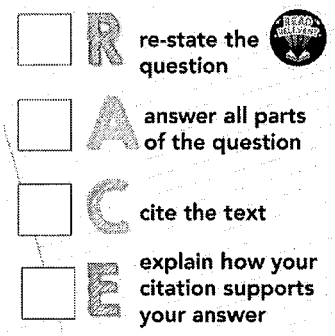
Article of the Week Name _____

Due: November 8, 2019 Period _____

Directions: After **reading** the attached article, **answer** the following questions. *Remember to **use** the RACE strategy (Restate, Answer, Cite, and Explain) and **provide 1** detail from the article.*

1. **Why did "stormquakes" go unnoticed for so long?**
2. **Do you think that a "stormquake" is a variable that could affect your lifeboat? Explain your answer.**



RACE Rubric for Short Answer Questions

	4	3	2	1
R Restate the Question	Restated the question completely	Restated almost all parts of the question	Attempted to restate the question, but was unsuccessful	Did not restate the question at all
A Answer the Question	Considered all parts of the question and answered each part accurately	Considered all parts of the question but had only partial accuracy	Missed part of the question	Did not answer the question at all
C Cite evidence from the text	Properly cited adequate evidence from the text that supported the answer	Cited evidence loosely related to the answer	Evidence used was either not relate to the question, or not correctly cited	No evidence from the text was used
E Elaborate -Make connections -Explain further-	Made a connection with the text and clearly explained its relationship to the question	Made a connection to the text, but was unable to explain its relationship to the text clearly	Attempted to make a connection to the text, but the relationship was weak	Did not make a connection to the text at all; element was not present

R: _____ A: _____ C: _____ E: _____ Total: _____ / 4 = Final Score: _____

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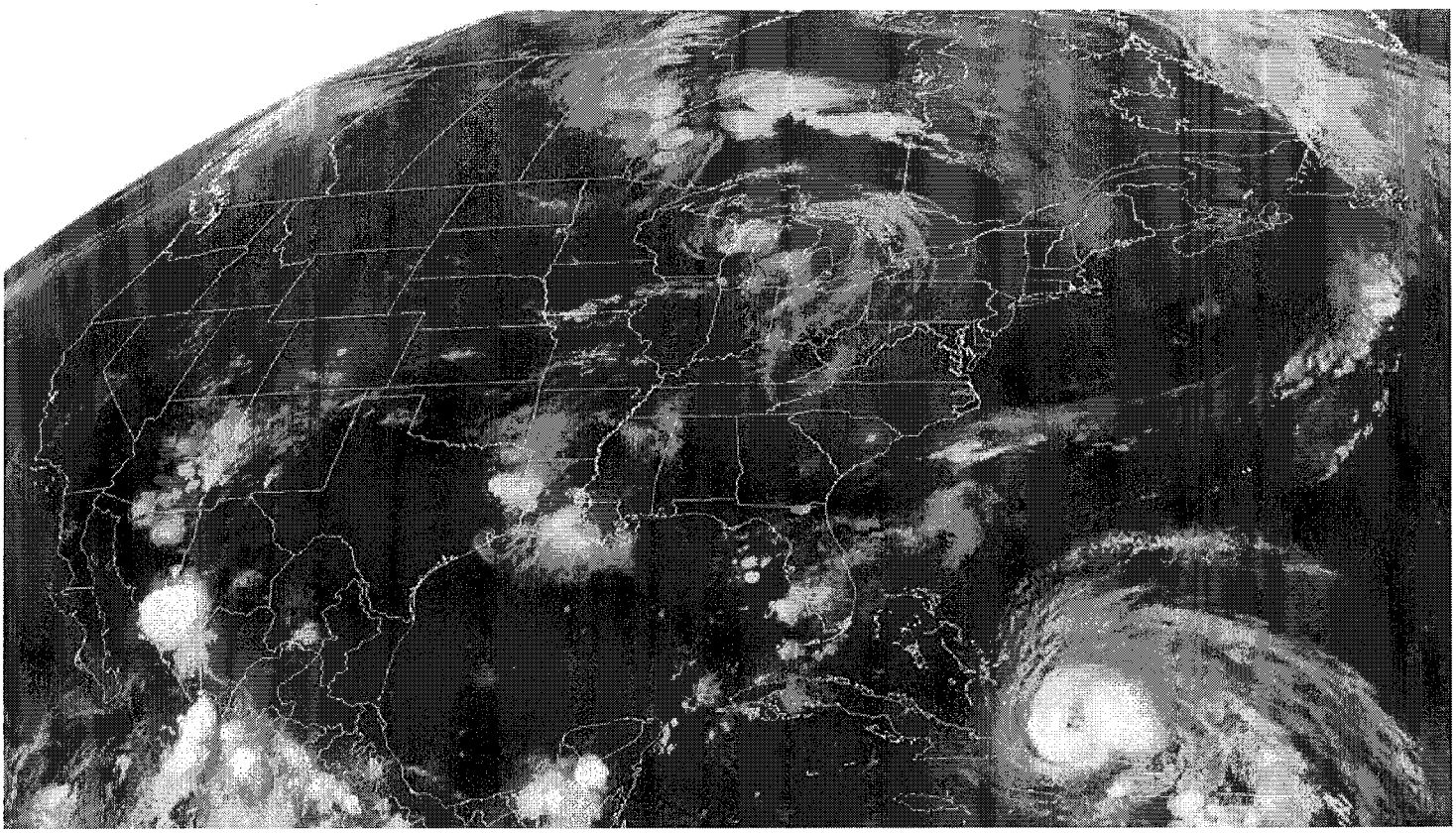
"Stormquakes" happen quite often, but don't worry, you'll never feel one

By Associated Press, adapted by Newsela staff on 10.29.19
Word Count **383**
Level **880L**



Hurricane Irene swirls at the bottom right of this satellite image taken August 24, 2011, by the National Oceanic and Atmospheric Administration. Image from: Weather Underground via AP

It sounds like something out of a movie: "stormquakes." However, scientists say it's no made-up Hollywood event.

Hurricanes and earthquakes are finding ways to come together in a mash-up form.

During hurricanes and nor'easters, a type of cyclone, the seafloor can rumble like a small earthquake — around magnitude 3.5. This shaking can last for days, a study shows in October's journal Geophysical Research Letters.

The quakes are fairly common. However, they weren't noticed before. They were considered background noise in the Earth's vibrations.

A stormquake is more an odd event than something that can hurt you, said Wenyuan Fan. He's a Florida State University seismologist, studying earthquakes. He was the study's lead author.

The stormquakes are less dangerous because no one is standing on the seafloor during a hurricane, he says.

The combination of two frightening natural events might bring to mind the movie "Sharknado." Still, stormquakes are real, if not all that threatening.

"This is the last thing you need to worry about," Fan told the Associated Press.

Seismologists Consider Them "Background Noise"

Storms trigger giant waves in the sea, which cause another type of wave. These secondary waves then interact with the seafloor, and that causes the shaking, Fan said. This only happens in places where there's a large continental shelf and shallow flat land. The continental shelf is an area of seabed around a large chunk of land. There, the sea is relatively shallow compared with the open ocean.

Fan's team found 14,077 stormquakes between September 2006 and February 2015. They happened in the Gulf of Mexico and off Florida and New England in the U.S., plus Nova Scotia, Newfoundland, Labrador and British Columbia in Canada. A special type of military sensor is needed to spot them, Fan said.

Hurricane Ike in 2008 and Hurricane Irene in 2011 set off many stormquakes, the study said. The shaking is a type that creates a wave that seismologists don't normally look for when monitoring earthquakes. That's why these have gone unnoticed until now, Fan said.

Ocean-generated seismic waves like this show up on instruments from the U.S. Geological Survey (USGS). It's the government group that researches earthquakes and other natural events. Still, in their mission of "looking for earthquakes, these waves are considered background noise," USGS seismologist Paul Earle said.