

# Recycle the Water

**The Action** Simulate the water cycle so students can visualize all the different states water goes through.

**Grade Level**  
Grade 2 – Air and Water  
Grade 3 – Heating & Cooling  
Grade 6 – Earth's Climate

**Materials**  
Aluminium tin trays (x2)  
Water  
Kettle  
String

**Instructions** Heat water in the kettle until boiling.  
Suspend a tray or plate in the steam or water vapour that comes from the kettle, and place the second plate under the first to catch the water drops (condensate).  
Cold water in the suspended plate can speed up the process of condensation.  
Pour the water from the second plate back into the kettle to complete the cycle.

**Safety** Care must be taken as hot water & steam is involved, so do not burn yourself!

## **Hints**

**Science Principle** The steam or water vapour is produced in the kettle, because the water in the kettle is heated. When the steam hits the cold plate, it condenses back into the water. The kettle can be compared to the ocean water being heated by the sun's rays. The water vapour accumulates in the higher layers of the atmosphere to form clouds. When these clouds move into colder regions, they saturate the air with water vapour and the cold temperatures turn it into rain – condensation. This may be compared to the steam hitting the cold surface of the first plate. The rainwater in nature flows into rivers and these flow back into the ocean.