

Lesson 2.2: Reading “Disaster in California!”

You may have heard about severe storms causing destruction and damage to an area, and you may have even been in a major storm yourself. In this lesson, you will read “Disaster in California!” to learn about a megaflood that happened over 150 years ago that was caused by severe storms. As you read, you will use what you know about air parcels and energy transfer to take a close look at what caused these storms to be so intense. Reading about this megaflood will help you to better understand how the warming of an air parcel can affect the weather.

Unit Question

- Why do some rainstorms have more rain than others?

Chapter 2 Question

- Why is the amount of rain in Galetown different from storm to storm?

Key Concepts

- The troposphere is warmest at the surface and coldest at its highest point.
- If an air parcel is warmer than the surrounding air it will rise.

Vocabulary

- | | | |
|----------------|---------------|---------------|
| • air parcel | • energy | • transfer |
| • change | • evaporation | • troposphere |
| • cloud | • stability | • water vapor |
| • condensation | • temperature | • weather |

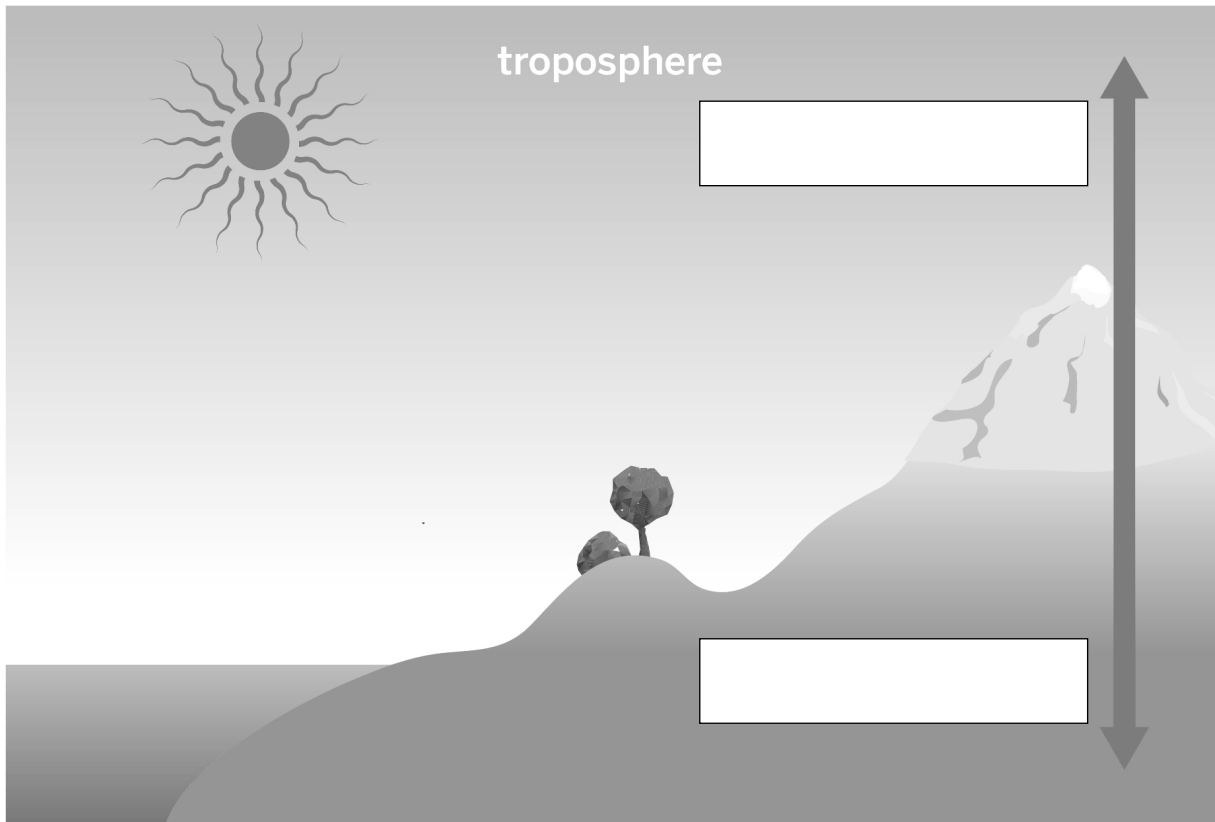
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Warm-Up

Model of the Troposphere

Below is a model of the troposphere. Use the words in the word bank to label the image and then answer the question below.



Word Bank

colder warmer

How does the temperature of the air in the troposphere change from the bottom of the arrow to the top of the arrow?

Reading “Disaster in California!”

1. Read and annotate the article “Disaster in California!”
2. Choose and mark one or two of your annotations to share with a partner. Once you have discussed these annotations, mark them as discussed.
3. Now, choose and mark a question or connection, either one you already discussed or a different one you still want to discuss with the class.
4. Answer the reflection question below.

What is something about the text that you discussed with your partner?

Active Reading Guidelines

1. Think carefully about what you read. Pay attention to your own understanding.
2. As you read, annotate the text to make a record of your thinking. Highlight challenging words and add notes to record questions and make connections to your own experience.
3. Examine all visual representations carefully. Consider how they go together with the text.
4. After you read, discuss what you have read with others to help you better understand the text.

Name: _____ Date: _____

Homework: Researching Rainfall in Your Area

Use the Internet to research climate data about your state and town. Some terms and phrases to use to help you in your search include:

- (your state/town) climate data
- average rainfall in (your state)
- United States climate data

What is the average annual rainfall in your state? _____

What is the average annual rainfall in your city? _____

What day had the highest rainfall? _____

How many inches of rain fell on that day? _____