

Could the De-Extinction of Certain Species Help the Environment?

Lesson plan for writing an argumentative essay

Suggested length: 1 class period (45-55 minutes)

Lesson components:

- At-home preparation: Exploring the Kialo discussion (approx. 30 minutes)
- Opener (5-10 minutes)
- Activity
 - Part A: Four Corners (25-30 minutes)
 - Part B: Preparing to write an argumentative essay (8-15 minutes)
- Optional closer (2 minutes)

Assessment

Students will write an individual argumentative essay on the prompt, “Should Scientists De-extinct the Woolly Mammoth?” (see suggested rubric in **provided materials**)

At-home preparation: Exploring the Kialo discussion (approx. 30 minutes)

1. To prepare for this lesson, direct students to explore the Kialo discussion “Could the De-Extinction of Certain Species Help the Environment?” at home. Students should spend about 30 minutes to:
 - a. Read the discussion.
 - b. Comment on any claims that they would like to discuss in class.
 - c. Vote on the 5 most impactful claims in the discussion, giving each a score of “4.”

TIP: You may wish to demonstrate [voting](#) to your students. Pick any claim and model how to give it a score of “4.” You can then revoke your vote by clicking on the “4” again.

TIP: This portion of the lesson can be done in class as well, if at-home device access is a concern. In this case, it is recommended to adapt this lesson for a double-block period or two class periods.

Opener (5-10 minutes)

1. Instruct the whole class to turn to a partner and discuss their answers to the following question: "What is your favorite extinct animal? If you could bring it back to life, would you?" Conduct a brief discussion around students' answers.
2. Go over any questions, comments, or highly-voted claims from the Kialo discussion, then lead a brief discussion around these points.

Activity

Part A: Four Corners (25-30 minutes)

1. Post a sign in the four corners of the room, reading "Strongly Agree," "Agree," "Disagree," and "Strongly Disagree."
2. Explain that students will now do an activity called "Four Corners." Students will go to the area that corresponds to their level of agreement with the statement, "**Scientists should de-extinct the woolly mammoth.**" Students who strongly agree with the statement will go into the area labeled "Strongly Agree," and so forth.
3. Once students are separated into their areas, tell students to choose a group recorder to help write down the group's reasons for picking their opinion. Groups will have 10 minutes to discuss and write. After the 10 minutes are up, a group representative will then share the group's reasons with the whole class.

Optional extension: Ask students to change corners if they were persuaded by another group's reasons. Conduct an informal debate on the reasons which students found compelling in making their decisions, such as: (1) opposition to animal experimentation, (2) the fight against climate change, or (3) the desire for scientific knowledge and progress

Part B: Preparing to write an argumentative essay (8-15 minutes)

1. Explain that students will write an individual argumentative essay on the prompt "Should scientists de-extinct the woolly mammoth?" to demonstrate their new knowledge on the topic. Tell students to consider the following factors as they argue their position:
 - a. The potential environmental impact of de-extinction.
 - b. The technology involved in de-extinction.
 - c. The risks of de-extincting an animal.
 - d. The investment (money) that de-extinction requires.

2. Distribute and go over the assignment rubric. If time permits, direct students to begin planning their essays.

Optional closer (2 minutes)

1. Remind students that species are constantly going extinct, and there have been many tragic extinctions over the last century. Share this [video footage](#) of some now-extinct animals for students to contemplate.