

Name: _____

CH 13 The Nature of Storms

SECTION 3 Tropical Storms

MAIN IDEA

DETAILS

Review Vocabulary

Coriolis effect

Use your text to define the following term.

New Vocabulary

In the left margin, write the terms defined below.

large, rotating low-pressure storm that gets its energy from the evaporation of warm ocean water and the release of heat

calm center of a hurricane

strongest winds of a hurricane in a band surrounding the eye

classification of hurricanes based on wind speed, which gives an idea of the potential for property damage

mound of ocean water driven toward land by hurricane-force winds

Academic Vocabulary

dissipate

Define the following term.

MAIN IDEA**DETAILS****Tropical Cyclones***Use with pages 355–357.***List** the three names used around the world for tropical cyclones, and identify the locations where each is used.

Name	Locations
A. _____	i. _____
B. cyclone _____	i. _____
C. _____	i. _____ ii. _____ iii. _____ iv. _____

Analyze the formation of tropical cyclones in the outline below.**I.** Two conditions required for a tropical cyclone to form:

A. _____

B. _____

II. Two tropical oceans where tropical cyclones do not form:

A. _____

B. _____

III. Two reasons tropical cyclones do not form in those two places:

A. _____

B. _____

MAIN IDEA

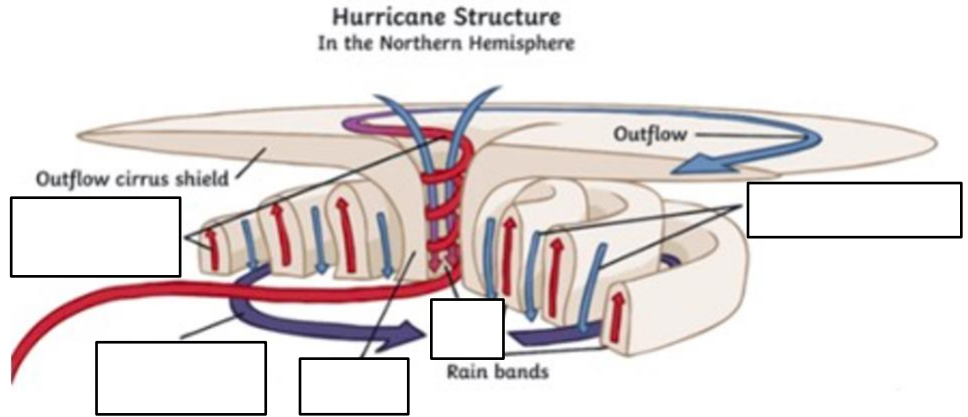
DETAILS

Cyclone Formation

Use with pages 356–358.

Label a hurricane, as seen from above. Use Figure 14 in your text as a guide. Use the following to label the diagram:

- cold descending air
- eye
- warm moist rising air
- direction of rotation
- eyewall



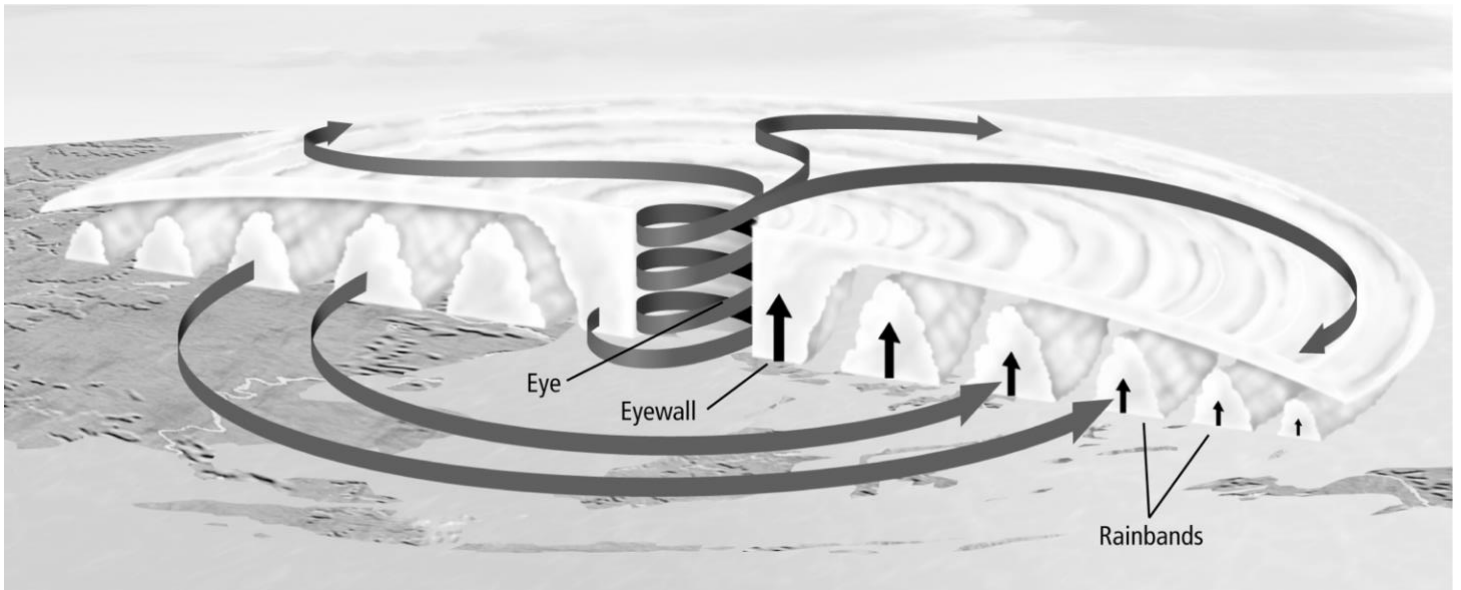
Hurricane Hazards

Use with page 359.

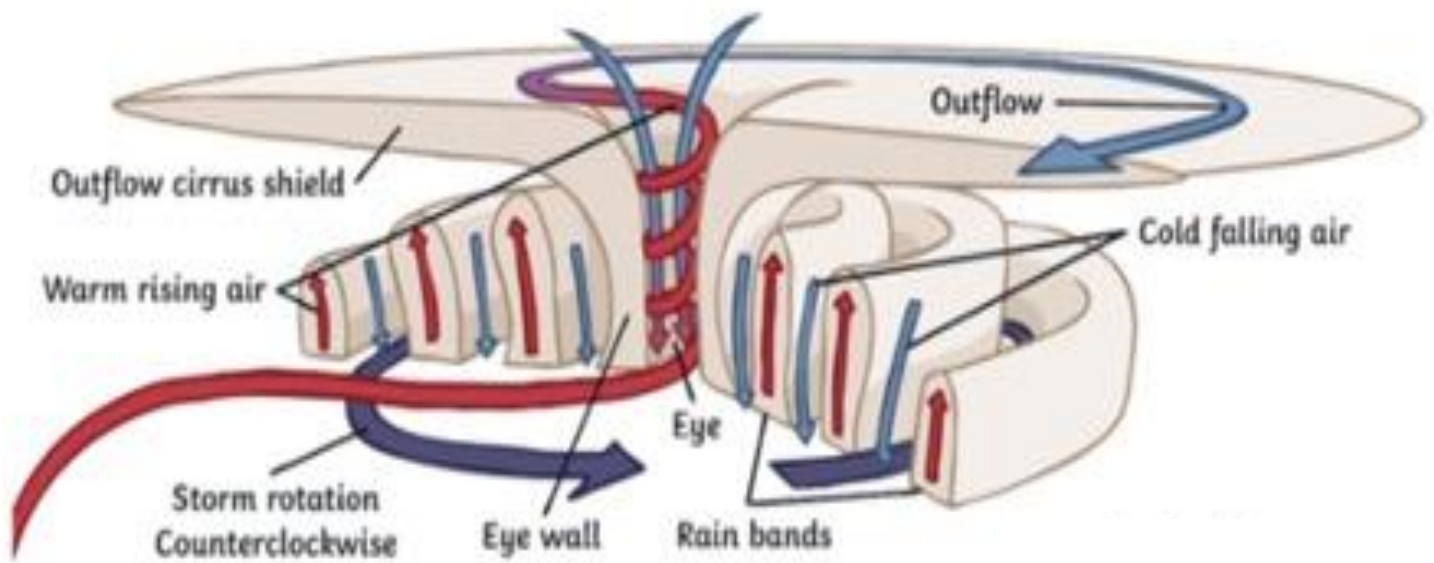
Analyze why flooding is a hazard of hurricanes by completing the statements.

Flooding occurs due to _____ ,
caused by the _____ .
Floods will be worse if the hurricane moves over mountainous areas,
because _____ .

HURRICANES



**Hurricane Structure
In the Northern Hemisphere**



HURRICANES

1. What is the center of the hurricane called?

2. Describe weather conditions in the center of the hurricane.

3. In the diagram, do the winds circulate around the storm's center in a clockwise or counterclockwise direction? Infer what hemisphere the storm formed in.

4. Where in this storm do the strongest winds occur?

5. Is this a high-pressure or a low-pressure system? Explain your answer.

6. Use the diagram to explain why the weather is calm in the eye of a hurricane.

7. A hurricane weakens when it moves over land or cool ocean waters. Use the diagram to explain why.
