Patterns of Circulation in the Atmosphere

Guiding Questions

DIrections: Each answer should be 4-6 sentences long, with details from the textbook pages 72-79 to back up your response.

1. What causes winds? Wind is caused by a difference in air pressure, air moves and wind is created. Wind is the movement of air parallel to the Earth’s surface. Air, like most things, moves away from high pressure areas to low pressure areas. A Wind vane is helpful in seeing which way the wind is blowing (anemometer). That is what causes wind.
2. How does the sun's energy affect wind characteristics? The sun’s energy affects wind characteristics when sunlight reaches the surface of Earth, land warms up faster than water. The air over the land gets warmer than the air over the water. As you know, warm air is less dense, and it rises, creating a low pressure area. That is how the sun’s energy affects wind characteristics.
3. How do winds redistribute energy around Earth? Wind redistributes energy around the Earth in many different ways. One way is a global convection current. The second way is the Coriolis effect. The Coriolis effect makes the way Earth’s rotation makes the wind curve. The third way is the wind belts.