Lesson Plan: Stonehenge artisticbiker.com

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Summary

In this lesson, students learn about Stonehenge, a 5,000 year old monument in England. The transcript discusses how archaeologists date the site, the meaning of the word henge, how the stones align with the solstices, and how people may have moved them using simple methods. The discussion emphasizes that art and creativity are valuable tools for problem solving.

https://www.youtube.com/live/C3-6nCQQhZc?si=FwBxHUux92sFokwE

Objective

Students will understand the history, construction, and cultural significance of Stonehenge, explore how archaeologists estimate its age, and examine how problem solving connects to both ancient engineering and modern creativity.

Standards

- NGSS MS-ESS1-1: Develop and use a model of the Earth-sun-moon system to describe cyclic patterns.
- CCSS.ELA-LITERACY.RI.6.7: Integrate information from visual and textual sources to develop understanding.
- C3.D2.His.2.6-8: Classify and analyze historical sources to understand the past.

Materials

- 9 Fun Facts about Stonehenge
- Worksheet
- Optional: images of Stonehenge, paper, pencils, colored markers, whiteboard

Activity

- 1. Read through the 9 Fun Facts with the class.
- 2. Discuss how archaeologists determine the age of sites using tools and radiocarbon dating.
- 3. Explore the definition of a henge and how Stonehenge is both typical and unusual.
- 4. Show how the stones align with the solstices and ask students why that might be important.
- 5. Demonstrate problem solving by discussing how Wally Wallington moved heavy stones using pebbles and leverage.

Introduction

Begin by asking students what they know about Stonehenge. Present the concept of ancient monuments and how archaeologists study them. Discuss how the word henge itself has a specific definition and how Stonehenge does not fully meet it, sparking questions about names and classifications.

Assessment

Students will complete the worksheet, participate in class discussion about the significance of Stonehenge, and explain how creativity and problem solving are used both in archaeology and art.

Rubric

| Criteria | Excellent (4) | Good (3) | Fair (2) | Poor (1) |
|-----------------------------|---|-----------------------------------|---------------------------------|----------------------------|
| Content Understanding | Accurately explains all key facts | Explains most key facts | Explains some facts with errors | Shows little understanding |
| Discussion Participation | Actively contributes thoughtful ideas | Contributes relevant ideas | Limited contribution | No contribution |
| Worksheet Completion | All answers correct and complete | Most answers correct and complete | Some answers correct | Few or no answers correct |
| Technology Connections | Clearly connects ancient and modern problem solving | Connects ideas with some clarity | Limited connection made | No connection made |

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9 Fun Facts

1) Stonehenge is a prehistoric monument of massive standing stones arranged in circles, set within an earthwork. In archaeology, a henge is a circular earthwork with an outer bank and an inner ditch used for ceremony, not defense. Stonehenge is unusual compared to the textbook layout, which is part of why it fascinates specialists.

https://www.english-heritage.org.uk/visit/inspire-me/what-is-a-henge/

2) It stands on Salisbury Plain in Wiltshire, England, inside one of Europe's richest prehistoric landscapes.. The setting is part of the monument's meaning, not just scenery.

https://www.britannica.com/topic/Stonehenge

3) Work began around 3000 to 3100 BC with a circular earthwork and post **settings.** The famous sarsen circle and trilithons were raised roughly 2600 to 2400 BC, and the complex kept changing into the Bronze Age. What you see is the result of more than a millennium of episodes.

https://www.english-heritage.org.uk/visit/places/stonehenge/history-and-stories/timeline/

4) Britain and Ireland are peppered with henges and stone or timber circles. A heavyweight neighbor is Avebury, whose vast bank, ditch, and giant stone circles wrap around a village and dwarf most people's mental picture of a henge. Stonehenge is part of a larger regional story, not a lone oddity.

 $\underline{https://www.nationaltrust.org.uk/visit/wiltshire/avebury/exploring-the-stone-circles-at-avebury}$

5) Stonehenge is aligned with the sun. At summer solstice the sunrise lifts over the Heel Stone along the monument's axis, and at winter solstice the sunset lines up through the stones. This is deliberate, measurable architecture that shows the builders tracked the turning points of the year.

https://www.english-heritage.org.uk/visit/places/stonehenge/things-to-do/solstice/

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6) There are two very different types of stone, from two very different places.

The huge sarsens, averaging around 25 tons, were sourced in Wiltshire about 15 to 20 miles away, while the smaller bluestones came from the Preseli Hills in southwest Wales, nearly 150 miles distant. That implies serious logistics and shared purpose across communities.

https://www.english-heritage.org.uk/visit/places/stonehenge/history-and-stories/building-stonehenge/

- 7) Retired builder Wally Wallington has shown low tech methods to lift and move heavy blocks. By levering, rocking, and pivoting them on small stones, even walking them upright, he was able too demonstrate they could be moved without heavy equipment. His backyard demonstrations do not prove the exact ancient methods, but they kill the idea that such work needed magic or modern machines. https://www.history.com/articles/solving-the-riddle-of-stonehenges-construction
- **8)** There are hidden carvings you cannot see from the path. High resolution laser surveys revealed more than a hundred prehistoric carvings on the sarsens, mostly axe heads and a few daggers, added centuries after the big stones went up. The scans also picked out tool marks and subtle dressing that emphasize the solstitial axis.

 $\underline{https://www.english-heritage.org.uk/visit/inspire-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog/blog-posts/30-things-you-might-not-know-about-stonehenge/linear-me/blog-post-stonehenge/linear-me/b$

9) Tourists still flock to the site, even after 5000 years. Stonehenge remains one of Britain's top attractions. A 2023 report showed visitor numbers rose by 36 percent compared to the previous year, reaching over 1.3 million people. That jump proves the stones still draw crowds five millennia after they were raised. https://salisburvandavon.co.uk/stonehenge-visitor-numbers-rose-by-36-in-2023-new-report-shows/

Worksheet

| Name: | Date: |
|---|------------------------------------|
| Review 1. How old is Stonehenge estimated to be? | |
| 2. What is the definition of a henge according to | archaeologists? |
| 3. Where is Stonehenge located? | |
| Discussion 4. Why do you think people built monuments like | ke Stonehenge? |
| 5. What does the solstice alignment suggest abo | out its builders? |
| Data Analysis 6. Compare the distance of the sarsen stones wi would that have created? | th the bluestones. What challenges |
| 7. What does Wally Wallington's experiment sho | ow about moving stones? |
| Reflection 8. What lesson does studying Stonehenge teach solving? | us about creativity and problem |
| 9. How does visiting Stonehenge today connect | people with the past? |