

On the Move: Transport!

What we need to know:

- How transport has developed over time.
- Understand how transport has changed lives.
- Where in the world are we – understand continents and oceans of the world and Europe in relation to UK
- Explore the chronology of vehicles.
- Investigate who Henry Ford and Karl Benz are and why they are famous in the local area.

Types of transport



Did you know?

- River boats and wheeled carts were the first modes of transport developed in 3500BC.
- Animals started being used for travel in 1662, when the first horse-drawn coach was invented.
- Steam engines were first invented in 1801, leading to the innovation of steam trains in 1817.

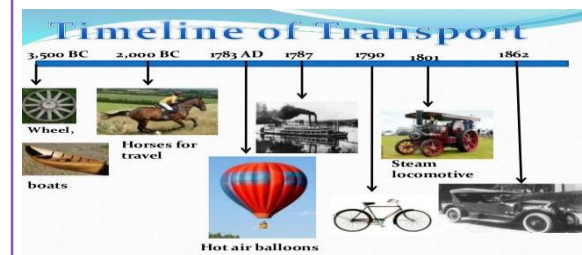
Key Vocabulary:

Travel	Go from one place to another.
Evolve	To gradually develop.
Commute	Travel to work.
Vehicle	Something used for transporting people or goods.
Develop	To grow and advance in a certain area.
Engineer	A person who designs, builds or maintains engines, structures or machines.
Mechanical	Operated by a machine or machinery.
Migrate	To move from one place to another.
Combustion	The process of burning something.

Understanding how transport has evolved across the world.



Comparing how transport has developed.



Considering the impact transport has on the environment.



Forces

What are we learning:

- ☞ To identify effect of air resistance
- ☞ To identify effects of water resistance
- ☞ To identify effect of friction
- ☞ To investigate how levers work
- ☞ To investigate how pulleys work and how the number of pulleys change the effort required

Investigations

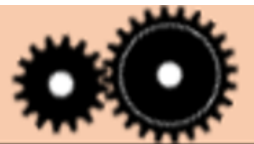
Design, make and test parachutes



Test water resistance when swimming (during Y5 swimming lessons) and build boats and test in a water trough



Recognise the impact of mechanisms on forces when using pulleys, levers and gears during technology lesson (Lego WeDo)



Enquiry

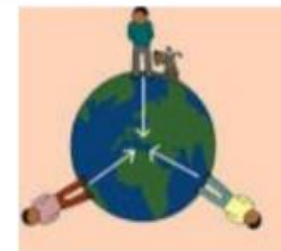
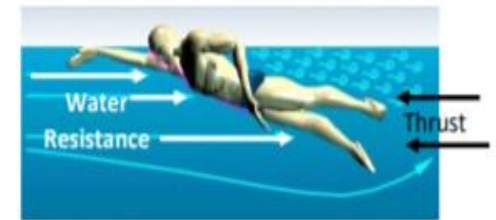
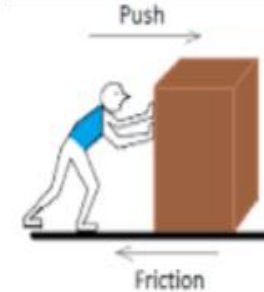
- ☞ What is air resistance and how can we understand it?
- ☞ What is water resistance and how can we investigate this?
- ☞ How do levers work?
- ☞ How do pulleys work?
- ☞ How does ground friction affect movement? .

Key Vocabulary

Force	A push or pull upon a object
Air Resistance	Air resistance slows down moving objects, because air slows you down as you move through it. To travel faster through the air, things need to be streamlined.
Water Resistance	Water resistance slows down moving objects, because water slows you down as you move through it. To travel faster through the water, things need to be streamlined.
Friction	Friction happens when two surfaces touch each other. Friction gives us grip. Friction produces heat. Rougher surfaces slow things down a lot. Smoother surfaces don't slow things down as much.
Streamlined	A shape that presents least resistance to air or water
Lever	A rigid bar resting on a pivot that is used to move a heavy or firmly fixed load

Diagrams and symbols

Diagrams of forces in action



Gravity pulls us towards the centre of the Earth.