



## LESSON PLAN

# WINDS OF CHANGE: THE GALVESTON HURRICANE OF 1900

### Social Studies, Grades 4–8

## OBJECTIVE

Through the use of primary sources, students will analyze the impact of hurricanes on the lives and livelihoods of the people and regions affected by them. Students will further compare the impacts of the Galveston Hurricane of 1900, Hurricane Katrina, and Hurricane Ike on the Texas coast, judging both immediate impact and long-term effect. Additionally, student will read accounts from various books, including historical fiction, about the Galveston Hurricane, the biggest natural disaster in American history. Students will work in literary circles to draw parallels between the moving images and the written descriptions of the event.

## PROCESS

### **Prior Knowledge**

Students should have a working knowledge of Texas geography, including the Gulf Coast region.

Students should be aware of the devastating impact of natural disasters on communities and the economy.

### **Hook A**

Display a map of the Texas Gulf Coast that includes Cuba; identify the cities of Galveston and Havana on the map.

Ask the class to make a list of how information was communicated between two separate locations around 1900. Write the students' responses on the board.

Ask how someone in Havana might be able to warn someone in Galveston that a storm was coming around 1900. The answer is that there was no easy way to communicate this information effectively, and as a result, the Galveston Hurricane devastated Galveston Island in 1900.

Extension: Have students brainstorm one of the following.

- The benefits of modern technology, such as storm radar, which informs meteorologists that a major storm is coming several days before it arrives
- The problems associated with not having the technology to give people an advance warning that a storm is coming



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### Hook B

Ask if anyone can name a natural disaster. Write students' responses on the board and make sure you list a variety of them.

Using a map or globe, ask students to identify where many of these natural disasters occur, from tornadoes in the Midwest and earthquakes along fault lines to hurricanes on the gulf coasts, etc. Discuss their causes.

Ask students if they can name any recent natural disasters and discuss when and where they occurred, as well as their long-term impact.

### Lesson

Watch the film, Panorama of East Galveston or one of the other suggested films (see Videos). This film illustrates the significant damage wrought by the hurricane that struck Galveston on September 8, 1900. Rather than react verbally, have students write down what images they see.

Ask students:

- How does this film look different from the images you see on your TV at home?  
Black and white, blurry images, jumpy images
- Why does this look different from the images we watch?  
This was filmed when moving images were first invented and had not been perfected.
- What similarities do you see between this footage and scenes that have resulted after Hurricane Katrina or Hurricane Ike?  
Have students refer to their paper to see what they wrote down.
- Thinker Question: Why are some buildings left standing during a hurricane while others are not?
- Why do people continue to resettle and rebuild Galveston Island though hurricanes continue to ravage the area?  
Possible answers: ports, trade, transportation, culture, tourism.
- Though technology has changed, and more than 100 years have passed, what has not changed about the effect of natural disasters and hurricanes?

Show students pictures from Hurricane Katrina

([https://www.nola.com/multimedia/photos/collection\\_1ae901f2-ca7a-11e9-a269-c31141550f2b.html#14](https://www.nola.com/multimedia/photos/collection_1ae901f2-ca7a-11e9-a269-c31141550f2b.html#14)) so they have an additional frame of reference to those

provided in the videos. Then ask them how long they think it takes to rebuild an area



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after a hurricane has struck land? What do you think the long term effects are on an area after a hurricane strikes?

Have students work in small groups of four and read segments out of Isaac's Storm by Erik Larson or Dark Water Rising by Marian Hale. Have students discuss how the book describes the period before, during and after the storm.

Compare and contrast the book's description of the event with the moving images of Galveston shot in 1900 after the storm destroyed the city in literary circles of four. Assign different roles to each student in the reading group. Have one student create a summary of what they read (specific chapters you assigned), another student will create 5- 10 reading questions, another select quotes that stood out from the book and the other will write about some of the parallels between the written and visual descriptions of the Galveston Hurricane.

Ask students to then compare and contrast the footage of the Galveston Hurricane with today's news coverage of natural disasters.

Or research Thomas Edison and his contribution to moving images. The Galveston Hurricane was one of the first major events in America to be filmed and viewed by a wide audience.

## Independent Practice

(To be completed over the course of several class periods)

Divide students into groups, and assign each group one of the following topics:

- Understanding the science of hurricanes: how do they happen?
- The shipping industry: 1900 and present day
- The evolution of communication: the telegraph, telephone, internet
- The history of meteorology
- Emergency response to hurricanes: 1900 and present day
- Recording Hurricanes: footage of destruction then and now (Focus on Edison's process and how the news media covers hurricanes today.)
- Have each group research their topic in regards to:
  - Basic background information about their topics (who, what, when, where, how)
  - How the topic affected Galveston Island in 1900
  - How their topic affects Galveston Island today



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- Why do you think people continue to settle in Galveston despite the risk of hurricanes?  
(Or how does your topic affect the distribution of populations along the Gulf Coast?)

Each group will present their findings (either through a 5-10 minute presentation or a poster) and will be evaluated on the following:

- Accuracy of information about topic
- Explanation of how their topic has shaped contemporary society
- Displaying differences between 1900 and present day
- Aesthetic value/engaging participation
- Explanation of why people continue to rebuild and settle on Galveston Island

## Closing

Explain to students that though living in a hurricane zone is dangerous, much advancement in technology and the desirability of Galveston's geographic placement has made it possible to weather natural disasters.



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### Videos



**Panorama of East Galveston**

[https://texasarchive.org/2006\\_00114](https://texasarchive.org/2006_00114)



**Launching a Stranded Schooner from the Docks**

[https://texasarchive.org/2006\\_00113](https://texasarchive.org/2006_00113)



**Panorama of Galveston Power House (Galveston, Texas Hurricane and Tidal Wave)**

[https://texasarchive.org/2006\\_00115](https://texasarchive.org/2006_00115)



**Panorama of Orphans Home, Galveston**

[https://texasarchive.org/2006\\_00116](https://texasarchive.org/2006_00116)



**Panorama of Wreckage of Water Front**

[https://texasarchive.org/2006\\_00117](https://texasarchive.org/2006_00117)



**Panoramic View of Tremont Hotel**

[https://texasarchive.org/2006\\_00001](https://texasarchive.org/2006_00001)



**Searching Ruins on Broadway, Galveston, for Dead Bodies**

[https://texasarchive.org/2006\\_00118](https://texasarchive.org/2006_00118)



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### Birdseye View of Dock Front, Galveston

[https://texasarchive.org/2006\\_00112](https://texasarchive.org/2006_00112)

## RESOURCES

Hale, Marian. *Dark Water Rising*, MacMillan: New York, 2010.

Larson, Erik. *Isaac's Storm: A Man, A Time, and the Deadliest Hurricane in History*. Random House: New York. 1999

Green, Nathan C. *Story of the Galveston Flood: Complete, Graphic, Authentic*. Cosimo Classics: New York. 2005

A presentation of the Galveston County Daily News, <http://www.1900storm.com/>

Exhibit from Galveston and Texas History Center at the Rosenberg Library, <https://rosenberg-library.org/special-collections/the-1900-storm-a-slideshow/>

Galveston 1900: Storm of the Century, the Portal to Texas History, <https://education.texashistory.unt.edu/lessons/psa/Galveston1900/>

## TEKS

### Social Studies, Grade 4

8B - Describe and explain the location and distribution of various towns and cities in Texas, past and present

9A - Describe ways people have adapted to and modified their environment in Texas, past and present, such as timber clearing, agricultural production, wetlands drainage, energy production, and construction of dams

9C - Compare the positive and negative consequences of human modification of the environment in Texas, past and present, both governmental and private, such as economic development and the impact on habitats and wildlife as well as air and water quality

20B - Describe how scientific discoveries and innovations such as in aerospace, agriculture, energy, and technology have benefited individuals, businesses, and society in Texas

### Social Studies, Grade 5

8C - Analyze the reasons for the location of cities in the United States, including capital cities, and explain their distribution, past and present



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9A - Describe how and why people have adapted to and modified their environment in the United States, past and present, such as the use of human resources to meet basic needs

9B - Analyze the positive and negative consequences of human modification of the environment in the United States, past and present

23A - Identify the accomplishments of notable individuals in the fields of science and technology, including Benjamin Franklin, Eli Whitney, John Deere, Thomas Edison, Alexander Graham Bell, George Washington Carver, the Wright Brothers, and Neil Armstrong

### **Social Studies, Grade 6**

3C - Compare various world regions and countries using data from geographic tools, including maps, graphs, charts, databases, and models

4B - Identify and explain the geographic factors responsible for patterns of population in places and regions

6C - Analyze the effects of the interaction of physical processes and the environment on humans

20A - Give examples of scientific discoveries and technological innovations, including the roles of scientists and inventors that have transcended the boundaries of societies and have shaped the world

### **Social Studies, Grade 7**

8B - Analyze and interpret geographic distributions and patterns in Texas during the 19th, 20th, and 21st centuries

9C - Analyze the effects of physical and human factors such as climate, weather, landforms, irrigation, transportation, and communication on major events in Texas

20E - Analyze how scientific discoveries and technological innovations have resulted in an interdependence among Texas, the United States, and the world

### **Social Studies, Grade 8**

10C - Analyze the effects of physical and human geographic factors on major historical and contemporary events in the United States

28A - Compare the effects of scientific discoveries and technological innovations that have influenced daily life in different periods in U.S. history



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#### **Social Studies, Grade 8**

10B - Compare places and regions of the United States in terms of physical and human characteristics

10C - Analyze the effects of physical and human geographic factors on major historical and contemporary events in the United States

11A - Analyze how physical characteristics of the environment influenced population distribution, settlement patterns, and economic activities in the United States during the 17th, 18th, and 19th centuries

11B - Describe the positive and negative consequences of human modification of the physical environment of the United States

12A - Identify economic differences among different regions of the United States

29A - Differentiate between, locate, and use valid primary and secondary sources such as computer software, databases, media and news services, biographies, interviews, and artifacts to acquire information about the United States

29B - Analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions

29C - Organize and interpret information from outlines, reports, databases, and visuals, including graphs, charts, timelines, and maps

29D - Identify points of view from the historical context surrounding an event and the frame of reference which influenced the participants