


California Tule

Script/Facilitation Support

Materials Needed:

-  Student Handout: Tule Lesson
- Slides Projected in slideshow mode when students enter the class.
Note: slides are animated to slowly provide written text - they will appear on click
 Slides: California Tule

***Allow for 10 minutes for lesson introduction (slides 1-5 and Student Handout Page 1).**

Slide 1:

Pass out student handouts then read aloud the following:

Today, we'll explore tule, a plant that grows in California's wetlands. Native American tribes have used tule for thousands of years to make everything from boats to baskets. We'll learn about its importance in the environment, how it supports wildlife, and why protecting wetlands is essential for tule and other plants to thrive.

Slides 2-3:

Read aloud slide content - students could volunteer to read from the bulleted lists.

Slides 4: Prompt students to fill out "Part 1: Understanding Vocabulary" handout while reading aloud these slides.

***Engage: Allow for 10 minutes (slides 5-7 and Student Handouts page 2)**

Slide 5:

Read aloud slide content. Ask students what they see that looks similar between the two species. Prompt students to write down a fact about tule from the presentation on Student Handout page 2.

Slides 6-7:

Read aloud slide content.

***Explore: Allow for 15 minutes (slides 8-12 and Student Handout page 2)**

Slide 8-9:

Read aloud slide contents and watch the short video. Prompt students to write down a fact about tule from the presentation on Student Handout page 2.

Slide 10:

Read aloud slide content. Prompt students to engage in answering questions after watching the video. Ask question #1, allow for a few moments for students to answer - answer *Wait - because you had to wait for the prey to come to you*. Ask questions #2, allow a few moments for students to answer - answer *Dolls*.

Before advancing to Slide 12, ask students to share any of the facts they have written on Student Handout page 2.

Slides 11 and 12:

Read aloud slide content.

***Explain: Allow for 15 minutes (slides 13-17 and Student Handout page 2).**

Slides 13-14:

Read aloud slide contents.

Slide 15:

Read aloud slide contents. Allow students to offer their ideas in response to the question at the end of the slide.

Slide 16-17:

Read aloud slide contents. For slide 17, prompt students to engage in answering questions after watching the video. This slide is animated so the answers to the questions will appear as you click (click slowly). Prompt students to write down a fact about tule from the presentation on Student Handout page 2.

***Elaborate: Allow for 15 minutes (slides 18-21 and Student Handout page 2)**

Slide 18:

Read slide contents. Prompt students to write down a fact about tule from the presentation on Student Handout page 2.

Slide 19:

Read slide contents. Allow students a few minutes to talk with a learning partner about their observations. Offer an opportunity for a few students to share with the class.

Possible student responses to describe the differences you see:

"In the 1851 image, there is a big body of water, and the land is green. It looks like a big, healthy lake. In the 2013 image, there's no water, and the land looks dry and brown. The lake is gone."

"The 1851 picture shows a lot of green, like there are plants and trees. But in the 2013 picture, the ground looks dry, and the lake is missing. It's like the area changed from being full of water to being empty and dry."

Possible student responses to what might have caused the differences:

Human Activity:

"I think people used the water for farming, and that made the lake dry up."

"Maybe people took the water to use for cities or for crops, and that's why the lake disappeared."

Climate and Weather:

"Maybe there wasn't enough rain over the years, and the lake dried up because of the weather."

"It could be that the area got hotter and drier over time, and that's why the water disappeared."

"The weather might have changed, making the land drier."

Combination of Human and Natural Causes:

"I think it might be a mix of people using the water for farms and not enough rain falling to fill the lake."

"Maybe both humans and nature caused it. People might have used the water, and there wasn't enough rain to bring it back."

Slide 20-21:

Read slide contents. Prompt students to write the dates on page 3 of the Student Handout.

***Evaluate: Allow for 30 minutes (slide 22 and Student Handout pages 4-6).**

Slide 22 :

Read aloud slide contents. Watch the video and read student handout page 4. Continue assessment of student learning on handout pages 5 and 6.