The History of Teeth

Directions: Over the course of three days, you are expected to read the article “The History of Teeth” and complete the choice board below.

Day 1: Read the text, “The History of Teeth.” While reading, underline TWO details from the text that you found interesting. Highlight/Circle ONE detail that best states the central idea of the entire text. After reading the entire text, go back and answer the questions that are written on the right side (margin) of your paper. Your answers should be written in complete sentences.

Day 2: Select ONE activity from the Vocabulary section AND ONE activity from the Comprehension section of your Choice Board. This should be completed on your own paper!

Day 3: Select ONE activity from the Writing section of your Choice board. This can be completed on the same paper you used the day before.

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### The totally gruesome, totally fascinating History of Teeth

By Kristin Lewis

<table>
<thead>
<tr>
<th>How did the mummy die? (paragraph 1)</th>
<th>What is the meaning of <em>mummified</em> as it is used in paragraph 1?</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is what researchers wanted to know as they studied the mummified body of a woman they called Djed. They knew she had lived more than 3,000 years ago along the Nile River in Egypt. She’d had a job playing music and was married. And somehow, when she was about 30, Djed had died. (paragraph 2)</td>
<td></td>
</tr>
<tr>
<td>Had she been bitten by a cobra? Killed by malaria? Attacked by a crocodile lurking near the river? (paragraph 3)</td>
<td></td>
</tr>
<tr>
<td>The answer was surprising. Djed died of a bad tooth. (paragraph 4)</td>
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</table>

### Terrible Fact of Life

Today, dying from a bad tooth is extremely unlikely in the U.S. Proper brushing and flossing as well as regular visits to the dentist can prevent or cure most serious dental ailments. Yet for most of human history, tooth problems were a terrible fact of life. Ancient Spartan warriors would charge into battle with cavities and abscesses in their gums. High-society women in 18th-century France would painstakingly cover their rotting teeth with hankies when they smiled. George Washington had only one tooth left by the time he became President—a fact that bothered him greatly. Tough cowboys of the American West would weep openly as their diseased teeth were yanked out with piers—often with little more than a few gulps of whiskey to dull the searing pain. (paragraph 5)

### Cat Intestines

Until the 20th century, most people had crooked and yellowed teeth. Many lost most or all of their teeth by the time they were middle-aged. As you might expect, people were always looking for ways to ease their suffering and make their teeth look better. (paragraph 6)

Some dental treatments of the past would seem strange to us now. Throughout history, people believed that toothaches were punishments from God or were the work of evil spirits. To scare away tooth-destroying demons, people might have kissed a donkey or walked around a barn three times while trying not to think about a fox. (paragraph 7)
On the other hand, some ancient procedures were quite sophisticated—and not so different from what we do today. The Romans, for instance, understood that teeth needed to be replaced when they fell out. So they used bone, wood, or ivory to create fake teeth similar to the dentures people wear now; in ancient Egypt, people tried to close up gaps between teeth using gold bands or cords made from cat intestines, kind of like modern-day braces. (paragraph 10)

In fact, both ancient Rome and ancient Egypt were relatively advanced when it came to dentistry. But much of this knowledge was lost over time. (paragraph 11)

**Worms in Your Teeth?**

Today, the most common tooth problems are cavities. Cavities form when certain types of bacteria make acids that eat away at our teeth and form holes. These holes are painful and can get infected if left untreated. Good hygiene helps prevent cavities but some people are particularly prone to them, no matter how much they brush and floss. (paragraph 12)

Cavities were a major source of dental troubles in ancient times too—including when Djed lived. But ancient peoples were baffled by what caused them. For centuries, people in many parts of the world thought that cavities were caused by small maggot-like creatures they called “toothworms.” [It’s an understandable mistake; the pulpy center of our teeth does resemble worms.](paragraph 13)

The recommended cures for toothworm and other toothaches were rather horrifying. You might have burned an inflamed tooth with acid or placed lice into your cavities. Rinsing with the first urine of the morning was another common treatment for tooth pain. While this likely did nothing for cavities, it may have whitened teeth, because urine contains a whitening chemical called ammonia. (paragraph 14)

**Gaping Wounds**

By the 1700s, a new crop of dentists was rising. Their work was based more on science than superstition. Over the course of the 18th and 19th centuries, they would invent special tools to better examine the mouth and remove problem teeth. They would hone new techniques and train others to perform them. If you had grown up in this time, though, you would probably have lived your whole life without ever seeing one of these fancy new dentists. There were very few of them around, and they were expensive. (paragraph 15)

Instead, you’d likely have gone to your local barber. Back then, barbers did a lot more than cut hair; they also performed surgery. Your barber would have yanked out your bad tooth with pliers—a miserable and risky procedure. There weren’t many ways to dull the pain, and serious infections from the gaping wounds left behind were common. What’s more, barbers sometimes broke people’s jaws while pulling teeth. (paragraph 16)

If you didn’t take your tooth troubles to your barber, you might have sought the help of a traveling “tooth drawer.” These men went from town to town across North America and Europe, pulling bad teeth for a small fee. Some tooth drawers were well-meaning but inexperienced. Others were outright con artists looking to make a quick buck. They’d show up to a town claiming they could pull teeth painlessly—which, of course, they couldn’t. Sometimes they traveled with musicians who would play loudly to drown out people’s screams. Then the tooth drawers would ride off into the sunset, leaving their “patients” to deal with bleeding gums, fractured jaws, infections, and facial disfigurements. (paragraph 17)

**Tiny Robots**

By the 19th century, people understood that cavities were not the work of toothworms or evil spirits. Dental schools sprang up across Europe and the U.S. New laws requiring dentists to be licensed put the con artists out of business. By the 1950s, professional dental care was widely available. And in the following decades, Americans became increasingly obsessed with their teeth. (paragraph 18)

Today, some 300,000 hygienists, dentists, and orthodontists work in the U.S. These highly trained professionals have powerful X-ray machines to spot problems, precision tools to clean teeth and gums, anesthetics to treat pain, and braces to straighten teeth. Modern dentistry is arguably one of humanity’s greatest achievements—and it’s still changing. Exciting new technologies will surely be developed in your lifetime. (paragraph 19)
Soon, your dentist may be able to use 3-D printing technology to make custom replacement teeth in mere seconds. Our toothbrushes could be replaced with smartbrushes that scan our teeth, plug into our phones, and tell us if we have problems. Synthetic materials may enable our teeth to heal themselves, and microscopic robots may one day straighten and clean our teeth for us. (paragraph 20)

Sadly, modern dentistry wasn’t around to help Djed. But thousands of years from now, if scientists ever study our bodies, it is doubtful they will discover that any of us died from a bad tooth.

### 6th Grade ELA Choice Board

Choose one activity from each column—vocabulary, writing, & comprehension.

<table>
<thead>
<tr>
<th>Vocabulary</th>
<th>Comprehension</th>
<th>Writing</th>
</tr>
</thead>
</table>
| **Option 1:** Select **FIVE challenging vocabulary words from the text**. Create a four-square vocabulary chart for each of your 5 vocabulary words. **Example:**

<table>
<thead>
<tr>
<th>Definition</th>
<th>Sentence</th>
<th>Synonym/Antonym</th>
<th>Picture</th>
</tr>
</thead>
</table>
| **Claim:** It is important for people to take care of their teeth.

<table>
<thead>
<tr>
<th>Evidence from the text</th>
<th>Type of evidence: Fact, Data/Statistic, or quote</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
</tbody>
</table>

**Option 1:** Complete the claim and evidence chart below. Select **THREE** pieces of evidence to support the following claim: *It is important for people to take care of their teeth.* Make sure you have **three different types of evidence** and identify each type of evidence (fact, data/statistic, or quote).

| Fact: something that can be proven to be true |
| Statistic: this is a number or percentage |
| Quotation: words that someone said aloud, usually from a person who was there or was an expert on the topic, it will have “quotation marks” around it |

**Example:**

Claim: *It is important for people to take care of their teeth.*

 Evidence from the text: Type of evidence: Fact, Data/Statistic, or quote

| 1. | |
| 2. | |
| 3. | |

**Option 1:** Create an infographic to help convey the message that taking care of your teeth is important. Make sure you include pictures and a title! Include the following information in your infographic:

- Why is taking care of your teeth important?
- What could happen if you did not properly take care of your teeth?
- How should someone take care of their teeth?
| Option 2: Select **FIVE** challenging vocabulary words from the text. **Create a stick figure drawing** for **ALL** of your words that represents the vocabulary word along with a **dialogue bubble or caption** about the word, the word must be used correctly in the caption or dialogue.  

Example: |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>She crept stealthily through the yard, careful not to step on a twig or dried leaf, as she quietly approached the house.</td>
</tr>
</tbody>
</table>

| Option 2: It is important for people to take care of their teeth. Write a CER proving this claim. Include **TWO pieces of evidence** from the article to support this claim. Include reasoning to explain how your evidence supports the claim. (Minimum of 5 sentences)  

C: Claim- It is important for people to take care of their teeth.  
E: Evidence- Use **TWO pieces** of evidence from the text to support your answer.  
R- Reasoning- Provide an explanation to show how your evidence supports your answer.  

Example:  
Mrs. Laird: How did you feel when your tooth was being yanked out?  
Cowboy: Sighing…It hurt worse than getting injured during a battle. The pain was indescribable. There was nothing I could do to make the pain stop. I tried not to cry, but I just couldn’t hold back the tears! |

| Option 3: Select **FIVE** challenging vocabulary words from the text. **Write 5 Haikus (3 lines that follow the 5, 7, 5 syllables in each line)** for each of the **5 vocabulary words** that show you know the words’ meanings. Underline the vocabulary word in each Haiku.  

Example:  
“Dreary”  
Dark, sad, a tad blue  
A little puppy sat still  
Rain pattered its fur |

| Option 3: Write an objective summary (5 sentences) for this article. Be sure to include the **title, author, and genre**.  

**Remember: 5Ws 1 H**  
Who:  
What:  
When:  
Where:  
Why:  
How: |

| Option 3: Write a letter to a **local dentist office**, describing how dentistry has changed over time. Include information from the article in your letter.  

**ROLE:** Yourself  
**AUDIENCE:** A local dentist office.  
**FORM:** Letter  
**TOPIC:** How dentistry has changed over time? |

**ADDITIONAL ACTIVITY: THIS IS NOT A REQUIREMENT!** If you would like to complete an additional activity you can do the following below:  
Create a timeline to show how dentistry has changed over the years. Remember that a timeline is in **chronological order**. It includes both dates and descriptions of events that took place during that time period. It should also include a **title**! You may also include illustrations.