Which would you rather face: Hurricane or tornado?

**Directions:**

**Monday**- read and thoroughly ANNOTATE the text (20 points)

**Tuesday**- complete the Sensational Summary activity (20 points)

**Wednesday**- answer the questions (\*Be sure to identify key words in the questions and label text evidence.\*) (5 points per question for identifying key words, 5 points per question)

**Thursday**- Find at least five words with word parts in this article. Write the word, word part, definition of word part, and definition of the word using context clues in the margins.. (20 points)

By Palm Beach Post, adapted by Newsela staff

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PALM BEACH, Fla. — Early one Saturday in August 1992, South Floridians discovered they had 48 hours to brace for, or flee, Andrew, which would become one of the nation’s most infamous hurricanes.

Oklahomans got all of 16 minutes warning before last week’s tornado. That was more time than most past twisters have allowed.

In a grim game of “choose your poison,” Floridians debate with their friends and family about which disaster they’d rather have.

Hurricanes have a lot of cons: sustained, devastating winds, vicious storm surges and damage over a wider area. But “they’re the one threat we can see coming,” said Craig Fugate, director of the Federal Emergency Management Agency. Fugate was Florida’s emergency manager during 2004’s spate of storms.

## Not Preparing Is Inexcusable

That advantage makes failing to prepare inexcusable, Fugate told the National Hurricane Conference in New Orleans in March. And yet studies have found that as many as two in three Florida residents say they have no plan for what they would do if a tropical storm threatens. That's even with the start of hurricane season on June 1.

Preparation helped only a little in Moore, Oklahoma, last Monday. According to a preliminary National Weather Service summary, Monday’s tornado was a top-end EF5. Its winds topped 200 to 210 miles per hour, and was 1.3 miles wide. It was tracked on the ground for 50 minutes — an eternity for a tornado — and its damage zone was more than 17 miles wide. EF is short for Enhanced Fujita Scale, which measures a tornado's wind speed and the damage it causes. The scale ranges from 1 to 5, with 5 being most powerful.

Oklahoma’s insurance commissioner has said damages could top those from last year’s Joplin, Missouri, tornado. That storm caused about $2 billion in damages.

## The Minutes Can Feel Like Hours

Tornadoes cover a smaller track than hurricanes, and their lifespans are measured in minutes. Last Monday's twister traveled 17 miles. A tornado of EF2 or more — winds of 111 miles per hour to 165 mph — can destroy a structure in four seconds. But only one in four tornadoes have wind speeds at 110 miles per hour or greater, the threshold of a major hurricane.

Hurricanes can be hundreds of miles wide and can plow across thousands of miles for days before they fizzle out. That means even minor inconveniences such as power outages often cover a vastly larger area. Wilma in 2005 knocked out power for weeks for 6 million households from Orlando south to Florida's tip.

Emergency responders must then face a sea of people who, while minimally affected, want immediate help.

“That means the importance of being self-sufficient for three to five days,” said Bill Johnson, Palm Beach County’s emergency manager.

Tornadoes are wind storms, and the varying effects of those winds are staggering.

Damage at 111 miles per hour is 21 times what it would be at 75 mph, a minimum-strength hurricane. This is according to a chart prepared by the National Oceanic and Atmospheric Administration.

At 155 miles per hour, the damage is multiplied by 333. At 190 mph, it’s multiplied 1,696 times. Last Monday’s tornado topped that level, if only for seconds.

While tornadoes can do vast damage in a short time, hurricanes have many ways to damage lives and property.

## Punishing Winds

Hurricane winds can range to a top-end of 155 miles per hour and can last for hours. As a result, they usually cause more property damage than deaths.

The strongest winds of Hurricane Frances stayed in Florida's Treasure Coast on the Atlantic Ocean. Only a tiny corner of Palm Beach County experienced hurricane-force gusts. But the storm pounded that area for two days, and those hours of wind did as much damage as a stronger, shorter storm.

Andrew, one of only three Category 5 storms to strike the U.S. mainland, had top sustained winds of 165 miles per hour. As many as 500,000 people felt hurricane-force winds. Because people took precautions, only 15 died in South Florida. Category 5 is the strongest hurricane.

## Rains Bring Floods

A slow-moving hurricane can produce considerably more rainfall than a swifter, stronger one. Andrew’s rainfall topped out at 8 inches. Isaac was hundreds of miles out in the Gulf of Mexico last year when one of its outermost bands dropped as much as 17 inches of rain on parts of Palm Beach County. Twisters can be associated with heavy rain, but don’t directly figure into rainfall or flooding.

A storm surge is what forecasters consider a hurricane’s most treacherous aspect. It generally features a rising tide, aided by the hammering of breaking waves, that can start hours before the storm comes ashore. It can flood buildings and drown people miles inland.

## Tornadoes Born Of Hurricanes

Hurricanes can spawn tornadoes. Twisters typically form on the outer edges of hurricanes, especially in or ahead of the storm’s most powerful part — its front right section.

In 1988, Hurricane Gilbert’s eye passed into Mexico but spawned 41 tornadoes in Texas. Several hit San Antonio, about 350 miles from landfall.

And small storms can produce tornadoes as often as large ones. In 2008, Fay, only a tropical storm, spun off a tornado in Florida's Wellington area that all but flattened a horse center.

But a high-end tornado might not create as much damage if it touched down on South Florida.

“In Florida, the homes are built to be wind resistant, and in the Midwest, less so,” said Remington Brown, an engineer for the Insurance Institute for Business and Home Safety.

While buildings in Florida would be built to withstand winds of up to 140 miles per hour, those in the Midwest might be built for 90 mph, Brown said.

**Sensational Summary: Write a 5-7 sentence summary of the article:**

1. The reader may infer that which of the following causes the greatest number of deaths during a hurricane?

(A) wind gusts of 155 mph

(B) a hurricane's rising tide

(C) power outages in the city

(D) rainfall of at least 17 inches

2. The Oklahoma tornado was an EF-5. What does EF measure?

 (A) length of the damage zone and rainfall

(B) a tornado's wind speed and damage

(C) the length and width of the tornado

(D) a tornado's width and wind speed

3. Select the sentence from the article that proves the Oklahoma tornado was on the ground longer than most tornadoes.

(A) Preparation helped only a little for Moore, Oklahoma, last Monday.

(B) According to a preliminary National Weather Service summary, Monday's tornado was a top-end EF5.

(C) Its winds topped 200 to 210 miles per hour, and was 1.3 miles wide. It was tracked on the ground for 50 minutes - an eternity for a tornado - and its damage zone was more than 17 miles wide.

(D) EF is short for Enhanced Fujita Scale, which measures a tornado's wind speed and the damage it causes.

4. Circle the paragraph from the article that proves taking precautionary measures can save lives even in the most severe storms.