

Topic/Objectives: 5-2 Cyclonic Storms; (1) Explain how energy is transferred from the ocean to the atmosphere through the formation of air masses and weather systems; (2) Detail the characteristics and movement patterns of Atlantic hurricanes; (3) Describe the factors that lead to the formation of weather events, including thunderstorms and hurricanes; (4) Give examples of the ocean's influence on weather and climate	Name:
	Date:
	Period:

Essential Question: How does the ocean influence the development of thunderstorms and tropical cyclones?

Questions:	Notes:
	<p>Cyclonic storms form over warm surface waters and are driven by energy from _____ and _____.</p> <ul style="list-style-type: none"> ◦ Cyclonic storms are rotating storms that are generated over the warm waters of the tropics and that occur over much shorter time spans than El Niño-Southern Oscillations (_____). ◦ Depending on the region, tropical cyclones might be called hurricanes, _____, or _____. ◦ Tropical cyclones are characterized by heavy rain, strong winds, and an _____ (calm region) in the middle of the storm.
	<p>For a storm to be considered a hurricane in the North Atlantic and Northeastern Pacific, it must have sustained winds of at least _____.</p> <p>A tropical cyclone continues to gain energy as it passes over warm water. It loses energy when it passes over _____ or _____.</p> <p>The _____ wind speeds of cyclonic storms are used to classify them into five different categories.</p> <p>This classification scheme is known as the _____ - _____ (SSHS).</p>
	<p>Impacts of Cyclonic Storms</p> <ul style="list-style-type: none"> ◦ Tropical cyclones directly cause destruction through heavy _____ and strong _____. ◦ _____ may be also be spawned. ◦ Intense _____, usually the most destructive aspect of hurricanes, may form from a combination of (1) the difference in _____ between the perimeter and the eye of the storm and (2) from _____. ◦ The deadliest cyclone on record, the _____, killed between 300,000 and 500,000 people in Bangladesh in 1970. ◦ The world's costliest cyclone was _____, which first made landfall in Miami, Florida before traveling across the Gulf of Mexico to New Orleans, Louisiana in 2005. The storm cost between \$100 and \$200 billion and claimed more than 1,000 lives.

