

Open Up the Textbook (OUT)

Enlarge

Complicate

Contest

Vivify

Title: The Spirit Cave Mummy

Authors: Rachel Holmes, Amy Kappel, Mary Lamont

In this OUT analysis, fourth grade students will study the Spirit Cave Mummy in order to better understand what we can legitimately infer about artifacts we find and study. This OUT analysis provides students with documents that are meant to deliberately enlarge and vivify the textbook.

This strategy is implemented most effectively when students collaborate to analyze the texts in small, heterogeneous groups. The texts that accompany the textbook are complex and often include difficult vocabulary and syntax. (For a few words that are likely unknown to students and unidentifiable based upon context clues, helpful synonyms are provided in the footnotes.) Students should first annotate each text and then collaborate to answer the text dependent and specific questions that follow. Questions will highlight sourcing and perspective of the author, close reading of key details from the document that enlarge and vivify the textbook, as well as questions that help students corroborate (or not) the accuracy of individual documents. The writing task that follows is an independent activity wherein students will employ evidence from multiple sources to justify their analysis, synthesis, and evaluation.

Source A: The Textbook – *Nevada: Our Home*, G.P. BeDunnah et al., page 48

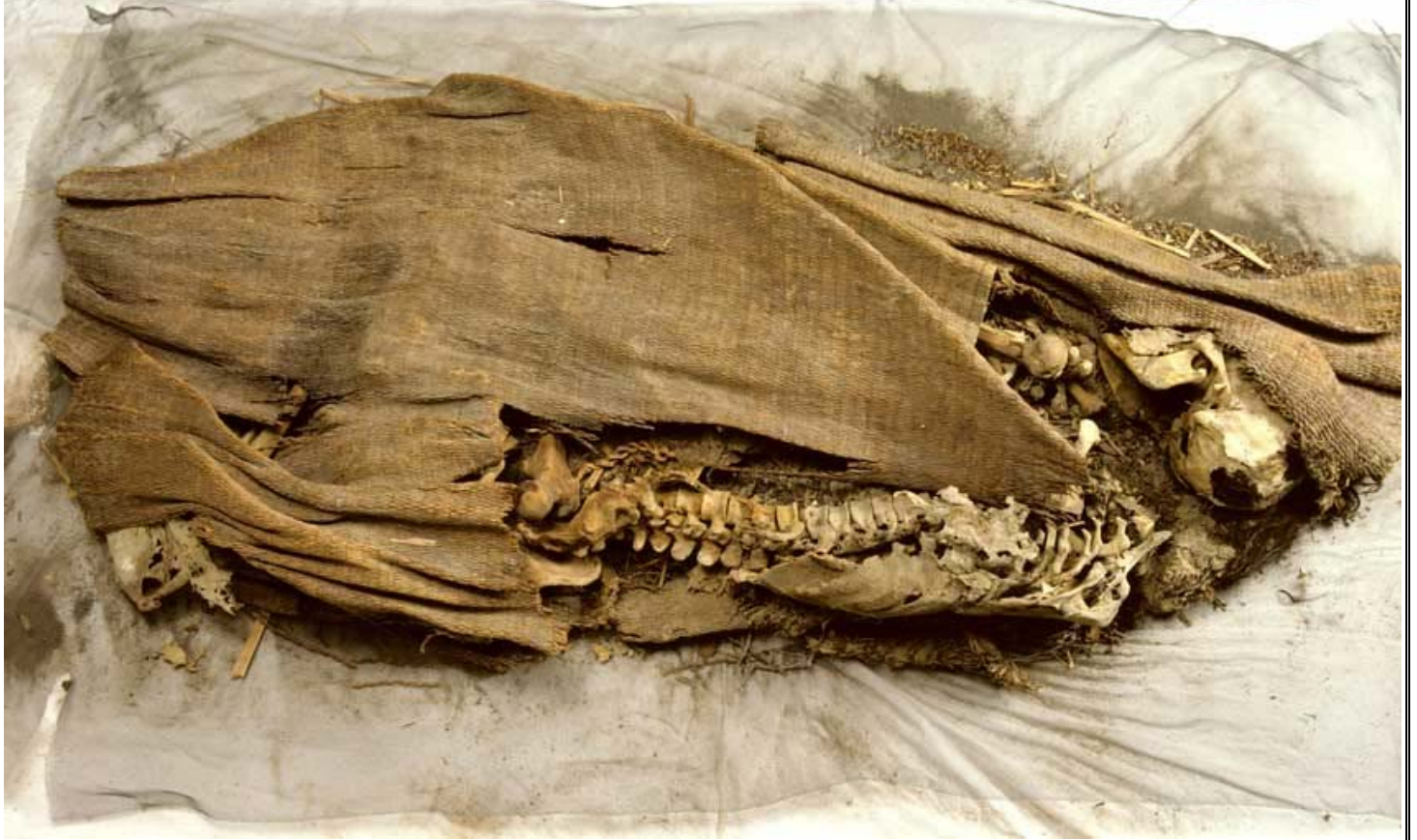
Discovery at Spirit Cave

More than sixty years ago, near the town of Fallon, the mummy of a man was found in a place called Spirit Cave. A mummy is a body that has been wrapped for burial. Some archeologists think the man died over 9,000 years ago. His skeleton was found wrapped in matting and a rabbit-skin blanket.

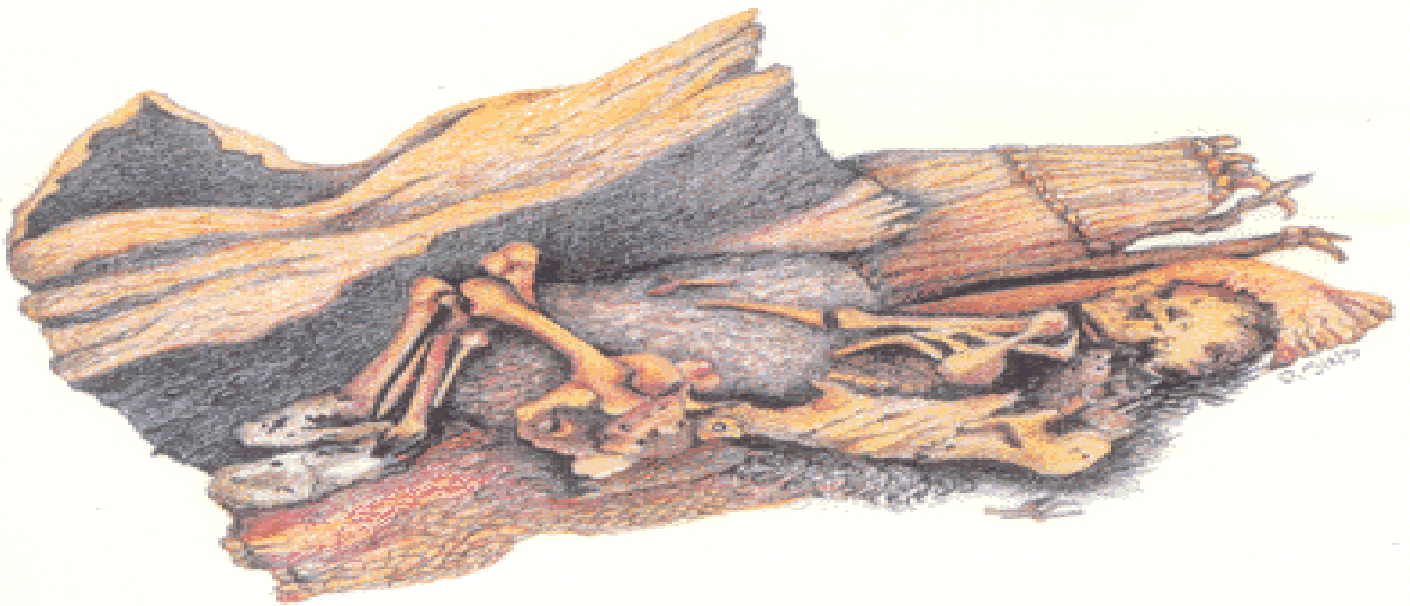
Source A Questions for Consideration

1. Underline the definition of the word mummy provided in the text.
2. What evidence from the text proves that this found body was a mummy?
3. What additional questions do you have about this mummy? Write at least two.
4. Based on evidence from the text, make a prediction about how this man died.

Source B: – *Spirit Cave Mummy photograph and sketch, F. Mullen, excerpted from the Reno Gazette Journal*

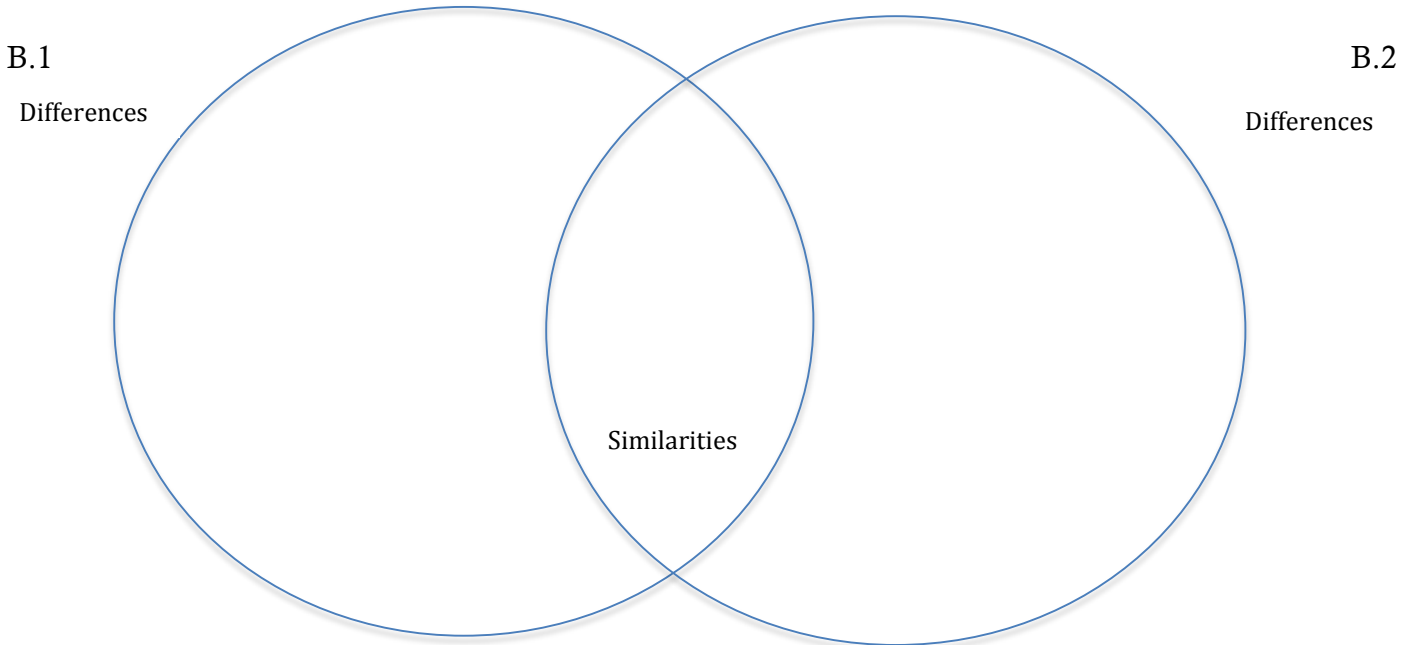


B.2



Source B Questions for Consideration

1. Take one minute to quietly examine the two images. List 7-10 details you observed.
2. The mummy was placed on his side, why do you think he was placed this way?
3. Compare and contrast the two images—complete the Venn diagram to record the similarities and differences you recognize? Which image do you think is a better source? Why?



4. Reread **Source A**. What 3 details from the **Source B** would you add to the description of Spirit Cave Mummy in **Source A** to enlarge or vivify the reader's understanding of him?
5. How does seeing the actual mummy change or add to your prediction regarding the circumstances of his death from **Source A**? List the specific details that added to your thinking.
6. Write down the most interesting idea your group discussed.

Source C: – *Spirit Cave Mummy Photos, F. Mullen, excerpted from the Reno Gazette Journal.*

Spirit Cave Man had a skull fracture from a blow to the head. The break stretched from the left front of his skull to behind his left ear. Two fractures spread out from a circular indentation in his skull, as though he had been hit with a blunt object, like a club or a rounded stone. The head fractures, more than a year old, had partially healed, but he had other medical problems.

His right hand had been broken in two places but had healed. His spine was malformed since birth, leading to conditions and injuries that probably gave him considerable lower back pain. He suffered from frequent dental abscesses, which left jagged edges on his jawbones.

Shortly before he died, three teeth were badly infected. The abscesses drained through an open sore in his cheek. The infection surged through his bloodstream. Fever raged through him. He was dying.

His people cared for him. Shortly before his death they fed him small chub and sucker fish, probably boiled and mashed. It was his last meal. The day he ate it, Spirit Cave Man's life ended.

Source C Questions for Consideration

1. Using evidence from the text, describe the Spirit Cave Mummy's injuries and illnesses.

Injuries	Illnesses

2. How does learning about his injuries, vivify and enlarge your knowledge of Spirit Cave Man? What evidence causes you to think this?
3. What was your original prediction for the death of the Spirit Cave Mummy? Contrast this with his actual cause of death. Is this a common cause of death today? Why or why not?
4. What word best describes the way the man was treated by his people; violently, kindly, indifferently? What words or phrases from the text helped you make this decision?
5. The words malformed and surged are words describing Spirit Cave Man's medical problems. Underline the phrases that help you determine the meaning of these two words? Define the two words.

Malformed:

Surged:

Source D: *Nevada: A Journey of Discovery*, M. Green et al, page 24 (2005).

[In 1940], A local doctor looked at the body and concluded that it was an adult male. Archaeologists thought the remains were about 2,000 years old. The remains were kept for *decades* in the Nevada State Museum in Carson City.

Later, using *radiocarbon dating*¹, another group of scientists examined Spirit Cave Man. They figured the skeleton was 9,400 years old. They were even able to determine that he probably suffered from bad teeth and lower back pain.

The difference in 2,000 and 9,400 years may seem to be a lot of years, but there is more to it than that. Spirit Cave Man's age changed what *scholars* thought about the time when people first came to North America and where they might come from.

Digging up human remains causes many problems. According to 1990 federal law, if the remains of Native Americans are found, a tribe can regain the body and bury it—if the tribe can show its connection to the body. The Fallon Paiute Shoshone Reservation claimed Spirit Cave Man. But scientists said that his age and features made any links to their tribe unlikely.

Source D Questions for Consideration

1. Two different ages are given to Spirit Cave Man. Fill out the information for each attributed age in the following table. Then answer the final question.

Age of Spirit Cave Man		
Person assigning mummy's age		
Method used		
Based on the information you collected, which age is more reliable? Why?		

2. How did radiocarbon dating influence scholars understanding of the peopling of North America?
3. What evidence from this source (D) supports evidence provided in Source C. Underline it in both Source C and Source D.
4. Should scientists be able to keep and study skeletons or mummies? Use evidence from the text to defend your answer.
5. What evidence in this passage impacts your personal beliefs about where Spirit Cave Man's body belongs?

¹ Radiocarbon dating is estimating the amount of carbon in objects 60,000 years or younger. The carbon atom is a material that every living thing has.

Writing Task

This is an informational writing task based on NVACS standards CCSS.ELA-Literacy.W.4.2.b which deals with developing the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. Students will demonstrate their understanding of the texts as well as the ways in which the textbook was enlarged and vivified.

1. Create a better version of the textbook paragraphs in Sources A and D by including details from the texts you analyzed. Write approximately four paragraphs using evidence from at least three of the texts provided.
2. After each piece of evidence cited in a direct quote or paraphrase (your own words), please add the source letter in parentheses, for example (Source B).
3. Choose six of the important vocabulary terms from the box below to include in your writing. Add at least two context clues for each term to demonstrate your understanding. Circle your context clues for each term.
4. Write a draft of your new textbook section. Make sure to include:
 - a. evidence addressing Spirit Cave Mummy's age and description,
 - b. evidence concerning Spirit Cave Man's cause of death,
 - c. evidence about the archeological conditions the mummy was found in.
 - d. information regarding the controversy over who should legally own his remains.
5. Have another student preview your draft to make sure your ideas flow and are correct.
6. Finalize your paper and type it using 12 point font.
7. Title your paper.
8. Draw a picture of Spirit Cave Man's remains including correct positioning of his body.

Choose at least four of these words to use in your paragraphs:

fracture abscess tribe archeologist remains
mummy radiocarbon dating skeleton malformed