

3.3.21 To identify evidence that supports or refutes the theory that Stonehenge was used as an astronomical calendar.

Cut out each box and decide if the evidence it contains supports or refutes the theory that Stonehenge could have been used as an astronomical calendar. Stick them into the correct column on your Support or Refute Activity Sheet.

In 1720, William Stukeley made an accurate scientific diagram of all the features of Stonehenge, and noticed that the Avenue and the Heel Stone were precisely aligned with the midsummer sunrise.

Richard Atkinson published his ideas in 1966. He explained that some of the pits that Hawkins had referred to were naturally formed depressions, and were not dug by ancient people. He also shared his findings that the features used by Hawkins to find alignments were all added to Stonehenge at different times, so could not have been used together as Hawkins suggested.

In 1963, Gerald Hawkins published his scientific analysis of Stonehenge. He had used a computer to discover over a hundred different alignments with the Sun, Moon and stars. He also suggested that the Aubrey Holes were used to predict lunar eclipses. He found evidence that posts or stones had been moved from hole to hole, suggesting a marker was moved around the circle to measure the passing of time and the movement of the Moon.

There are 56 Aubrey holes. In order to use them to track lunar eclipses, the ancient Britons would have had to move markers around the circle of holes over a period of 56 years. This has been proven by scientists to be an unreliable method for measuring eclipses, and that lunar eclipses would never repeat their date and position over the 56 years.

Some scientists doubt that the ancient Britons could have observed or known about astronomical events such as eclipses. Many lunar eclipses would not even be visible from Stonehenge.

Archaeologists and scientists have found geologic evidence that shows that the Avenue was formed naturally during the ice age, rather than purposefully dug out by people.

The Heel Stones were added over 1000 years after the first stage of Stonehenge was constructed, so they could not have been used to view the sunrise when Stonehenge was first built.

In 1966, Fred Hoyle concluded that the 28-day lunar cycle could have been measured by moving a marker each day. He also suggested that by moving a marker two holes every 13 days, the ancient Britons could have measured the Earth's annual movement around the Sun. He suggested that when the Sun marker and the Moon marker were at opposite positions around the circle, this would show that a lunar eclipse would occur.