FACT FILE

This fact file will support your homework and other projects.

It will help you to:

 Discover when Manchester canals were built and why

Find out how they connect together

• Explore your local canal.

A great city

Waterways are one of the reasons why Manchester grew into the third largest city in Britain. Canals brought coal, cotton and other raw materials into the centre of the city and carried the finished goods back to seaports to be sold all over the world.

When I was queen, Manchester was one of the greatest industrial cities in the world!









The Bridgewater Canal

King canal

The story of the Manchester canals begins with Francis Egerton, 3rd Duke of Bridgewater, (1736 - 1803). In 1759 the duke decided he was paying too much to transport coal from his mines at Worsley to Manchester by horse and cart. I want a canal! It will deliver my coal quicker and cheaper

Permission please

Every canal had to pass through someone's land. To dig a new canal needed permission from Parliament. Landowners were often Members of Parliament who didn't want a want a smelly canal spoiling the view of their magnificent house.



James Brindley

When the duke got permission to build a canal he employed James Brindley to plan it (see p9). The first part of the canal was opened in 1761 and completed five years later.

> Bridgewater Canal is 41 miles (66km) long and runs from Manchester to Runcorn. It's a broad canal that carried wide boats such as barges



Canal Mania

The Bridgewater Canal made so much money that other businesspeople wanted a canal too. This started the great rush of canal building in Britain two hundred years ago. It was known as Canal Mania.



A barge being towed by horse on the Bridgewater Canal.



canalrivertrust.org.uk/explorers

© Canal & River Trust Charity Commission no. 1146792

Rochdale Canal

Crossing the Pennine Hills

In 1776 a group of mainly businessmen from Rochdale asked John Rennie (see p.9) to plan a canal to cross the Pennines. They knew it would be a huge project but they would gain a valuable link to the North Sea.

Angry mill owners

The route cut across land where cotton and wool mills stood and which needed large amounts of water to power them. Mill owners got angry believing the new canal would take water supplies from the mills. William Jessop (see p.9), who had helped to plan the Rochdale Canal, calmed them down. He even opened it before other cross-Pennine canals. Result!!

No

CANAL

We won't have

enough water to

power our mills!

Building Rochdale Canal

Crossing the Pennines was super difficult. Bridges, aqueducts and locks had to be built to carry the canal over rivers and up steep hills. Tunnels had to be blasted through some of the hardest rock in Britain.

The Rochdale Nine

The last nine locks on the Rochdale Canal that run through the centre of Manchester are known as 'The Rochdale Nine'.

Rochdale Canal was the first of three canals to cross the Pennine Hills



Brrrrr! The Pennines are some of the snowiest, rainiest, windiest and coldest places in Britain!

Explorers

Canal & River Trust



The Rochdale Canal is a broad canal. It runs for 32 miles (51 km) from Manchester to Sowerby Bridge. There are 92 locks which raise boats 600 feet (180 metres) above sea level. The canal summit is one of the highest in Britain.

canalrivertrust.org.uk/explorers



Ashton Canal



We're not paying

for paving!

Money, money, money!

In 1792, a group of local business people got an Act of Parliament to build the Ashton Canal. Benjamin Outram, another great canal engineer (see p9), was employed to plan it.



The Ashton Canal is a narrow canal that use less water than broad canals. It runs from Manchester to Ashton-under-Lyne.

The main line of the canal between Manchester and Ashton is 6.75 miles (10.86 km) long. Several short canals (called arms) were added later more than doubling its length. There are 18 locks.

Delays and hold-ups

The tolls

are too high.

No one will

use it!

Like most Manchester Canals, the Ashton Canal was successful. It carried coal and raw materials to the mills and took manufactured goods away to be sold. It also carried stone for building work and road construction.

Arguments about charges to use the canal (tolls) and who was responsible for paving the streets around the canal basins delayed it and it wasn't finally completed until 1800.

> The canal will never be finished at this rate

canalrivertrust.org.uK/explorers

Manchester, Bolton and Bury Canal

We want more trade!

Local Bolton and Bury landowners and businessmen wanted to increase trade to Manchester and in 1791 got an Act of Parliament to build the Manchester, Bolton & Bury Canal.

It became very successful carrying mainly coal but unfortunately the canal suffered from serious collapses and burst banks.

A broad canal

Manchester Bolton & Bury Canal is a broad canal almost 15 miles (24 km) long and connects to the River Irwell. There are three arms which meet at Nob End. It cost £127,700 to build (£10.5 million in today's money).

A spectacular collapse

Much of the canal ran along the side of the Irwell Valley. There were often landslips. The most serious one was in 1936 at Prestolee. It swept two boats into the river 100 feet below.

DAILY NEWS

CANAL DISASTER!

Spot the boat hanging over the edge of the canal



Staircase locks

The canal has 17 locks including four staircase locks of two or three locks together.

Staircase locks are grouped in pairs. There are wide pounds to hold water in between each one to allow boats to pass



The Nob End Flight of Locks is the upper set of locks.

canalrivertrust.org.uk/explorers

Manchester Ship Canal

A direct route to the sea

Although Manchester canals were very successful there was a BIG problem. All goods to be shipped by sea to the rest of the world had to go through the Port of Liverpool - Manchester's great rival!

It means we Liverpool can't make charges too much enough profit to use the port A tug pulling a ship on the Manchester Ship Canal. The Manchester Ship Canal is 36 miles long (58 km) and tidal. It runs from the Mersey Estuary to Manchester Docks into the centre of Manchester (now known as Salford Quays). Sea-going ships 'The big ditch' could sail right into the terminus Important Manchester businesspeople raised enough money to build a at salford Quays waterway large enough to take oceangoing ships - and bypass Liverpool! Edward Leader Williams (1828-1910), a civil engineer, designed it.



The cost of the canal

The first 'cut' was made in 1887. The canal took 12,000 navvies to build, six years to complete and cost almost £14.5 million (about £1.5 billion in today's money).



canalrivertrust.org.uk/explorers

© Canal & River Trust Charity Commission no. 1146792

Building Manchester Canals

Great canal engineers

William Jessop (1745-1814) became a great expert on British canal

construction and river improvement. He advised on the Rochdale Canal.

Canals attracted great engineers who liked to solve the big problems involved in building canals.



James Brindley (1716-1772) was the first great engineer of the Canal Age. He solved problems such as how to prevent water from escaping from canals.





Benjamin Outram (1764-1805) was skilful in building the tramways (simple railways) that connected mines, ironworks and canals. He worked on the Ashton Canal and its branch to the Rochdale Canal.

John Rennie (1761-1821) was a specialist on water supplies - especially useful on the Rochdale Canal where water supplies were a big problem.



© Canal & River Trust Charity Commission no. 1146792

Hardworking navvies

There were no machines to build the first canals. Men and some women called navvies (short for navigators) used just pickaxes, shovels and muscle-power to dig through very hard rock.



By the time the Manchester Ship Canal was built, steam powered cranes and excavators had been invented. Nevertheless, building canals was dangerous work – and there were often bad accidents.





One of the great achievements of the Canal Age is the Barton Swing Aqueduct, designed by Edward Leader Williams. It carries the Bridgewater Canal over the Manchester Ship Canal and swings aside allowing ocean-going ships to pass through. It still operates today.

Rival Railways

The end of an era

In the twentieth century, it became much cheaper and quicker to transport goods by rail. Many canals were bought by railway companies that allowed them to fall into ruin.

By the early 1960s, most canals held too little water and were choked with weeds. Wharves, lovely old canal buildings and quaint bridges and locks were left to rot.



© Canal & River Trust Charity Commission no. 1146792



The Ashton Canal before it was restored.

Canal heroes

After the Second World War people realised that an important part of our history was being lost. They formed groups and gradually cleared rubbish and weeds, mended banks and rebuilt locks.



Volunteers clear weeds and rubbish.



Container ships

Although the Manchester Ship Canal was still working, in the 1980s goods were shipped in huge containers. Most ocean-going ships became too large to use the canal and the great docks at Salford closed.

Life alongside water

Today people love to live and work alongside water. Old warehouses and other canalside buildings are being converted into offices and homes. Towpaths are now very popular for walking, cycling and fishing.



canalrivertrust.org.uk/explorers

Manchester Canals Today







The Cheshire Ring is 97 miles (156 km) long. It has 92 locks and takes about one week to complete.



The Cheshire Ring at Kidsgrove.

Canal enthusiasts restoring the Manchester Canals realised that the canals could become part of the circuit for people using the waterways for leisure. In 1974, following restoration, the Cheshire Ring, as it became known, re-opened for navigation.

© Canal & River Trust Charity Commission no. 1146792

Stay Away From the Edge

canalrivertrust.org.uK/explorers

• KIDSGROVE