

Review of chap 15: Hurricanes

- What is the latitudinal range of the tropics? (p. 406)
- What characterizes seasons in the tropics? (p. 406)
- What is the typical wind direction in the tropics? (p. 406)
- Roughly what is the diameter of a mature hurricane? (Use Hurricane Elena as an example, p. 406, col. 2.)
- What is the eye of a hurricane? (p. 406)
- Roughly how wide is the eye of a hurricane? (p. 406)
- What is the name for the region of intense thunderstorms surrounding the eye? (p. 407)
- What part of a hurricane has the fastest winds and the most intense rainfall? (p. 407)

Review of chap 15: Hurricanes

- List three conditions that must be met in the atmosphere and ocean for a hurricane to form. (p. 410, col. 1)
- Roughly how warm does the ocean have to be for a hurricane to form? (p. 410, col. 1)
- What does "converge" mean? Example (p. 410, col. 1): For a mass of unorganized thunderstorms to develop into a hurricane, the surface winds must converge.
- Many if not most Atlantic hurricanes can be traced back to what kind of trigger? (p. 410, col. 2)

Hurricanes

- Where do hurricanes form? (fig.15.7, fig. 15.10)
- What is a tropical wave? Why do they travel easterly? From which continent do Atlantic tropical waves originate? (p. 406)
- What are the 2 main theories about how hurricanes are driven? (class lecture)
- What sequence of events occurs as a hurricane forms and ultimately dissipates? (pp.412-413)
- What is the minimum wind speed for a hurricane? (p. 412)

Hurricanes

- Is air rising or sinking in the eye? (p. 408)
- If one hurricane has a smaller eye than a second hurricane, which one likely has the faster winds? Why? (discussed in lecture)
- What is the eye wall? (p. 407)
- Where are the most intense thunderstorms and fastest winds found in a hurricane? (p. 407)
- Describe the structure of a hurricane beyond the eye wall. (p. 407 column 2 – p. 408)

Hurricanes

- What is the typical lifetime of a hurricane? (lecture)
- Name two factors that can kill a hurricane. (lecture)
- If Atlantic hurricanes stay over water, where do they usually go which results in their death? Why do they move in that direction? (p. 414)
- On what side of a hurricane are the fastest hurricane winds found? (class lecture)
- When a hurricane comes on shore, which area relative to the storm's center (the eye) gets the most rain? Why? (class lecture)

Hurricanes

- What does "storm surge" mean? What is its importance? Which side of a hurricane has the worst storm surge? (pp. 417-418)
- Do tornadoes ever occur in hurricanes? (p. 418)
- Over 1800 deaths are attributed to Hurricane Katrina, but what disaster, also a hurricane, was the biggest killer in the US history? (p. 423, col. 1)
- What hurricane (anywhere) is known to have killed the most people? (p. 423, col. 1)
- What is the name of the system used to rank hurricane strength? (pp. 424-425)
- Is it possible for hurricanes in different years to have the same name? (p. 426)

Hurricanes

- What is storm surge? (p. 418)
- When a hurricane makes landfall, which area will experience the fastest winds? Highest sea level? Most rain? (lecture)
- What is the direction of the low-level winds for a Northern Hemisphere hurricane? What about upper-level winds? (p. 408, fig. 15.3)
- What is the name of the scale that assigns a number to the strength of a hurricane? (pp. 424-425)
- What numerical categories of hurricanes are regarded as “major hurricanes”? (p. 424, col. 2)
- What causes most of the damage from a hurricane?
- How often do tornadoes occur with hurricanes?