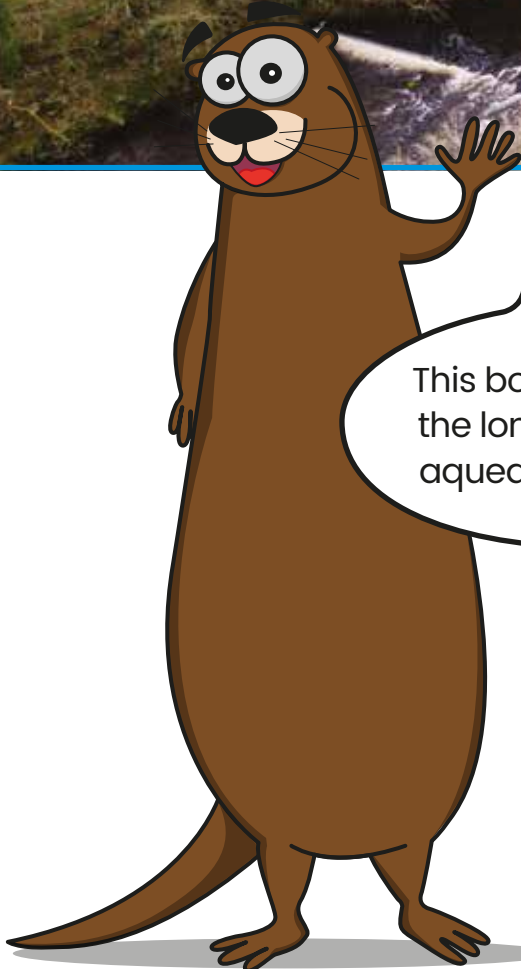


## Fact file

### Pontcysyllte Aqueduct and Trevor Basin

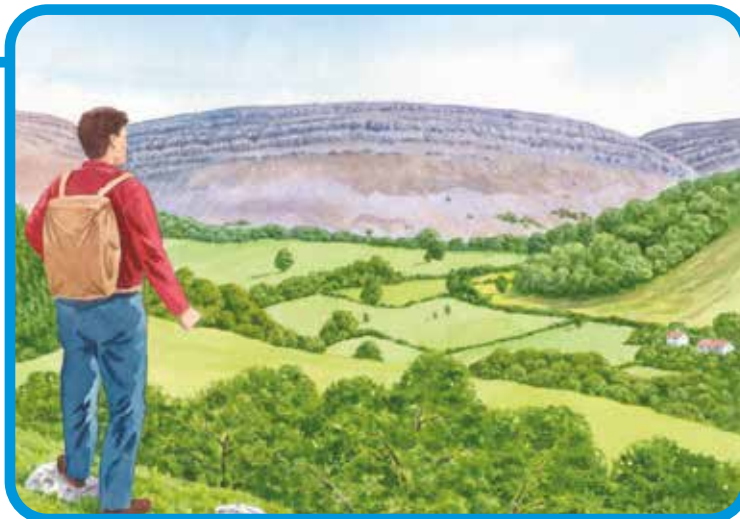


This boat is crossing  
the longest, highest  
aqueduct in Britain.

## What is an aqueduct?

An aqueduct looks like a bridge but it carries water over a valley, road, railway or river. The first aqueducts carrying boats were built nearly 600 years ago which is pretty incredible considering the building equipment then. When aqueducts to carry canals were first built in the UK, they were built from stone and brick, and the trough which carried the canal was lined with puddling clay to make it waterproof. The stone and clay were very heavy so the aqueducts had to be built low and the piers (legs of the arches) wide. Even so many aqueducts, such as the Vrynwy Aqueduct collapsed and had to be repaired.

Imagine having to build an aqueduct over a valley like this!



## What is different about the Pontcysyllte Aqueduct?

When the Llangollen Canal was being built, the architects and local business owners wanted it to cross the Dee Valley to reach the industries on the other side. The valley was high and the aqueduct would have to stretch over 300m. A new material was beginning to be used in building - cast iron. Using iron for the trough that carried the canal would make it much lighter and so put less strain on the stone piers holding it. It was a bold move by Thomas Telford to create the new aqueduct which would be higher and longer than any other, of this less familiar material. The construction was done using wooden scaffolding and simple cranes.

**Fascinating  
Facts**

The aqueduct is over **300m** long and **39m** above the River Dee.



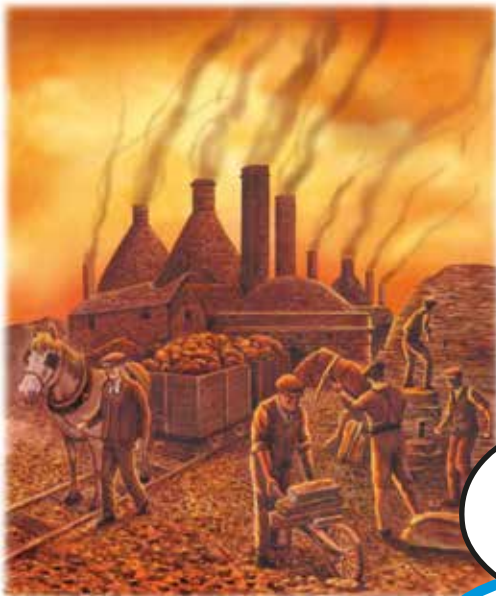


## Why is it so special?

The Pontcysyllte Aqueduct is probably the most famous aqueduct in Britain because it is the longest and the highest. It stands at 39m high. Imagine how difficult it must have been to build without modern equipment and safety gear. It was refurbished in 2003/4 although much of it, amazingly, needed very little work. All the bolts on the aqueduct were inspected and 500 replaced. The towpath was also replaced and the iron work painted.

## Trevor Basin

The businesses around the Trevor Basin flourished when the aqueduct opened in 1805. The area expanded with more industries quickly being established. You can still see the remains of the iron tracks where the horses pulled carts from the factories, iron foundaries, chemical works, brick and tile works and coal from the local mines to the wharf to be transported. Two short extensions with a central island extended the basin forming two docks.



What do you think it would have been like to work here?



In 1855 George Burrow describes the industry here:

“...enormous sheets of flame shot high into the air ...a clanging of engines, a noise of shovels and a falling of coals truly horrible”

Always remember to stay **SAFE** near water – **Stay Away From the Edge.**

## Fascinating Facts

8000 people came to the opening ceremony of the aqueduct in 1805.

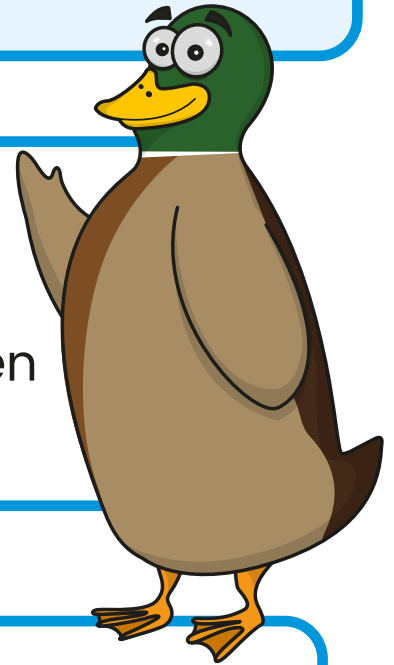
It took over **500 men** and **10 years** to build the aqueduct.

'Aqua' is Latin for water and 'ducere' means to lead.

The aqueduct carries enough water to fill 16,666 baths and takes 3 to 4 hours to drain when the plug is pulled.

The iron used to make the trough was cast locally at **Plaskynaston Foundary**.

The stone piers holding up the iron trough are hollow at the top to reduce their weight.



## Strange but True

The drinking water in your tap, at home, might have travelled across the aqueduct on its way to be treated.

The mortar used in the building of the aqueduct contained ox blood!

Chemicals created at the works at Trevor Basin, were transported by canal as they were thought too dangerous to travel by road.

The aqueduct was described by **Sir Walter Scott** as a '**stream in the sky**' where fish swim above birds.