

# Stonehenge

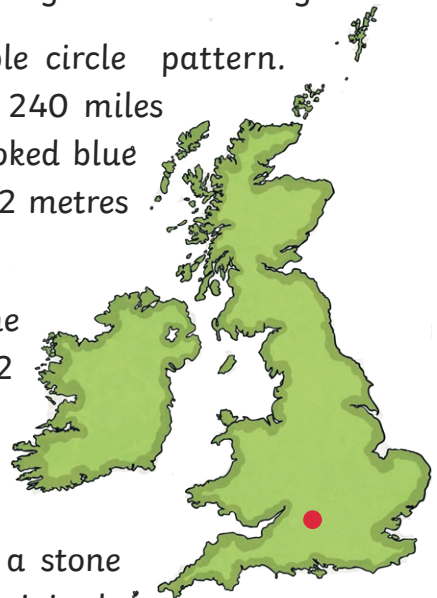


Stonehenge is a very famous stone circle in the South of England that was started in the Stone Age and continued into the Bronze Age. They started by digging a circular ditch that was 100 metres across using picks made from antlers. There were two entrances to the circle. There were 56 pits

dug around it, 1 metre deep, with flat bottoms. They could have held timber posts, or stones or might have been part of religious ceremony.

The second stage saw 82 stones added in a double circle pattern. These stones came all the way from South Wales, 240 miles away. They were called bluestones because they looked blue if they were broken or wet. The stones were around 2 metres tall and over 1 metre wide.

About 500 years later more stones were added. The Sarsen stones were enormous, over 4 metres high, 2 metres wide and weighing up to 30 tonnes. An outer circle was created, with stones laid horizontally across the top. In the middle, more stones were arranged in a horseshoe shape. At the centre was a stone called the Altar Stone. During the final changes the original bluestones were rearranged in the horseshoe and circle shape that can be seen today.





There is one stone that looks red when it gets wet because there is iron in the rock. The Victorians called this the Slaughter Stone.

To make the stones fit well, they carved bumps and holes to make them fit together, a bit like building blocks.

The stones are very carefully lined up so you can see the sunrise at midsummer and sunset at midwinter at opposite ends of the circle.

It could have taken 600 men to move each massive stone by pulling on ropes over a line of logs.

They lifted the stones by sliding them into holes and using large wooden frames and ropes to pull them up in the right direction.

They carved pictures of axe-heads and daggers on some of the Sarsen stones.





# Stonehenge

Stonehenge is a very famous prehistoric monument in the South of England, in Wiltshire. It was started 5000 years ago during the Stone Age, around 3100 - 3000BC. Up to 150 people were buried there when it was just an earthwork. The stones that we see today were added later.

The earthwork was a circular ditch dug using antler picks with a bank both inside and out. Bones of oxen and deer were found in the bottom of the ditch along with flint tools. The central area was about 100 metres in diameter and there were two entrances. There were 56 pits dug around the circle (called the 'Aubrey holes' after John Aubrey, who was thought to have first identified them in the 17<sup>th</sup> century) which were 1 metre wide and 1 metre deep, with flat bottoms. The purpose of these holes is unclear. Different people think they could have held timber posts, or stones, or were part of a religious ceremony.



It is unclear when the second stage started, it could have been between 4000 and



5000 years ago. The stones that were added at this point came all the way from the Preseli Hills in South Wales. They were called bluestones (because they appear to be slightly blue when broken or wet) and 82 of them, weighing up to 4 tonnes each, were transported an amazing

240 miles over land and water. This was way before roads and lorries. (Another theory is that they were brought much closer by a glacier). The stones were set up in a double circle pattern. During this second stage the North East entrance was widened and the largest stone, known as the Hell Stone added. The Avenue was started. This was an earth corridor dug to connect Stonehenge with the River Avon.

The third stage involved the addition of more stones about 500 years later. These were called Sarsen stones and came from the Marlborough Downs, about 25 miles from Stonehenge. The Sarsen stones were enormous, the upright stones being over 4 metres high, 2 metres wide and weighing up to 30 tonnes.



An outer circle was created, with stones laid horizontally across the top. Medieval gallows were built with two vertical stones and a horizontal stone on top, which is why the name Stonehenge could be derived from the Old English words for 'stone' and 'hang'.

In the middle, more stones were arranged in a horseshoe shape. At the centre was a stone called the Altar Stone. During the final changes the original bluestones were rearranged in the horseshoe and circle shape that can be seen today.

The Slaughter Stone is a type of sandstone which, after rain, can appear to have a reddish colour. This is because the iron in the stone reacts with the rainwater. It was called the Slaughter Stone by Victorians who assumed that the red in the stone was blood, and thought that Druids must have practised sacrifices on it.

The stones are positioned very carefully to align with sunrise at midsummer and sunset at midwinter at opposite ends of the circle.

It has been estimated that the three phases of construction could have taken more than thirty million hours of labour.

Modern calculations show that it would have taken 500 men using leather ropes to pull one Sarsen stone, with an extra 100 men need to lay the huge rollers in front of the sledge.

The stones would have been moved and raised using a combination of rollers, ropes, wooden levers, A-frames and pulleys, and a massive amount of man power. It is thought that the horizontal stones would be raised to the height of the vertical stones by building up wooden platforms.

Carvings of axe-heads and daggers can be seen on some of the Sarsen stones. These were perhaps symbols of power.

We don't know why Stonehenge was built. Suggestions include a special burial ground, a place of healing, an astronomical calendar, or a place of worship.



# Stonehenge

Stonehenge is a very famous prehistoric monument in the South of England, in Wiltshire. It was started in the Stone Age, around 3100 - 3000BC, and would initially have just been a large earthwork, somewhere for people to bury the dead. Remains found indicate that up to 150 people were buried there from as early as 3000BC. The stones that we see today were added later. During the Stone Age much of Southern England was woodland, but the ground around Stonehenge is chalky and may have been a very open landscape. This could explain the chosen location for Stonehenge and the many other monuments and earthworks found in the area that date from the Neolithic Stone Age and Bronze Age. The earthwork comprised of a circular ditch dug with antler picks and a bank both inside and out. Bones of oxen and deer were found in the bottom of the ditch, along with flint tools. The central area was about 100m in diameter and there were two entrances. There were 56 pits dug around the circle (called 'Aubrey holes' after John Aubrey, who was thought to have first identified them in the 17<sup>th</sup> century) which were 1 metre wide and 1 metre deep, with flat bottoms. The purpose of these holes is unclear.



The second stage, when stones were added to the existing earthworks, was thought by different people to have been started anytime from 2600BC to 2150BC, although a team of archaeologists in 2013 used radiocarbon dating that suggests the site could actually date from 3000BC. The stones that were added at this point came all the way from the Preseli Hills in South Wales. They were called bluestones (because they appear to be slightly blue when broken or wet) and 82 of them, weighing up to 4 tonnes each, were transported an amazing



240 miles over land and water using rollers and rafts. This was way before roads, lorries and cargo ships! (A less impressive theory is that they were carried on a glacier to much nearer the site). The stones were around 2 metres tall and over 1 metre wide.



They were set up in a double circle pattern. During this second stage the North East entrance was widened and the largest stone, known as the Heel Stone added. The Avenue was started. This was an earth corridor dug to connect Stonehenge with the River Avon.

The third stage involved the addition of more stones around 2000BC (although recent radiocarbon dating suggests it could have been between 2600 and 2400BC). These were called Sarsen stones and were probably sourced from the Marlborough Downs, about 25 miles from Stonehenge.

The Sarsen stones were enormous, the upright stones being over 4 metres high, 2 metres wide and weighing up to 30 tonnes. An outer circle was created, with stones laid horizontally across the top. Just like the stone laid across the top of a doorway, these are called lintels.

Two vertical stones capped with a horizontal lintel is called a trilithon. Medieval gallows were built like this, which is why the name Stonehenge could be derived from the Old English words for 'stone' and 'hang'.

In the middle, more stones were arranged in a horseshoe shape. At the centre was a stone called the Altar Stone. During the final changes the original bluestones were rearranged in the horseshoe and circle shape that can be seen today.

The Slaughter Stone used to stand vertically, but fell over and has sunk partly into the ground. Unlike the other stones it is a type of sandstone which, after rain, can appear to have a reddish colour. This is because the iron in the stone reacts with the rainwater. It was called the Slaughter Stone by Victorians who assumed that the red in the stone was blood, and thought that Druids must have practised sacrifices on it.





The workmanship involved is impressive. Techniques usually seen in woodwork were used to fit the stones together. Tongue and groove joints were carved into the lintels to slide them together. Tenons, which are like round lumps, were left on the tops of the standing stones, and round holes called mortise holes carved into the bottom of the horizontal stones so they would hold position. It was basically like carving the enormous stones into building bricks.

It is clear that the arrangement of the stones at Stonehenge was carefully planned. They are aligned in such a way that at midsummer you can watch the sunrise through the North East entrance. At midwinter, the sunsets in the gap between the two tallest trilithons.



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Modern calculations show that it would have taken 500 men using leather ropes to pull one Sarsen stone, with an extra 100 men needed to lay the huge rollers in front of the sledge. The stones would have been moved and raised using a combination of rollers, ropes, wooden levers, A-frames and pulleys, and a massive amount of man power. It is thought that the lintels would be raised to the height of the vertical stones by building up wooden platforms.

Carvings can be seen on four of the large Sarsen bricks, depicting axe-heads and daggers. These were perhaps symbols of power.

We don't know why Stonehenge was built. Suggestions include a special burial ground, a place of healing, an astronomical calendar, or a place of worship.

