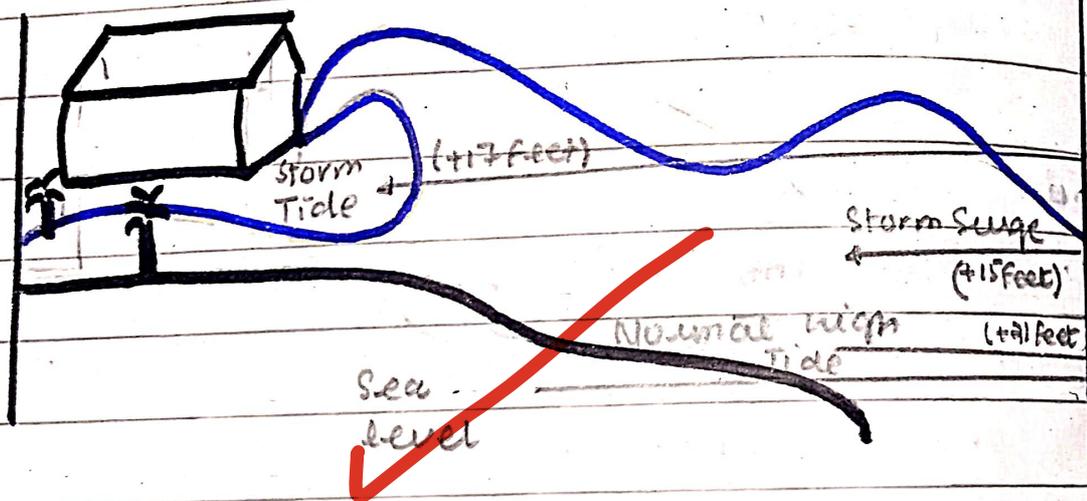


# DANGEROUS PART OF HURRICANE:

what is the dangerous part of hurricane?

## Storm Surge:

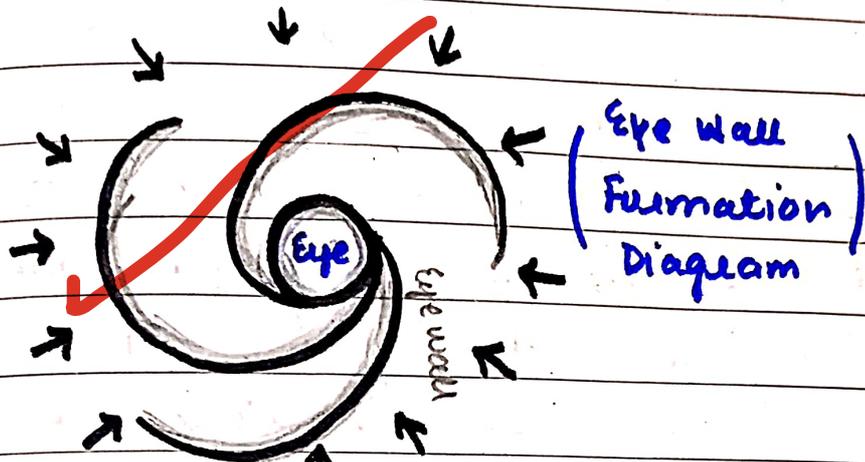
Storm surge is water that is pushed towards the shore by the force of the winds swirling around the storm. This wind can also form large waves on top of the surge. This advancing surge combines with the normal tides to create the hurricane storm tide, which can increase the average water level 15 feet (4.5 meter) or more.



**Effects of this Storm Surge:** (i) This rise in water level can cause severe flooding in coastal areas, particularly when the storm tide coincides with the normal high tides.

(ii) The destructive power of the storm surge and large battering waves can result in loss of life and infrastructure, and can travel miles inland.

(iii) Much of the United States densely populated Atlantic and Gulf Coast Coastlines lie less than 10 Feet above mean sea level, the danger from storm tide is tremendous.



**Eye wall:** (i) This is the ring of towering thunderstorms immediately surrounding the calm center (the eye).

(ii) The eye wall contains the tropical cyclone's strongest winds and heaviest rainfall. When the eye wall passes over, the winds are at the most destructive phase, and airborne debris becomes a lethal risk.

(iii) They occur most frequently and are largest in the Western Pacific Ocean.

### Precautions:

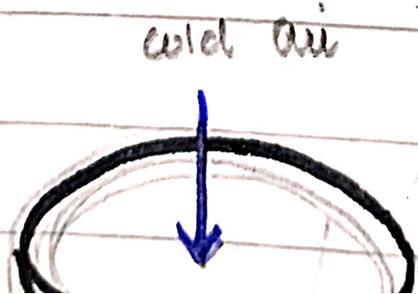
Cyclones can be predicted with 100% certainty. Meteorologists world wide use modern technology, such as satellites, weather

Date: \_\_\_\_\_

radars, and computers to track tropical cyclones as they develop. However, Tropical cyclones can be challenging to forecast, as they suddenly weaken and change their course. However, Meteorologists use state-of-the-art technologies and has developed Modern techniques such as numerical weather prediction models to forecast how a tropical cyclone evolves, including its movement and change of the intensity; where and where one will hit land and at what speed. National Meteorological services of the concerned authorities then issue official warnings.

4.5

Tornado  
Formation



Condensation  
Funnel



## What is Richter scale?

**RITCHER SCALE****DEFINITION OF RITCHER SCALE**

Richter scale is a scale that was originally used to measure the magnitudes of earthquakes.

and developed by Dr Benno Gutenberg and Charles Richter.

1. Richter scale ranging from 0-10 is calculated on the basis of seismograph oscillations.
2. The number from one to ten is ascertained and calculated with the help of information that is gathered by a seismograph. It is basically used to indicate the intensity of an earthquake and how intense the earthquake was.

Magnitude on Richter	Description	Effects of Earthquakes	Occurrence Frequency
Scale less than 2.0	Micro	The earthquake is not felt	Approximately 8000 per day.
2.0 to 2.9	Minor	Normally not felt, but recorded	Approximately 1000 per day.
3.0 to 3.9	Minor	Normally felt, but the likelihood of damage is rare	Approximately 49,000 per day
4.0 to 4.9	Light	Often felt indoors, with shaking of items and rattling noises	Approximately 6200 per year.
5.0 to 5.9	Moderate	Major damage can be caused to poorly constructed buildings	Approximately 800 per year.
6.0 to 6.9	Strong	It can be very destructive in areas as far as 160km	Approximately 120 per year.

Magnitude	Description	Effects	Frequency
7.0 to 7.9	Major	It is known to cause severe damage over large areas	Approximately 18 per year.
8.0 to 8.9	Great	It can cause severe damage several hundred miles across	Approximately 1 per year
9.0 to 9.9	Great	Devastating in areas for several thousand of miles.	Approximately 1 per 20 years
10.0 +	Epic	Has never been recorded	Extremely low and cannot be estimated.
<b>Limitations OF Richter Scale</b>			

On the contrary, some countries used moment magnitude scale (Mw) because it accurately measures the total energy released by all earthquakes, especially large ones, avoiding the "saturation" problem of the Richter scale, which underestimates massive quakes.

good answers overall!!!!

4.5