

Last updated: 10/17/17.

### 8.6 L4 Anchor/Uncover/Share Student Guide

Student Name(s): \_\_\_\_\_

### Anchoring Experience

#### Student Steps:

1. Watch each video and record your observations and prediction below.

	Video 1	Video 2
<b>Observations.</b> Describe what you saw and heard.		
Which types of damage did you observe caused by this hurricane? (This may include some of the same observations from your previous response.)		
<b>Make a prediction.</b> Would you expect the hurricane in Video 1 to cause more damage than the hurricane in Video 2? Why?		

## Uncover/Share Your Ideas 1 - Video Lab

Watch the videos of the two hurricanes. Record your observations and identify problems caused by the hurricanes.

What do you observe happening in each video?	Identify and describe problems or difficulties that people have to deal with as a result of this natural hazard.
Video 1	Video 1
Video 2	Video 2

How could you explain the difference between these two videos?

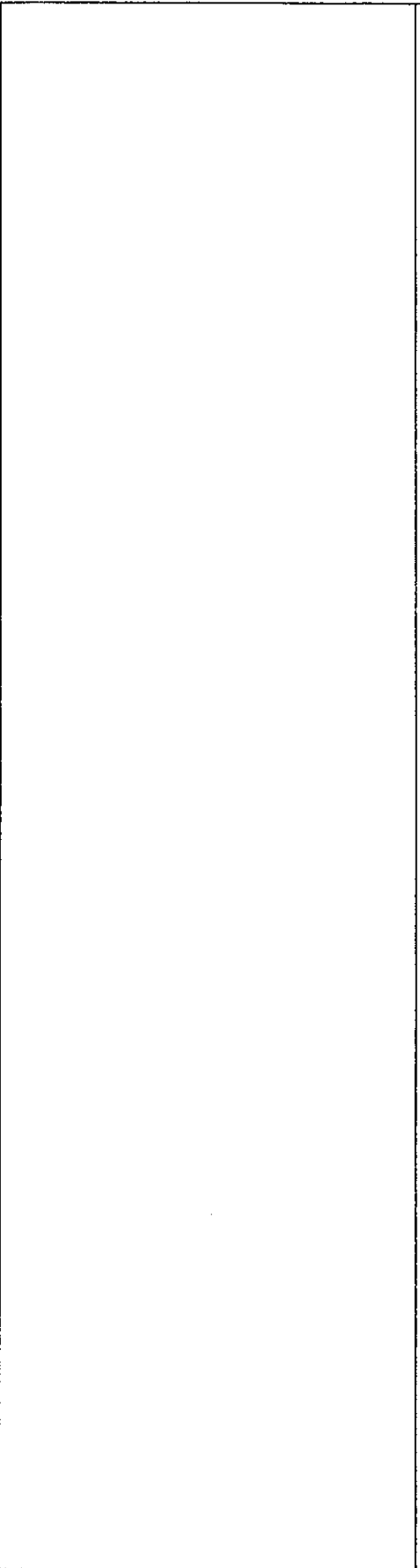
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Watch the two videos showing wind in a hurricane and draw a diagram to show what happens to the **forces acting on an object** in the video as the wind speed gets higher.

	Video: "Jim Cantore vs. the Category 5 Hurricane" Forces acting on: <b>Jim Cantore</b>	Video: Why Hurricane Categories Make a Difference Forces acting on: <b>the Wall of the House</b>
<b>Category 1</b>		
<b>Category 2</b>		
<b>Category 3</b>		
<b>Category 4</b>		
<b>Category 5</b>		

Watch the video showing storm surge and draw a diagram to show how storm surge causes damage.

Video: "Hurricane Katrina Historic Storm Surge Video - Gulfport, Mississippi" (2016)



5. After watching the videos, think about what you observed and write an explanation for what you think causes the differences between how damaging a hurricane is:

My explanation: There is a difference in the damages between the least and most damaging hurricanes because:

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Evidence and reasoning that supports my explanation:

## Uncover/Share Your Ideas 2 - Analyze and interpret past data:


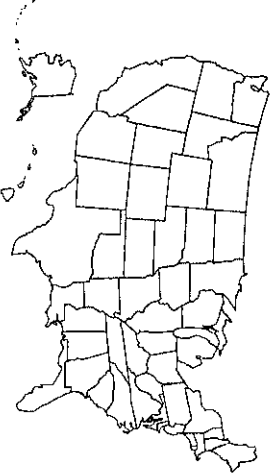
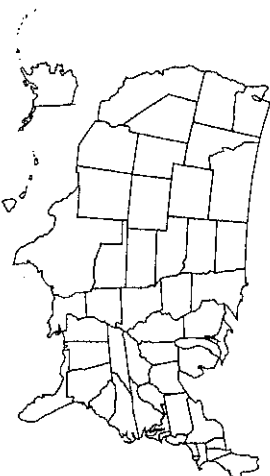
**Make a prediction:**

Which states do you predict are likely to experience hurricanes that are most damaging?

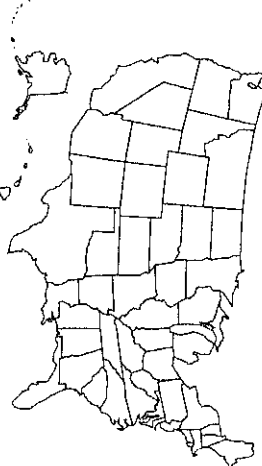

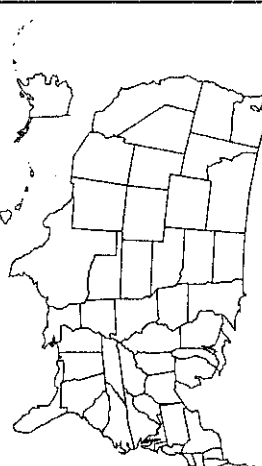
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Work with a partner to identify the characteristics of the most and least damaging hurricanes using the spreadsheet "Hurricanes that hit the United States from 2000-2015".

### Most Damaging Hurricanes (2000-2015):

Hurricane Name	_____	_____	_____
Economic Damages:	\$ _____	\$ _____	\$ _____
Year	_____	_____	_____
Shade in the States Affected by this Event:			
Maximum Wind Speed:	_____ MPH	_____ MPH	_____ MPH
Storm Surge Height:	_____ Feet	_____ Feet	_____ Feet

Least Damaging Hurricanes (2000-2015):

Hurricane Name	_____	_____	_____
Economic Damages:	\$ _____	\$ _____	\$ _____
Year			
Shade in the States Affected by this Event:			
Maximum Wind Speed:	_____ MPH	_____ MPH	_____ MPH
Storm Surge Height:	_____ Feet	_____ Feet	_____ Feet

US Map source: [https://a2a2a2a2.com/6-35713/2no\\_redirect/](https://a2a2a2a2.com/6-35713/2no_redirect/); License: CC0 Public Domain. No attribution required

**How can this help us in the future? Make a claim that predicts future hurricane hazards. Include evidence and reasoning from all of your investigations in this lesson.**

My Claim:

The states that are likely to experience the most damage from a hurricane in the future are:

\_\_\_\_\_

Evidence: The evidence that supports my claim:

- ⊙
- ⊙
- ⊙
- ⊙

Reasoning: (Why this evidence supports my claim):

