

Mitigation Plans

Overview

Students will develop mitigation plans to help communities fight against drought.

Estimated Time

One class period.

Materials

Powerpoint with teacher explanations as a guide to the lesson activities. [Slides are numbered in slide notes to correspond to directions below.]

Master copies of **Student Worksheet 1: Drought Mitigation Plan** for students

Laptops or other devices for completing online aspects of projects. It is ideal that students use Google Docs or another collaborative program so they can work together on their products. Teachers may accept handwritten products as needed.

Colored sticky notes for student feedback. Best to have a variety of colors available. Save one color for the final activity in Closing the Lesson.

Student Worksheet 2: Drought Mitigation Plan Exit Ticket

Learning Objectives

After completing the lesson, students will be able to:

- **Develop a script** for a podcast, blog or interview that includes a drought mitigation plan
- **Identify careers** in geography fields that will help with implementation of their water plan, including a press release statement/blog entry.

Opening the Lesson

1. **Review the information learned about droughts** from Lesson 2 - where water supplies come from in different regions of Texas, how drought may be caused by people and how it impacts people, etc....
2. **Debate/discuss in small groups** the impacts of too little water on municipalities (areas of settlement), agriculture, industry, recreation. Which of the four will have the biggest impact on your region?

Developing the Lesson

3. **Use the Power point to guide students through their project decision process.** Students will create a product of their choice to help mitigate (reduce) the severity of drought in a specific region within Texas.
 - Focus problem solving on planning, vegetation, climate change.
 - Possible products: **script of a podcast, blog or interview** that includes place of focus, data and source/s, plan, careers in geography that will help with forming and implementing the plan.
4. **Students will complete a Drought Mitigation Plan** for teacher approval before they start their final product. Students can opt to work with others in their Drought group from Lesson 2 or on their own.
5. **PRODUCT: Instruct students that they must advocate for their assigned region**—students will make a plan for the region/area along with a time frame for implementing it and a press release statement. The plan must be in the form of a script for a podcast, blog or interview or other products the teacher approves. Students will also create a Press Release statement on their Mitigation Plan page.

Give students time to develop their scripts and Press Releases once their idea has been approved by the teacher. Students will turn in a digital or hard copy of their completed script to the teacher for student editing.

Note: Script must be attached to the Mitigation Plan page for full credit.

6. **The teacher will need to print out copies of student plans/products and have students complete a Gallery Walk** for the plans/products developed. Students will add sticky notes to each script/product with suggestions, questions, etc.... to be added before final script/product is turned in to the teacher.

Concluding the Lesson

7. **Have students complete a second Gallery Walk** of final scripts/ products and answer these Essential questions as a group or an exit ticket, etc....
 - How do people cause drought in Texas?
 - How are people impacted by drought in Texas?
 - How can we outrun drought in Texas?
 - What geography related careers can help with mitigating for too little water?
 - What student plan would be best to mitigate/reduce the threat/s of drought in Texas?
8. **Students can vote** on the best plan, most realistic plan, etc.... with sticky notes, online, etc....

9. EXTENSION ACTIVITY:

IF BOTH LESSON PLAN SCENARIOS [TOO LITTLE/TOO MUCH] ARE COMPLETED, students could also have a Socratic Discussion in which half of class discusses Too Much Water and the other half does Too Little Water.

Students create 5-6 questions and answers/key regarding their topic using Bloom's question starters. The other group will listen to the discussion and respond to written questions about the topic. Students switch roles halfway through class time/time given for the discussion.

Worksheet I:
Drought Mitigation Plan

You may work with a partner in your group from lesson 2 or on your own. **This page must be turned in to the teacher for plan approval before you start your final product. BE PREPARED TO SHARE YOUR MITIGATION PLAN WITH THE CLASS.**

Note: Press release statement and final script for plan must be attached for full credit.

- **NAME/S:** _____
- **REGION OF FOCUS:** _____
- **PLAN TYPE: CIRCLE ONE:** podcast with script / blog with script / interview with an expert

(All plans must include – places, data with sources, geography related careers that assist with mitigation, plan for mitigation, Press Release and final script.)
- **TIME FRAME FOR IMPLEMENTATION:** _____
- **PROBLEM TO BE MITIGATED/SOLVED:** [Include explanations for causes of drought in the area, effects on people and the environment, geography related careers that will be involved in mitigating drought for the future. You will also need to back up your work with citations and data sources.]

PRESS RELEASE STATEMENT: _____

PLANNING NOTES CAN BE WRITTEN BELOW AND ON THE BACK:

