Thermal Transport: Convection – Worksheet to follow the viewing of the demonstration movie at
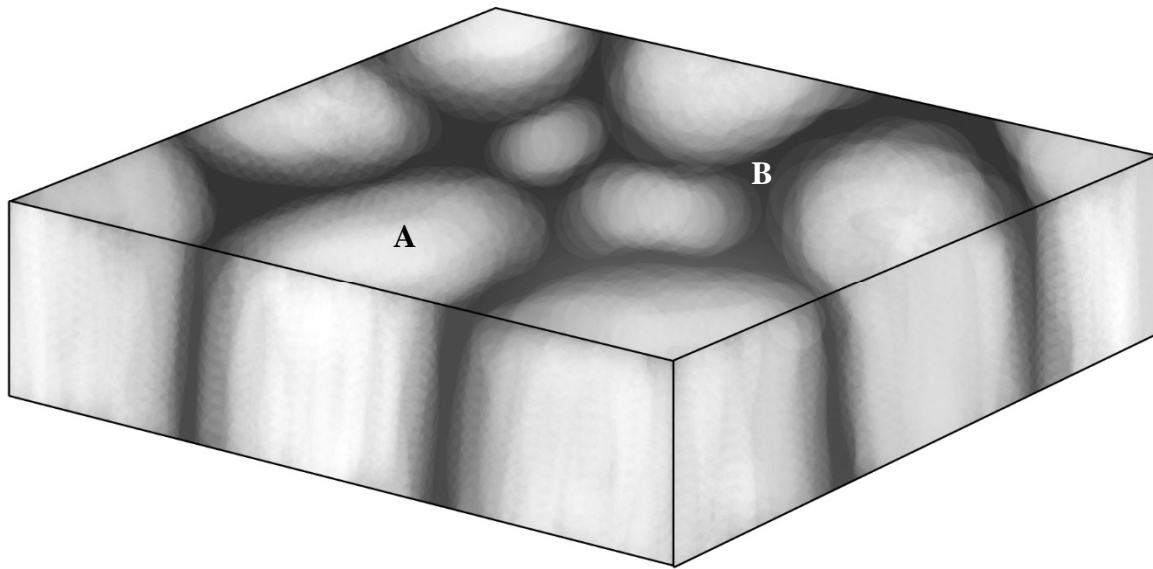http://astro.unl.edu/video/demonstrationvideos

1. The diagram below represents a slab of the material that makes up the visible surface of the sun.
a) Circle the quantity that best describes the value of the variable at the position labeled A.

Temperature: hotter   average   colder

Motion: rising   still   sinking

Density: high   average   low

b) Circle the quantity that best describes the value of the variable at the position labeled B.

Temperature: hotter   average   colder

Motion: rising   still   sinking

Density: high   average   low

2.) Convection cells on the sun are about 1000 km in diameter. Draw the convective cell at position A on top of the map of the United States as a circle using your best estimation of the proper scale. (Hint: the distance from New York City to Los Angeles is ~4,000 km)