

## ACTIVITY

### ● Floating Mountains

1. Take a large **block** of wood and place it in a clear plastic **container**. The block of wood represents the mantle part of the lithosphere.
2. Fill the container with **water** at least 10 cm deep. The water represents the asthenosphere. Use a ruler to measure how far the top of the wood block sits above the surface of the water.
3. Now try loading the block of wood with several different **wooden objects**, each with a different weight. These objects represent different amounts of crustal material loaded onto the lithosphere during mountain building. Measure how far the block sinks under each different weight.
4. What can you conclude about how the tectonic plate reacts to increasing weight of crustal material?
5. What happens to a tectonic plate when the crustal material is removed?