

# The Bronze Age: Stonehenge

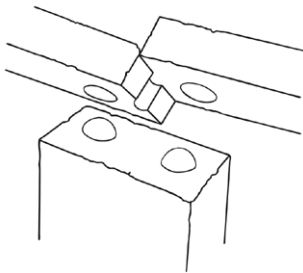
Stonehenge is a very famous stone circle in the south of England that was started in the Stone Age and continued into the Bronze Age. They started by digging a circular ditch that was 100 metres across using picks made from antlers. There were two entrances to the circle. There were 56 pits dug around it which were one metre deep, with flat bottoms. They could have held timber posts, or stones, or might have been a part of a 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 two metres tall and over one metre wide.



About 500 years later, more stones were added. The Sarsen stones were enormous, over four metres high, two 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 into the horseshoe and circle shape that can be seen today. The stones were lined up so you can see the sunrise at midsummer and the sunset at midwinter at opposite ends of the circle.



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

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.



Photos courtesy of The Stonehenge Stone Circle Website and Peter G Trimming (@flickr.com) - granted under creative commons license - attribution

# Questions

1. Where is Stonehenge?  
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2. When was it started?  
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3. How did they dig the ditch?  
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4. Where did the bluestones come from?  
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5. How many bluestones were there?  
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6. What are the larger stones called?  
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7. What was the stone in the middle called?  
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8. How did the slaughter stone get its name?  
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9. There is so much we don't know about Stonehenge. If you could go back in time and find out the answer to just one question about Stonehenge, what would the question be?  
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10. No one really knows why it was built. Why do you think it was built? What do you think it was used for?  
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11. In the past, anyone could walk round Stonehenge but now it has a rope round it to protect it. Do you think people should be able to walk round the stones? Why?  
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# Answers

1. Where is Stonehenge?  
**Stonehenge is in the south of England.**
2. When was it started?  
**Stonehenge was started in the Stone Age.**
3. How did they dig the ditch?  
**They started by digging a circular ditch that was 100 metres across using picks made from antlers.**
4. Where did the bluestones come from?  
**The bluestones came (240 miles away) from South Wales.**
5. How many bluestones were there?  
**There were 82 blue stones.**
6. What are the larger stones called?  
**The larger stones are called the Sarsen.**
7. What was the stone in the middle called?  
**The stone in the middle is called the Altar Stone.**
8. How did the slaughter stone get its name?  
**The slaughter stone got its name from the Victorians as the stone turns red when it gets wet.**
9. There is so much we don't know about Stonehenge. If you could go back in time and find out the answer to just one question about Stonehenge, what would the question be?  
**Children to write their own question about Stonehenge.**
10. No one really knows why it was built. Why do you think it was built? What do you think it was used for?  
**Children to write their own question about Stonehenge.**
11. In the past, anyone could walk round Stonehenge but now it has a rope round it to protect it. Do you think people should be able to walk round the stones? Why?  
**Yes – an appropriate answer e.g. referring to visitors learning about the history of it.**  
**No – an appropriate answer e.g. referring to the protection of the stone.**

# The Bronze Age: 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 which was dug by 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 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 one metre wide and one 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 slightly blue when broken or wet) and 82 of them, weighing up to one tonne 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 around two metres tall and over one 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, was 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 away from Stonehenge. The Sarsen stones were enormous, the upright stones being over four metres high, two 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 have been 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.

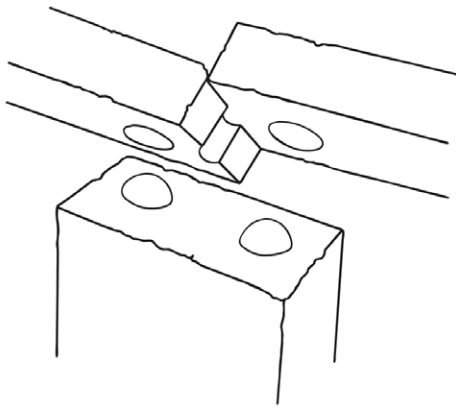
During the final changes, the original bluestones were rearranged in the horseshoe and circle shape that we see today.



The stones would have been moved and raised using a combination of rollers, ropes, wooden levers, 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 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.



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 needed to lay the huge rollers in front of the sledge. To make the stones fit together well, they carved bumps and holes to make them fit together, a bit like building bricks!

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 practiced sacrifices on it.



Photo courtesy of the Stonehenge Stone Circle Website

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



# Questions

1. Where is Stonehenge?  
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2. How did they dig the ditch?  
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3. What was the name given to the pits?  
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4. Where did the bluestones come from?  
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5. There are two main theories on how the bluestones got to Stonehenge. What are they?  
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6. Which entrance was widened during the second stage?  
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7. What are the largest stones called?  
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8. How much did they weigh?  
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9. We don't know how Stonehenge got its name, but what is one suggestion?  
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10. How did the slaughter stone get its name?  
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11. What is special about the alignment of the stones?  
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12. There is so much we don't know about Stonehenge. If you could go back in time and find out the answer to just one question about Stonehenge, what would the question be?  
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13. In the past there was open access to Stonehenge, now there are ropes up so visitors have to look from a distance, and closer access is required. Do you think this is right? Why? Write your answer on the back of the sheet.

# Answers

1. Where is Stonehenge?  
**Stonehenge is in the south of England, Wiltshire.**
2. How did they dig the ditch?  
**Stonehenge was dug by using antler picks with a bank both inside and out.**
3. What was the name given to the pits?  
**The pits were called the 'Aubrey holes'.**
4. Where did the bluestones come from?  
**The bluestones came from Preseli Hills in South Wales.**
5. There are two main theories on how the bluestones got to Stonehenge. What are they?  
**Some people believe the stones were transported 240 miles over land and water, others believe they were brought closer by a glacier.**
6. Which entrance was widened during the second stage?  
**The north-east entrance was widened during the second stage.**
7. What are the largest stones called?  
**The largest stones are called the Sarsen stones.**
8. How much did they weigh?  
**The stones weighed up to 30 tonnes.**
9. We don't know how Stonehenge got its name, but what is one suggestion?  
**One suggestion of how Stonehenge got its name is from the Old English words for 'stone' and 'hang' due to how the stones were built.**
10. How did the slaughter stone get its name?  
**The Slaughter stone turns red when it rains due to the iron in the stone. Victorians named it this because they assumed the red colour in the stone was blood from sacrifices by the Druids.**
11. What is special about the alignment of the stones?  
**The stones are lined up so you can see the sunrise at midsummer and the sunset at midwinter at opposite ends of the circle.**
12. There is so much we don't know about Stonehenge. If you could go back in time and find out the answer to just one question about Stonehenge, what would the question be?  
**Children to write their own question about Stonehenge.**
13. In the past there was open access to Stonehenge, now there are ropes up so visitors have to look from a distance, and closer access is required. Do you think this is right? Why? Write your answer on the back of the sheet.  
**Yes – an appropriate answer e.g. referring to visitors learning about the history of it.  
No – an appropriate answer e.g. referring to the protection of the stone.**

# The Bronze Age: 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 the 'Aubrey holes' after John Aubrey, who was thought to have first identified them in the 17<sup>th</sup> century) which were one metre wide and one 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 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 was added. The Avenue was started. This was an earth corridor dug to connect Stonehenge with the River Avon.

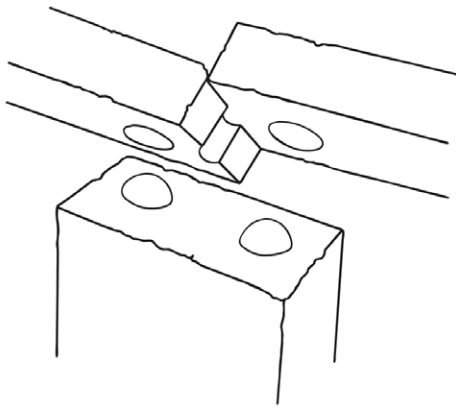




The stones would have been moved and raised using a combination of rollers, ropes, wooden levers, frames and pulleys and a massive amount of man power. It is thought that the lintels would be raised to the height of the vertical stones by building up wooden platforms.

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.



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 in position. It was basically like carving the enormous stones into building bricks.

The slaughter Stone used to stand vertically, but fell over and has sunk partially 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 practiced sacrifices on it.



Photo courtesy of the Stonehenge Stone Circle Website

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 sun rise through the north-east entrance. At midwinter, the sun sets in the gap between the two tallest trilithons.

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 needed to lay the huge rollers in front of the sledge.

The third stage involved the addition of more stones from 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 away from Stonehenge. The Sarsen stones were enormous, the upright stones being over four metres high, two metres wide and weighting 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 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.



# Questions

1. Where is Stonehenge?  
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2. What is one theory about why it was built in that area?  
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3. How did they dig the ditch?  
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4. Where did the bluestones come from?  
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5. There are two main theories on how the bluestones got to Stonehenge. What are they?  
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\_\_\_\_\_
6. Which entrance was widened during the second stage?  
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7. What is the name of the recent method used to date the stones?  
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8. What are the largest stones called?  
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9. How much did they weigh?  
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10. We don't know how the Stonehenge got its name, but what is one suggestion?  
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11. How did the Slaughter Stone get its name?  
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12. What is special about the alignment of the stones?  
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13. There is so much we don't know about Stonehenge. If you could go back in time and find out the answer to just one question about Stonehenge, what would the question be?  
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14. There are many different theories about why it was built. What do you think? Write your own theory on the back of the page.

# Answers

1. Where is Stonehenge?  
**Stonehenge is in the South of England, Wiltshire.**
2. What is one theory about why it was built in that area?  
**The ground around Stonehenge is chalky and may have been a very open landscape unlike most of Southern England which was mainly woodland so was a good place to bury people.**
3. How did they dig the ditch?  
**They dug the ditch with antler picks, bones of oxen and deer and other flint tools.**
4. Where did the bluestones come from?  
**The bluestones came from Preseli Hills in South Wales.**
5. There are two main theories on how the bluestones got to Stonehenge. What are they?  
**Some people believe the stones were transported using rollers and rafts 240 miles over land and water, others believe they were brought closer by a glacier.**
6. Which entrance was widened during the second stage?  
**The north-east entrance was widened during the second stage.**
7. What is the name of the recent method used to date the stones?  
**The recent method used to date the stones was 'radiocarbon'.**
8. What are the largest stones called?  
**The largest stones are called Sarsen stones.**
9. How much did they weigh?  
**The stones weighed up to 30 tonnes.**
10. We don't know how the Stonehenge got its name, but what is one suggestion?  
**One suggestion of how Stonehenge got its name is how the stones have been placed: two vertical stones capped with horizontal lintel, which is called a trilithon. Medieval gallows were built like this so could explain the name from the Old English words for 'stone' and 'hang'.**
11. How did the Slaughter Stone get its name?  
**The Slaughter stone turns red when it rains due to the iron in the stone. Victorians named it this because they assumed the red colour in the stone was blood from sacrifices by the Druids.**
12. What is special about the alignment of the stones?  
**The stones were aligned so that during midsummer you can watch the sun rise through the north-east entrance and at midwinter you can see the sunset in the gap between the two tallest trilithons.**
13. There is so much we don't know about Stonehenge. If you could go back in time and find out the answer to just one question about Stonehenge, what would the question be?  
**Children to write their own question about Stonehenge.**
14. There are many different theories about why it was built. What do you think? Write your own theory on the back of the page.  
**Children to write their own appropriate theory about why Stonehenge.**