Oceans and Air Temperature

climate - the average weather patterns of a region.

current - an ongoing movement in one direction. An ocean current is a large stream of water that flows through the ocean.

What affects climate?

- Bodies of water - air temps over land are warmer in summer and cooler in winter than they are over oceans.
- Global winds - they push air masses across the country. They bring warm, moist air to the west coast.
- Ocean currents - as ocean water moves, it brings along warm or cool air from where it goes.
- Altitude - the higher the altitude is above sea level, the cooler its climate is.

How do oceans affect temperatures on land?

Summer: It is cooler near the ocean, and hotter inland.

Water:
Water heats up slowly, so air temperature above the water will not change much because the water temperature will not increase much.

Land:
Air temperature above the land will get hotter because land heats up faster.

Winter: It is colder inland than over the ocean.

Water:
The ocean slowly gives up its summer heat. So the air above the water usually stays warmer than the air over the land.

Land:
Land cools down faster than water, so the air temperature over the land is cooler than that over the water.

Main idea: The slow warming and cooling of the oceans around the world keeps air in a narrow range of temperatures.