46 Convection Currents



cientists don't know exactly what drives plate motion. One theory is that there are convection currents within the earth's mantle. **Convection** occurs when there is a temperature difference within a substance like magma, causing it to move in a circular pattern shown in the diagram below). This convection of the magma within the mantle is believed to cause plate movement. In this activity, you will investigate how differences in temperature can cause substances like magma to move.



How do differences in temperature cause a convection current?

