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The Oceans

**Grade 8
Science**

**Unit 5: Cycles of the Earth
Louisiana Comprehensive Curriculum**

Unit Description

This unit focuses on the Earth's oceans, the different ocean layers (zones), ocean currents, the tidal process, sea breeze versus land breeze, and the ocean's effect on the upper level winds.

Student Understandings

Students understand the structure and dynamics of Earth's oceans and the various cycles within. Students will also learn how the oceans impact our weather systems.

Guiding Questions

1. Can the students identify the different layers of the oceans?
2. Can students explain the effect that the oceans have on weather patterns?
3. Can students explain the interactions of the oceans and the atmosphere?
4. Can students explain the sea breeze and land breeze?

Unit 5 Grade-Level Expectations (GLEs)

Earth and Space Science	
25.	Explain and give examples of how climatic conditions on Earth are affected by the proximity of water (ESS-M-A11)
26.	Describe and illustrate the layers of Earth's atmosphere (ESS-M-A11)
27.	Identify different air masses, jet streams, global wind patterns, and other atmospheric phenomena and describe how they relate to weather events, such as El Niño and La Niña (ESS-M-A12)
28.	Use historical data to plot the movement of hurricanes and explain events or conditions that affected their paths (ESS-M-A12)
29.	Make predictions about future weather conditions based on collected weather data (ESS-M-A12)
44.	Describe how unequal heating of Earth's surface affects movement of air masses and water in the atmosphere and hydrosphere (ESS-M-C6)