

<b>Topic/Objectives:</b> 4-2 Surface Circulation; (1) Indicate that energy in the ocean is distributed through currents, (2) Identify sea surface temperature and ocean currents from satellite imagery, (3) Explain how Earth's ocean basins are interconnected through the flow of currents	<b>Name:</b>
	<b>Date:</b>
	<b>Period:</b>

**Essential Question:** How do scientists determine what the seafloor looks like at extreme depths?

<b>Questions:</b>	<b>Notes:</b>
	<p>The _____ drives the strongest ocean currents, which occur in the surface layer.</p> <p>Wind and surface currents are driven by _____ from the Sun.</p> <p>All of the major surface _____ of the open ocean are driven by the wind and by heat energy from the Sun.</p>
	<p>The wind and the Coriolis effect create a spiral effect, called the _____, in a column of ocean water.</p> <p>The effects of the wind _____ with depth.</p> <p>The upper part of the water column that is affected by the wind is called the _____.</p> <p>Though each micro-layer moves in a different direction, taken as a whole the Ekman layer moves at 90 from the wind direction. This is called _____.</p>
	<p>While the trade winds move toward the equator, the _____ that these trade winds produce move parallel to the equator.</p> <p>Under the influence of the Coriolis effect, the wind-driven surface currents combine into huge, circular systems called _____.</p>
	<p>_____ is the movement of large volumes of bottom water to the surface and it is caused by Ekman transport.</p> <p>Upwelling is usually most intense in small _____ patches.</p> <p>_____ tends to be seasonal, occurring mainly during the time of year when winds are strong and blow in the right direction along the coast.</p>

[illegible]