

Transport Theme

Year Group	Content	Key Vocabulary
Nursery	<p>There is a car park outside each building so that teachers and visitors can travel by car if it is too far to walk. There are also bike stands outside each building so that children can use their bike or scooter to travel to school.</p> <p>Some toys have wheels. They look like cars, trucks, trains or buses. Wheeled toys can move if you push them. We can build a track for wheeled toys to move around on. If we push them with our hands they will move.</p> <p>There are lots of roads around Doncaster. You can travel by bicycle, car or bus on the roads to get to other parts of Doncaster. Doncaster has an important train station. It is important because in the past famous trains were built there and it is also on a main railway route which means that you can catch a train to travel to lots of different towns and cities.</p>	Travel Car Truck Bus Train Bike Scooter Train station Railway
Reception	<p>People in Scawsby need the garage and car wash to look after their cars. Lots of people travel using a car so there are lots of car parks outside shops in Scawsby. You can also get around Scawsby using a bike and there are some bike lanes which are special safe roads just for bikes. There are also lots of bus stops in Scawsby where you can catch a bus to other parts of Doncaster or to other nearby towns like Barnsley and Rotherham. You can also catch a bus to the train station in Bentley or Doncaster where you can catch a train to travel to towns and cities that are further away like York, London and Edinburgh.</p> <p>Toys can go down ramps if we push them with our hands and let go. They can go down the ramp on their own. Wheeled toys can't go up ramps without us pushing them all the way up, they will roll back down on their own.</p>	Garage Car park Bike lanes Ramp Wheeled
Y1	<p>3500 BC: Fixed wheels on carts and river boats were invented. 3100BC: Wild horses were tamed and used as transport. 2000BC: The first chariots were built. 1662: The first horse-drawn public bus was invented 1783: The first hot air balloon was launched 1814: The first steam-powered railway train was built. 1816: The first bicycle was built 1903: The first motor-driven aeroplane 1908: The first cars were made by Ford 1934: The first steam train to reach 100mph 1969: The first men travelled to the Moon in a spacecraft called Apollo 11.</p> <p>The Romans, who lived 2,000 years ago, were famous for building long, straight roads to transport legions, supplies and messages from the emperor. Many of them are still there today, including the Roman Ridge, which is now a path behind Rosedale Primary School. This was originally part of an important Roman road called Ermine Street, which ran from London to York.</p> <p>Longboats were used by Vikings to travel to other countries.</p>	Steam engine Petrol/combustion engine Motor car Electric cars Aviation Aircraft: Astronaut Spacecraft Cart River boat Chariot Horse-drawn public bus Steam-powered train Bicycle Aeroplane Longboat Engineer Diesel engine

George Stephenson is significant because he was an engineer who built steam trains for the first ever railways. He was born in 1781 and lived in the time of the Industrial Revolution, when Britain was changing to a land of big factories instead of farms. The railways he built made Britain the richest in the world. Modern trains use large powerful diesel engines and can travel much more quickly.

Orville and Wilbur Wright, born in America, invented the aeroplane; this was a huge milestone in the world of international transportation. Today people can take trips that previously would have taken months by train or boat, now taking a few hours by plane. The first flight took place in 1903.

Significant women in aviation:

Harriet Quimby was the first woman to fly across the English Channel. She grew up in America where she worked as a newspaper reporter, but she was determined to learn to fly so persuaded her editor to pay for her flying lessons in return for articles about aviation. She became the first woman to get her pilot's licence on 1 August 1911. On 16 April 1912, Harriet took off from Dover to fly the English Channel. With nothing more than a compass to guide her and no effective backup she was able to land triumphantly on the French coast later in the day. Harriet mysteriously died on 1 July 1912 during a test flight when it suddenly nosedived and she fell from the plane.

Hilda Hewlett was the first British woman to gain her pilot's licence. In 1910 she opened the first flying school in England with aviation engineer Gustav Blondeau and on 29 August 1911 she gained her own licence. Hilda and Gustav opened a factory to make aeroplanes in Battersea (London) and they made ten different types of planes. They also provided planes to the military during World War I.

Bessie Coleman was the first woman of colour to gain her pilot's licence. Born in America, her family were very poor and Bessie worked alongside her mother and siblings in the cotton fields. After reading about flying feats during World War I, she first became interested in flying. Flying schools in America would not accept a black woman and so she worked hard to earn money and learn French so she could go to France to train there. In June 1921 she was awarded a pilot's licence.

Sir Nigel Gresley was the chief mechanical engineer at Doncaster Works and designed a famous train called the Flying Scotsman. In 1934, it became the first train in the world to reach a speed of 100 miles per hour! In 1938, another steam train designed by Nigel Gresley, called the Mallard, became the fastest ever steam train when it reached 126 miles per hour! Sir Nigel Gresley Square in Doncaster town centre is named after him. Doncaster remains an important railway town to this day and was chosen to be the site of the new National College for High Speed Rail.

Neil Armstrong, born in America, was the first man to walk on the Moon. Neil Armstrong flew the Apollo 11 spacecraft which landed on the moon. The other astronauts were Buzz Aldrin, who also walked on the moon and Michael Collins, who stayed on the spacecraft. Neil became the first man to walk on the Moon on July 21st 1969. The astronauts arrived back on earth on July 24th 1969. Before he was an astronaut, Neil Armstrong was an aeroplane pilot. He flew over 200 different aircrafts in his career.

Compass
Pilot

Journey



Horse bus (1800s)



Liverpool 1950s



1895



1950s

Victorian seaside

Most Victorians would go to a British seaside because flying to another country wasn't an option. People could travel by train to the seaside. They believed that the seaside air was good for you.

Railways were being built right around Britain during the Victorian era. This meant that people could now travel more quickly and cheaply.

Y2

- Henry VIII was carried around in a **sedan chair**—it took four strong chairmen to carry him towards the end of his life.
- **Horse and carriage** was the most common way to travel until the invention of the motor car. In the sixteenth century, monarchs like Henry VIII and Elizabeth I might have covered just ten miles a day when travelling. Unreliable roads, changeable weather and a large entourage all combined to make journeys on horseback slow and difficult.
- Passage by sea offered a faster alternative to travel over land. Charles II was a keen sailor and owned 27 **yachts** which he used for racing and leisure, as well as crossing the English Channel.
- Long-distance travel became considerably cheaper and easier in the nineteenth century with the advent of the **railway** and the **steamship**, and royals began to journey further afield more frequently. Many of Queen Victoria's children undertook tours abroad to prepare them for their future responsibilities, with Albert Edward, Prince of Wales travelling as far afield as Canada, India and Egypt. Queen Victoria herself frequently travelled to France.
- In 1855, a new mode of transport, the **Royal Train**, was established, bringing greater comfort and speed to long-distance journeys.

Sedan chair
Yacht
Steamship
Concorde
Royal Air Force
Queen's Helicopter Flight
Commercial flights

Sailing ship
Skis
Sledge

- In 1953, the **Royal Yacht Britannia** was launched and for over 44 years transported The Queen and Royal Family on official visits around the world.
- In 1977, Queen Elizabeth II first travelled with **Concorde**, the supersonic passenger airliner. Concorde had a maximum speed of over twice the speed of sound but was retired in 2003, due to safety factors. Today she travels with **The Queen's Helicopter Flight** the **Royal Air Force** or **commercial flights**.

Christopher Columbus and James Cook travelled by sailing ship which moves because of the wind pushing the sails. Sailing ships were first used a lot in Europe around 600 years ago.

Robert Falcon-Scott travelled over the ice and snow on foot, on skis, on motor sledges and on sledges pulled by both dogs and horses.

Ann Bancroft travelled to the North Pole on foot and using sledges. In 2001, she travelled using only skis.

Brazil: Brazil is a huge country: covering a total area of 8.5 km² it is the fifth largest country in the world. Being almost as large as the whole European continent, you would expect to find a railway network connecting the country. In fact, Brazilian railways were started off enthusiastically in the 19th century, but shortly after they were abandoned in favour of roads as the preferred method of ground transport. Nowadays there are a few railway lines but getting from a city to another by train is difficult as there are almost no trains to run the service.

In all of Brazil's main cities: São Paulo, Río de Janeiro, Recife, Puerto Alegre, Brasilia, Belo Horizonte, Teresina, Fortaleza and Salvador, there are underground train systems to help you to travel anywhere within the city you are in.

Buses are the best way to move between cities in Brazil, though some journeys can take a very long time. A bus journey between Rio de Janeiro and Brasilia takes around 17 hours!

England: You can travel to all cities and many towns in England by train and by bus. There are also trams that help you get around some cities, such as Sheffield, Croydon and Manchester. In London, the biggest city in England, there is an underground train network that people can use to get around the city quickly. This is called London Underground and is often referred to as The Tube. You can also catch buses within cities and towns to get around the local area.

England has a road and motorway system so you can drive a car easily to different parts of the country.

Brasília has a range of different transport methods:

A large airport, the third busiest in the whole of Brazil.

A range of taxis.

An underground railway named 'the Metro'.

A high speed railway.

A main bus network.

London has a range of different transport methods:

Six large airports such as London Heathrow (the busiest in the world for international traffic).

One of the largest bus networks in the world, running 24 hours a day with over 9,000 buses.

An underground railway named the London Underground or the Tube.

Railway network
Tram
London Underground
Motorway
Route

Metro

	<p>A large railway network (366 railway stations in London). Many motorways and ring roads. Some port and river boats.</p>	
Y3	<p>Early tracks and roads carried carts and wagons drawn by animals</p> <p>Iron Age Travel by sea and land was common in the Iron Age Walking was the most popular form of land travel, but use of carriages grew in popularity especially as more roads were built Oxen pulled the heavier wagons. Iron Age people used dugouts when travelling by river – made from lime or oak trees hollowed out so people could sit in them. Usually used on rivers but sometimes in the sea Bigger boats made out of lime and oak were built for sea travel eg the Hjortspring boat</p> <p>The earliest mines would use horse or hand powered winches to send people and materials down, and to bring coal out. At this time, all transport underground would be manual – people would push and pull corves (large wicker baskets) on sled runners. Corves or sleds could be filled with tools and materials going in, and loaded with coal to come back out again.</p> <p>Wooden or metal tubs on wheels might be used, with wood or iron rails, and sometimes corves might be loaded onto flat-bed carts with wheels. In these early mines children were often cheaper to employ than horses underground, although by the end of the 1700s ponies were working underground at some mines.</p> <p>In the 1840s, after women and children under ten had been banned from working underground, horses and ponies started to be used more commonly to pull wheeled tubs underground. Steam winding engines increased the speed and capacity for transporting men and materials into the mine, and pulling coal out.</p> <p>By the end of the 19th century mechanised haulages, using metal ropes, started to be used to transport materials, tools and coal underground, and similar machines might be used in sloping drifts as a means of bringing coal out. The rope haulages could be powered by compressed air or electricity.</p> <p>In the early 1900s, conveyor belts began to be used more commonly to move coal away from the coal face, and in some cases, in drift mines, conveyors would carry the coal all the way to the surface to be sorted and processed. Belts could also be used for man-riding, transporting workers in and out of the mine. In larger mines, underground locomotives might be used to transport workers, tools and materials.</p> <p>In the USA you can travel by road, air, rail and waterways (boats). The vast majority of travel is by car for shorter distances and plane or train for longer distances. In San Francisco there is a tram system to help people get around because it is very hilly. In big cities</p>	<p>Flat-bed cart Wheeled tub Wagon Dugout Mechanised haulage</p> <p>Subway Metro</p>

	such as New York and Washington, there are underground rail systems to get around, like the London Tube. In New York it is called the Subway and in Washington it is called the Metro.	
Y4	<p><u>Roman Roads</u></p> <p>Before the Romans arrived, Britain had no proper roads. The Celts rode horses, walked and travelled in carts pulled by oxen along paths and tracks. These paths and tracks connected local farms and hamlets, and there were some longer routes for trade. These tracks were often in very poor condition.</p> <p>The Romans wanted better roads so that:</p> <ul style="list-style-type: none"> • Troops could be quickly moved from one place to another • Better links between places was good for trading • Supplies could be sent to different areas of the country • The Emperor had more control if messages could be sent quickly <p>The Romans were famous for their long, straight roads. They knew that the shortest distance from one place to another is a straight line. So they made all their roads as straight as possible to get around quickly. You can still see some Roman roads today, two thousand years after they were built.</p> <ul style="list-style-type: none"> • The Roman Ridge that runs through Scawsby is an example of a Roman road. The Roman Ridge is that part of the Roman road of Ermine Street located in Doncaster. Although in places Ermine Street follows what is now the Great North Road, there is a stretch between Sunnyfields and Red House known as the Roman Ridge • The Fosse Way was one of the first great Roman roads in Britain. It ran from Exeter to Lincoln, passing through Bath, Gloucester and Leicester • Eventually the Romans built around 10,000 miles of road <p>Romans travelled by chariot, boat, cart, and on foot. It was important to be able to transport goods and people to all parts of the Roman Empire. A chariot was a small two wheeled cart pulled by horses. The Romans also used waterways. The Rhone River in France was especially important as it linked Rome with several important provinces in France and Germany. They used the rivers to float huge barges that brought food to the provinces, much of it stored in amphorae, or clay pots with corks.</p> <p>It is believed that Mayans were connected by a series of roads. These “white roads” were constructed out of large stones which were overlaid by rubble and surfaced with a smooth layer of cement.</p> <p>Coastal Mayan groups used canoes to supply inland groups with goods such as salt, dried fish, shells, and pearls. The Mayans had no animals or wheels to carry their heavy loads. Instead, goods were transported on the backs of slaves who travelled along well established routes. However, most merchants found it much easier to use a canoe. Canoes were carved out of enormous trees and were approximately 50 feet in length. Canoes transported goods to towns along the coast, never traveling very far from land. From the coastal towns the goods would be transported to the inland towns. This method of commerce was still in place when the Spaniards arrived.</p>	<p>Roman Ridge Ermine Street Fosse Way</p> <p>Barge Canoe</p>
Y5	<p>While the Anglo-Saxons were invading from the sea in wooden boats, the Picts attacked from the north on horses.</p> <p><u>Viking Transport</u></p>	<p>Wheel rut Cargo Skiff</p>

The ships of the Vikings were the key to their success. Longboats were highly specialised vessels, which were constructed in order to reach high speeds and transport troops. Their long, narrow shape made them quick in water, but also meant a very limited capacity for cargo.

Land transport was also an important part of life. People could walk, ride or drive a carriage where the terrain allowed. The roads of the Viking Age are known from wheel ruts. Oxen could be used to pull crude working carriages, while horses were mostly used for transporting people.

Longboats A long boat that Vikings used to invade the United Kingdom.

Ancient Egyptians: **4500 BC** Sails were used on ships for the first time and ships were used as transport

The Nile River was basically a “water highway” that joined the country together. Unless it was through walking or by animal, travelling by land was virtually unknown. Boats and ships were the primary source of transportation for both people and goods around the country.

The simplest type of boat used in ancient Egypt was the skiff, made from papyrus reeds that were tied together. Since the reeds are filled with air pockets, they are particularly buoyant. Skiffs were used for fishing and hunting game in the marshes, or for travelling short distances. Large wooden ships were equipped with square sails and oars. Their planks, held together with rope, expanded in the water, making the vessel watertight.

The roads were little more than paths. To get around on land, people walked, rode donkeys or travelled by wagon. They carried goods on their head, but the donkeys hauled heavier loads.

The wheel was probably introduced into Egypt by the Hyksos, an Asiatic people who invaded the country and ruled it in the fifteenth and sixteenth dynasties. The Hyksos most likely had horse-drawn chariots, which were used in warfare. New Kingdom pharaohs and nobles adopted this mode of transportation for hunting expeditions, but it was not used for travel by the common people

The Space Race

1957 - Russia (USSR) launched Sputnik I which became the first satellite into orbit around Earth. This ushered It also started Space Race between the Russians and the United States.

1957 - Russian dog Laika became the **first animal** in orbit.

1961 - Russian cosmonaut Yuri Gagarin became the **first human** in space and the first human to orbit the Earth.

1963 - Russian cosmonaut Valentina Tereshkova became the **first woman** in space. .

1969 - The Apollo 11 spacecraft landed on the Moon and Neil Armstrong became the **first man to walk on the Moon**.

1973 - The United States launched its first space station called Skylab.

1975 - The Apollo-Soyuz Test Project became the **first multinational manned space mission**. The Space Race between Russia and the U.S. came to an end.

1976 - Viking 1 successfully **landed on Mars**. It sent back pictures and scientific data for the next six years.

1981 - The United States launched the **first Space Shuttle**, Columbia.

1983 - Sally Ride became the **first American woman** in space.

1986 - The Mir became the **first consistently inhabited space station**. It remained in orbit until 2001.

1990 - The Hubble Space Telescope was carried into orbit by a Space Shuttle.

1998 - The International Space Station was launched into space

Satellite
Orbit
Cosmonaut
Sputnik I
Apollo 11
Skylab
Apollo-Soyuz Test Project
Viking 1
Space shuttle
The Mir
International Space Station

Y6	<p>Railways, originally built to transport goods, meant people could travel easily around the country for the first time. The first petrol motorcar was built by Karl Benz</p> <p>Trains and telegraphs were introduced during her time. The Queen holds the slightly enviable honour of being the first monarch to ride in a train.</p> <p>At the beginning of Victoria's reign, there were steam trains on the railways. By the 1860s, they rode bicycles, watched airships, and talked excitedly of the latest huge iron steamships. In the 1890s they could travel by motor car.</p> <p>At the start of the Victorian period, most people travelled by road, either on horseback, in horse-drawn vehicles or on foot. There were no cars or aeroplanes. Instead stagecoaches were used for long-distance travel between major towns. Wealthier people could afford to buy their own horse-drawn carriages. In towns people travelled in horse-drawn buses. Most people living in the country travelled in open vehicles, such as wagons and drays. These were larger, heavier and slower than carriages. Wagons were used for carrying people as well as goods and animals.</p> <p>Towards the end of the Victorian period the horseless carriage (motor car) started appearing on roads. The very first petrol driven car appeared in 1865 however, these first cars were rarely seen until the 1880s and 1890s. Only the very wealthy could afford to buy them.</p> <p><u>Environmentally friendly transport</u> Transport systems are major emitters of greenhouse gases, responsible for 23% of world emissions in 2004, with about three-quarters coming from road vehicles.</p> <p>Walking, the first mode of transport, is also the most sustainable. Public transport dates back at least as far as the invention of the public bus by Blaise Pascal in 1662. The first passenger tram began operation in 1807 and the first passenger rail service in 1825. Pedal bicycles date from the 1860s. These were the only personal transport choices available to most people in Western countries prior to World War II and remain the only options for most people in the developing world.</p> <p>The post-war years brought increased wealth and a demand for much greater mobility for people and goods. The number of road vehicles in Britain increased fivefold between 1950 and 1979 with similar trends in other Western nations. Most affluent countries and cities invested heavily in bigger and better-designed roads and motorways, which were considered essential to underpin growth and prosperity.</p> <p>However, the world now needs to move quickly away from fossil fuels to renewable energy. As the world tries to reduce its emissions, using public transport, especially electric railways, has been encouraged. During the 21st century, electric cars, which use an electric motor instead of burning petrol, have become much more popular. The first electric cars were actually around in the early 1900s but were not popular because of poor battery storage. Now advances in technology mean that electric cars are much more popular but are still very expensive for many people to buy.</p>	<p>Airship Steamship Stagecoach Dray Horseless carriage</p> <p>Public transport Renewable energy</p>

Ancient Greece: **Ships / Fighting at Sea** - living along the coast of the Aegean Sea, the Greeks became experts at building ships. One of the main ships used for battle was called the trireme- had three banks of oars on each side allowing up to 170 rowers to power the ship. Very fast in battle. The main weapon on a Greek ship was a bronze prow at the front of the ship. It was used like a battering ram. Sailors would ram the prow into the side of an enemy ship causing it to sink.

Travel by land was difficult. Roads were nothing more than dirt paths that were dry and dusty during the summer and muddy during the winters. Some roads were cut with ruts so that the wheels of carts could roll within them. Roads were very expensive, so they were rarely built, and then only on the most travelled routes. Rich people could rent or own horses for travel. Poor people rode donkeys or walked from place to place. Oxen were used for heavy loads, while horses pulled light loads. Farmers typically transported their goods short distances to town on mules. Greece had limited food supplies due to the rocky and mountainous landscape. To make up for this, the Greeks produced goods to trade for food from other areas around the Mediterranean, transported by boat.