

Here Comes the Story of the Hurricane



Hurricane Ian was a large and destructive Category 4 Atlantic hurricane. It was the deadliest hurricane to strike the state of Florida since the 1935 Labor Day hurricane. Ian caused widespread damage across western Cuba and the southeast United States, especially the states of Florida and South Carolina. It was the ninth named storm, fourth hurricane, and second major hurricane of the 2022 Atlantic hurricane season.

COSTLIEST HURRICANES TO HIT U.S.		
	YEAR	COSTS
KATRINA	2005	\$186.3B
HARVEY	2017	\$148.8B
MARIA	2017	\$107.1B
SANDY	2012	\$81.9B
IDA	2021	\$78.7B
IAN (EXPECTED)	2022	\$70.0B

NOAA, ENKI RESEARCH

Option 1: What causes a hurricane?

Big Idea: On average, seven hurricanes hit the United States every four years, with about three major ones every five years.

Essential Questions:

- What causes hurricanes?
- What are the rating of hurricanes and what weather conditions must exist to make one stronger than another?
- What is the pattern of hurricanes in the US over the past ten years?

Deliverables: Students will create a reenactment of Hurricane Ian including how it came to form and the path it took.

Possible ideas: comic book, stop motion animation, simulation

Bonus opportunity: Try and predict where the next big hurricane will occur and what causes you to think this.

Option 2: Why do certain homes/structures withstand a hurricane?

Big Idea: Many hurricanes leave a swath of devastation in their path. Homes, bridges, apartment buildings, and businesses laid flat to the ground. And yet there are some structures that remain unscathed.

Essential Questions:

- How does a hurricane cause damage to a structure?
- What causes a structure to be able to within the destruction of a hurricane?
- Are there certain engineering decisions that can be made that will better protect a structure from a hurricane?

Deliverables: You will create a design/model of a structure (business, home, etc.) designed in such a way that it could withstand a hurricane.

Possible ideas: 3-D rendering, drawings/sketches, models

Bonus opportunity: Figure out the cost of building such a structure and how much more this would be than a typical structure.

Option 3:

Big Idea: In addition to the destruction of buildings and the loss of human life, animals that live in these areas can be affected.

Essential Questions:

- How are animals affected by hurricanes?
- How are their habitats/homes affected by hurricanes?
- What can be done to protect animals in the event of a hurricane?

Deliverables: Develop a plan that the wildlife and refuge department could use to protect the habitats of animals affected by a hurricane as well as what can be done to safeguard the animals.

Possible ideas: Google Slides, pamphlet, video, poster

Bonus opportunity: Figure out a way to help people who are currently trying to assist animals affected by Hurricane Ian.

Option 4:

Big Idea: There are short term effects of a hurricane such as destruction, damage, and loss of life. However, there are also long term effects that can be felt for many years as people try to pick up the pieces and get back to normal.

Essential Questions:

- How have people been affected by Hurricane Ian?
- What efforts are being made after the storm is over and people have to pick up the pieces?
- How can we best help those affected by a hurricane??

Deliverables: Some kind of aid provided to those who have been hit by the hurricane.

Possible ideas: partner with an organization that helps and raise money for them, gather supplies needed by those affected and arrange to get them down to Florida, roll out a school-wide effort to provide help

Bonus opportunity: Figure out a way to involve the community beyond the school.