

# Hot Snake Spirals

Hot air is lighter (less dense) than cool air. Therefore, hot air is more buoyant than cold air.

## buoy·an·cy

- a. The tendency or capacity to remain afloat in a liquid or rise in air or gas.
- b. The upward force that a fluid exerts on an object less dense than itself.

To illustrate buoyancy think of the following:

- A hot air balloon rises because the air in the balloon is warmer than the air outside the balloon
- Ships float because they are less dense than the water
- The basement in you house is cooler than the upstairs (good in summer!) because the hot air rises to the top of the house
- The upstairs of your house is warmer than the basement (good in winter!) because the hot air rises to the top of the house

The snake will spiral because the air over the heater is warmer than the air around it causing it to rise. The rising air forces the snake to spiral!

