**The Lavish Lava Lamp!**

*Read the text below and examine the diagram before answering the questions. Do not touch the lava lamp and remember to wear your safety glasses for this station.*

A lava lamp consists of oil, and wax in a glass, and a heat source (a light bulb) placed underneath the glass.

When the lamp is turned on the bulb gets hot. As the bulb heats up some of the heat from the bulb is transferred to the glass by radiation. As the wax (lava) heats up it begins to melt and become less dense than the surrounding oil.

This change in density causes the melted wax to rise. As the wax rises, some of its heat is lost. After it has been at the top for a while it loses most of its heat and becomes denser so it sinks.

The movement of wax in a lava lamp is similar to **convection currents** that occur in the air. A heat source, like the light bulb or sun, can heat up air or liquid, causing it to become less dense and rise. As the air or liquid rises, cooler air or liquid above it sinks because it is denser, and in turn is heated up again.

