainter it will be. A train in the distance sounds quieter.

