

Differences in Temperature

Hypothesize...

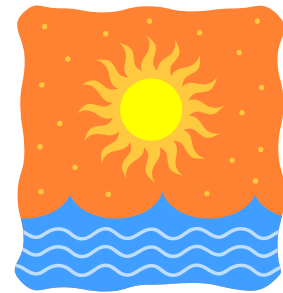
Why do the world's oceans have different temperatures?



How do temperatures differ on Earth?

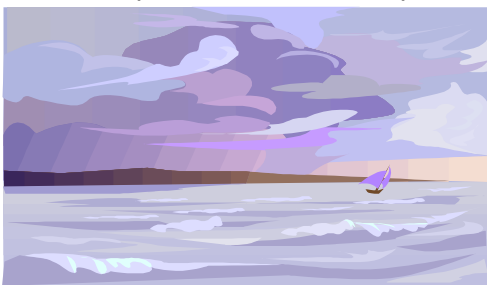


How do you think the difference in temperatures will affect ocean temperatures?



Thinking and Drawing - Temperature Differences

How do you think the temperature of the ocean will affect the temperature of the air masses above it? Warm ocean? Cold ocean?



Temperature differences in liquids and gases create convection currents. Draw a full-colored model of a convection current and include a brief explanation.

Differences in Temperature - KEY

Hypothesize...

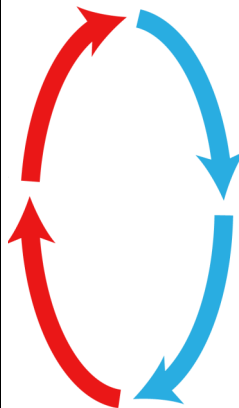
Some oceans are located in polar areas (cold), while other oceans are located in more tropical regions (warm)

The equator is warmer than the polar regions because the light is more concentrated at the equator and more spread out at the poles.

The water near the equator is warmer, and the water near the poles is colder.

Thinking and Drawing - Temperature Differences

The air above the water will take on the temperature of the water beneath it. Air masses at the equator will be warmer and air masses at the poles will be colder.



Air or liquid is heated and rises (it is less dense). As it cools, it sinks because it is more dense and the process is repeated over and over.