History Knowledge Organiser - Y4 - Autumn Term

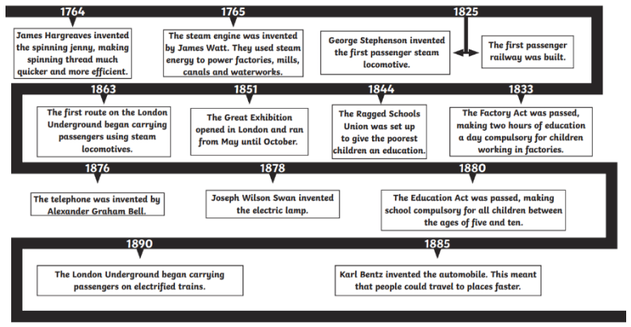
Why do we export from Yorkshire?

What should I know from prior learning?

- From studying the unit on Transport in Year 2, you should remember facts about the history of travel within Doncaster and how rail travel has changed over time.
- In Year 3, you studied if Rivers are friend or foe – you should remember learning about the River Don and how it transports goods across the UK

Key Dates/Timeline

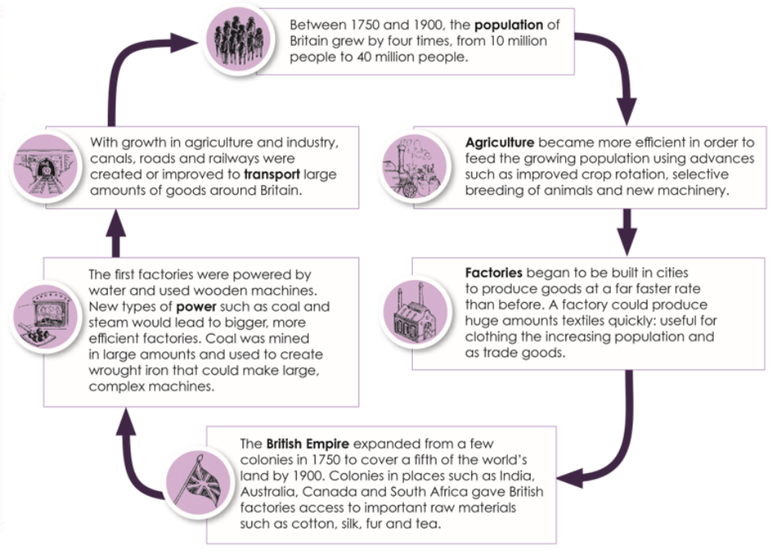
1712 - The first practical steam engine is invented by Thomas Newcomen. Steam would become an important source of power for the Industrial Revolution.
1761- The Bridgewater Canal opens, the first of its kind in Britain.
1764 - James Hargreaves invents the spinning jenny allowing a worker to produce multiple spools of thread at the same time.
1774 - Samuel Crompton invented the Spinning Mule which revolutionised the industry.
1779 - Richard Arkwright became an entrepreneur and opened a cotton spinning mill using his invention of the water frame.
1781 - James Watt patents an improved steam engine making it useful as a power source in factories , steam boats and trains.
1801 - Richard Trevithick built the first working railway locomotive.
1803 - Cotton becomes Britain's biggest export, overtaking wool.
1825 - The first passenger railway opens with Locomotion No.1 carrying passengers on a public line.
1850 - With just 2 per cent of the world's population Britain produces around half of the world's manufactured goods.



Important Facts

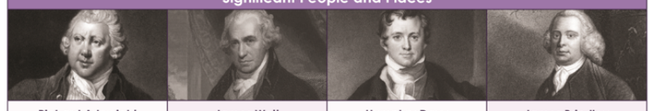
What was the Industrial Revolution?

The word '**revolution**' means a process of change. The **Industrial Revolution** was a time in British history where the country changed hugely from a mostly **rural** society to an **industrial** one. This means that many British people moved from living in small towns and villages, where they were farmers, to huge cities, where they worked in places such as factories or mills. It also meant society changed from being based on manufacturing by hand and human or animal power, to a society based on machinery.

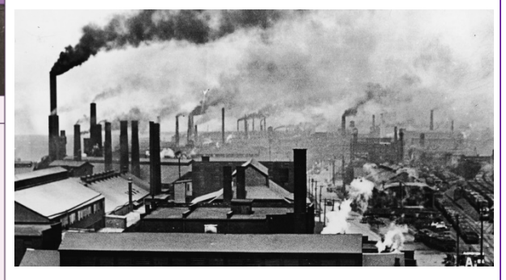


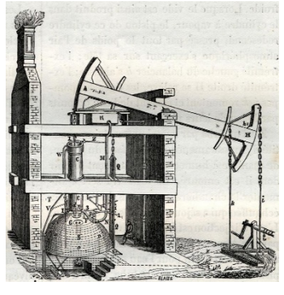
The Industrial Revolution - Historians believe there are around six factors that caused the Industrial Revolution. These six factors were population, empire, agriculture, factories, power and transport. Each of these factors were connected and contributed to the development and improvement of Britain during the time that is described as the Industrial Revolution.

Significant People and Places



Richard Arkwright	James Watt	Humphry Davy	James Brindley
Richard Arkwright opened the first cotton spinning mill using his invention of the water frame. Although mill owners may not have had direct links with the slave trade, they will have indirectly gained from their exploitation in pricing and transportation of cotton.	James Watt improved the steam engines. They would power new mills and transport. Despite his great engineering ability, we now know that Watt's early career included the trafficking of enslaved Africans.	Humphry Davy created a safety lamp to keep coal miners safe from explosions caused by gas in the mines.	James Brindley was one of the early canal engineers who worked on some of the first canals. He played an essential role in shaping the way canals were built during the Industrial Revolution.





Significant People and Places

City of Doncaster

Coalmining - Between the 19th and 20th century Doncaster emerged as an industrial centre. Its communication links, particularly its waterways, meant that Doncaster became extremely busy and saw vast migration to its centre. Underneath Doncaster lies huge natural resource by way of deep seam coal. It was coal that prompted Doncaster's exponential population growth. The waterways, River Don and Don Navigation were used to transport coal from Doncaster to the steel production centres at Rotherham, Sheffield and Scunthorpe.

Trains - Transport has played an important role in Doncaster's heritage. The stagecoach trade of the 17th and 18th centuries generated the wealth that built the town centre. The Industrial Revolution brought the railway to Doncaster, and the Great Northern Railway Locomotive and Carriage Building Works was established there.

Key Vocabulary

Factory	Piston	Aqueduct
Engine	Rotary	Locomotive
Mechanise	Motion	Packhorse
Mill	Smelting	Invention
Industry	Coalfield	Trade
Industrial	Coalmine	Imported
Revolution	Canal	Urbanisation
Steam	Barge	Agrarian

Key Questions

- What was the Industrial Revolution?
- How does an industrial society differ from a pre-industrial society?
- What sorts of developments characterised the Industrial Revolution?
- How was cotton spun before the Industrial Revolution?
- Why was Arkwright's invention so important?
- What were the advantages of spinning cotton in a factory, using machines?
- What do you think happened to the women who spun cotton on their spinning wheels?
- How did a steam engine work?
- Why was it necessary to burn fossil fuels to power a steam engine?
- Why did the steam engine have such an enormous impact as an invention?
- Why was iron needed during the Industrial Revolution?
- How did the 'blast furnace' improve iron production?
- Why was coal needed during the industrial revolution? How was coal mined?
- Why were packhorses so ineffective for transporting heavy goods?
- Why were barges on canals so much more effective for transporting goods?
- How did a steam train work?
- Where was the first passenger steam train built?
- Who designed the first passenger steam train?

- **Why do we export from Yorkshire?**