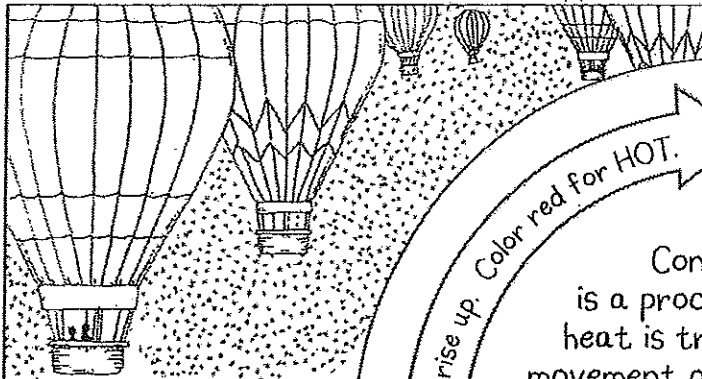
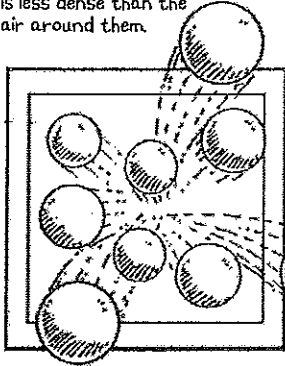


CONVECTION

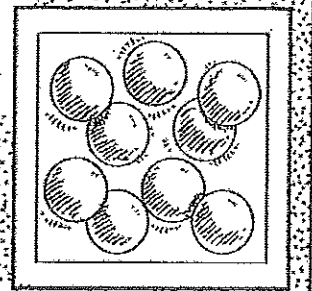


Hot gases and liquids are less dense, so they float upward when surrounded by gases and liquids of medium temperature. That's how hot air balloons float: the hot air in them is less dense than the air around them.

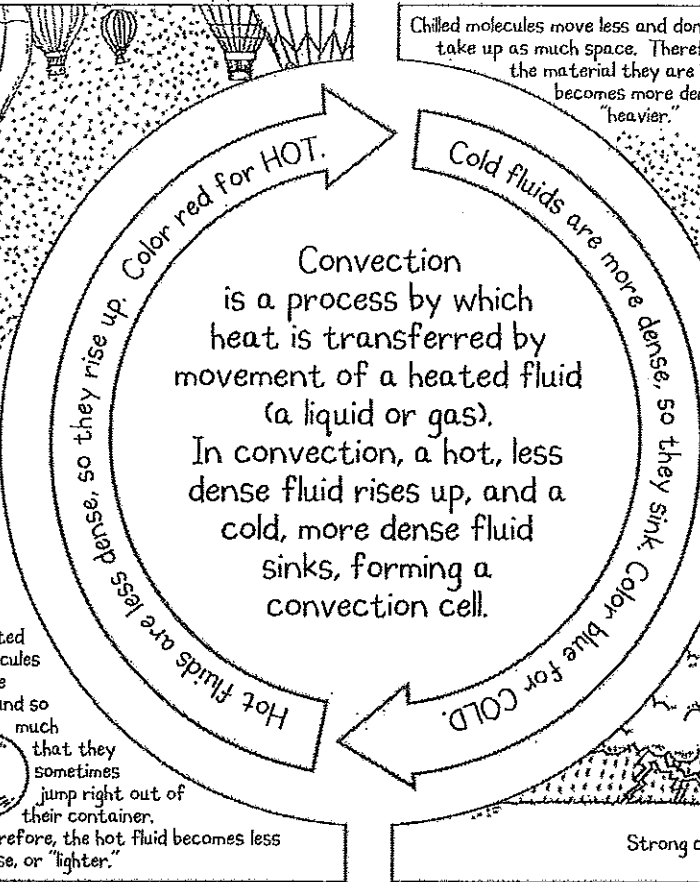


Heated molecules move around so much that they sometimes jump right out of their container. Therefore, the hot fluid becomes less dense, or "lighter."

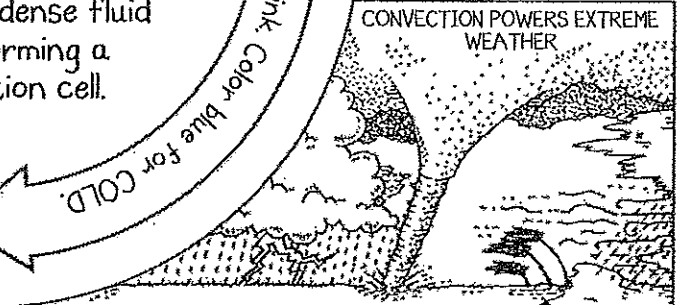
Chilled molecules move less and don't take up as much space. Therefore, the material they are in becomes more dense or "heavier."



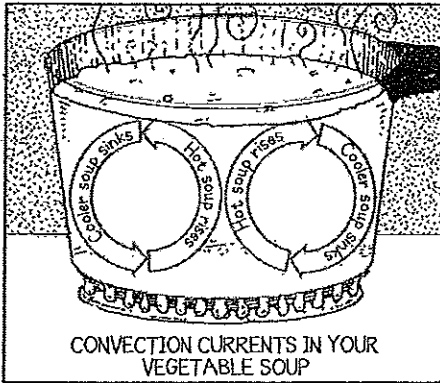
COLD AIR IS MORE DENSE. COLD AIR SINKS.



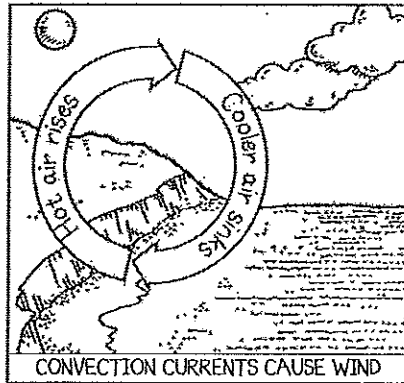
CONVECTION POWERS EXTREME WEATHER



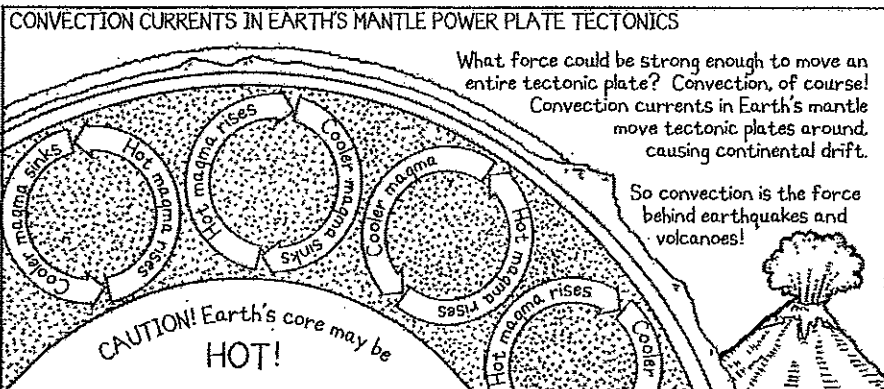
Strong convection cycles cause thunderstorms, tornadoes, and hurricanes.



CONVECTION CURRENTS IN YOUR VEGETABLE SOUP

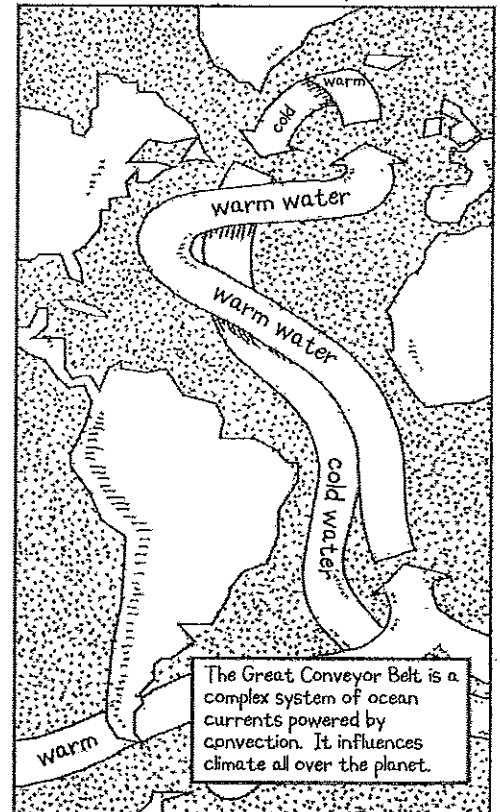


CONVECTION CURRENTS CAUSE WIND



What force could be strong enough to move an entire tectonic plate? Convection, of course! Convection currents in Earth's mantle move tectonic plates around, causing continental drift.

So convection is the force behind earthquakes and volcanoes!



The Great Conveyor Belt is a complex system of ocean currents powered by convection. It influences climate all over the planet.