

Sendereihe	Reports in English
Sendefolge	London's Bridges
Zielgruppe	Sek. I ab Klasse 7 und Sek. II
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Skript

Mike Allan

0:03

This is one of the most breathtaking sights in London. Tower Bridge being raised as a huge ocean going liner passes underneath it. But Tower Bridge is just one of 34 bridges that cross the river Thames in London. And their history and construction have done much to shape England's capital.

0:29

Up until the 1880s the most easterly of the capital's bridges was London Bridge. But as London's trade expanded and its population grew, London Bridge became ever more congested. It was decided a new bridge was needed about a mile further east than London Bridge. But because this bridge would be the nearest of London's bridges to the sea it would need to be very special. The city authorities said that the design had to be such that tall-masted ships coming from abroad to unload in the port of London must be able to pass underneath it, whilst at the same time the bridge had to fulfil its basic role as a river crossing. A thorny problem and one that wouldn't be easily solved.

1:20

Over 50 designs were received and after 7 years of deliberation the design of Sir Horace Jones was commissioned and work began in 1886. Unfortunately Jones died before its completion some 8 years later - its cost a then staggering three-quarters of a million pounds. On the 30th of June 1894 the bridge was opened by the Prince and Princess of Wales. Huge crowds turned out to witness the opening ceremony.

1:53

Nowadays the bridge still draws big crowds. Eric Suthern is the Bridge Master, responsible for its day-to-day running.

O-Ton Eric Suthern

2:03

I'm in the north-east control cabin at Tower Bridge. We have two control cabins at the bridge. There's the one I'm in at the moment and another one on the south-west corner of the bridge. In this cabin I've got a bank of colour TV monitors which give me an all-round view of what's happening on the road and on the bridge. My control desk is in front of me and from here I can control all the traffic, all the pedestrians, the locking and unlocking procedures on the bridge. And I also drive the bridge using the joystick here.

Mike Allan

2:41

When the bridge first opened it was lifted upto 6,000 times a year. Nowadays that figure is about 900. But it's never more spectacular then when cruise liners like the Seaborne Pride come to town.

O-Ton Eric Suthern

2:57

Seaborne Pride this is Tower Bridge I am now ready to commence your bridge lift, over.

3:02

I'm ready now to start the bridge lift and the first process I must do is put the traffic lights to red and clear the bridge of all the traffic. Once the traffic is clear I'm able then to shut the road gates and the pedestrian gates.

Once I'm satisfied that the bridge is clear, I'm then in a position to be able to lift the bridge by pulling back on the driving lever.

Mike Allan

4:12

Surprisingly the bridge is actually made from steel. The gothic effect has been created by the use of stone cladding so that it was in keeping with its much older neighbour the Tower of London.

The walkways that run horizontally across the upper section of the bridge offer today's visitors superb river views but were originally used as pedestrian crossings when the bridge was being raised.

Once opened Tower Bridge became known as 'the wonder bridge' and for good reason. Not only was it the largest and most sophisticated lifting bridge ever built, but it used hydraulic power on a scale never before attempted.

O-Ton Eric Suthern

5:01

I'm now down underneath the bridge in one of our four machinery rooms. On my left you'll see one of the original old water driven engines, which were installed in 1894 and these water driven engines actually lifted the bridge right up until 1976. In 1976 we reverted to the new hydraulic-driven system which is electrical motors driving hydraulic pumps.

Mike Allan

5:35

And when the road lifts this is where the lower part ends up, deep in the bowels of the bridge in what is know as the 'bascule' chamber under the water line. The word 'bascule' comes from the French meaning 'seesaw' - the basic principle on which the bridge is built.

Today it's widely regarded as one of the greatest ever feats of Victorian engineering. But the bridge is just one of the capital's 34 Thames crossings stretching all the way to Teddington Lock in the west.

6:12

18 are road bridges. 9 are railway bridges. And 7 are for pedestrians only.

The very first bridge across the Thames was built some 2,000 years ago by the Romans, on the site of the current London Bridge.

O-Ton Alex Werner

6:34

People needed to get from one side to the other. It was basically the Roman army that was coming over from the continent and they needed very, very good lines of supply. And the river Thames needed to be forded, needed to be crossed and this was an absolutely crucial point for where they could do it with ease and they could strengthen their hold on the country.

Mike Allan

6:58

The story of London Bridge is a fascinating one. In fact several different London Bridges have been built on this site since Roman times. The most famous of them all was the medieval London Bridge, the first ever stone bridge here.

O-Ton Alex Werner

7:15

The mediaeval bridge that was built in London in the 12th century is probably one of the most famous bridge ever built. Old London Bridge. This is the bridge that had houses on it. There were many, many arches. It had 19 arches. So not like bridges today where you have one enormous span, this had lots of little spans across the river and it took about 30 to 40 years to build.

Mike Allan

7:42

Old London Bridge was the only crossing over the Thames in London for some 600 years, often referred to as the eighth wonder of the world. On it were stalls, shops, 7-storey high houses, even a chapel. It was also where heads of executed criminals were put on display, on stakes for all to see. The bridge was only three and a half metres wide - with all its traders, carts and animals it was a busy place.

O-Ton Alex Werner

8:15

Well this is a bridge with houses on it and imagine if you were crossing the bridge you'd have this very, very sort of narrow causeway along the bridge and there'd be these houses on either side rising up above you. And there'd be sounds of the river, but it would have been a very noisy sort of a bridge. There were shops all the way along the bridge, so you could go in and buy things in the shops. There'd be all the carts, the animals would be ferried through into the markets in the city. So it'd be an amazingly noisy, dirty, smelly place the bridge. I don't think it would have been very pleasant to live on it because it would have been so noisy.

Mike Allan

8:49

As London Bridge became more crowded, the demand for new crossings grew and the 18th century saw the first major period of bridge building in London, with new crossings at Blackfriars and Westminster. These new bridges were vital to the capital's development and with whole new areas south of the river opening up to the city, London changed dramatically.

However not everyone was happy with these new bridges.

O-Ton Alex Werner

9:20

The arrival of these new bridges did upset some individuals. There were the Thames Watermen who were really the taxi drivers on the river at this period, and they were very unhappy with the new bridges because it actually put a lot of them out of work. Basically, anywhere alongside of the river there would be hundreds of watermen crying out trying to get your business, to row you across to the other side of the river. Obviously once the bridges were built you didn't need to take a boat so much. There were still areas where it was still quicker to get a boat across the river, but they fought very, very hard to try and stop those new bridges being built.

Mike Allan

10:02

As for old London Bridge, by the turn of the 19th century, time had taken its toll. The bridge became more famous for bits falling off it than anything else. There was even a nursery rhyme written called 'London Bridge is Falling Down'. The result was the eventual building of a new London Bridge alongside the old one. The much wider bridge, was opened in 1831 with much pomp and pageantry. The medieval bridge that had stood for 600 years was demolished a year later.

The new London Bridge was one of many that were built in the early 19th century, another phase of major bridge building, as London led the world into the new industrial revolution.

10:53

The arrival of the railways later in the century meant new railway bridges were needed, to carry London's ever-expanding population into the enormous railway stations springing up around the city. The age of the commuter was just beginning.

11:11

And bridge building across the Thames still continues. The most recent is the Millennium Bridge, which links the Tate Modern art gallery in Southwark to St Paul's Cathedral on the north side. It's one of the most controversial bridges ever built here.

11:29

Designed as a celebration of the new millennium it was opened on the 10th of June 2000 in a blaze of publicity. An estimated 80,000 people turned up to try it. It soon became clear though that something was wrong as the bridge began to wobble from side to side.

11:50

The police tried to limit the number of people going on it to a 100 or so at any one time. But still it wobbled. So much so that after just 2 days it was closed down. And its designers were left with the problem of why it wobbled so much and how to stop it. For months they carried out exhaustive research but laboratory tests proved inconclusive. They decided to use their own staff to make it wobble once more. They gradually increased the number of people walking across it. With 10 it was stable. With 100 it began to wobble again. Eventually a solution was hit upon. Large dampers were fitted which acted as shock absorbers to the bridge and stopped all the excessive wobbling.

12:47

In February 2002 the bridge was once again reopened to the public and is now an established part of the Thames scenery.

12:58

2,000 years on from that first Roman crossing, London's bridges are still making headlines.