

Say to students, ‘Now that we are familiar with the water cycle, let’s see if we can create our own mini-water cycle.’

Materials required	Per experiment
Heat proof jug	1
2 litre plastic bottle	1
Paper knife or scissors	1 (or to share)
Cutting board	1
Masking tape	1
Ice	1 bowl
Blue food colouring (optional)	1
Hot water*	2 cups
Blank character worksheet	1 each

\*Use appropriate safety precautions when handling hot water and cutting utensils, adult supervision essential.

### Method

1. Wrap a strip of masking tape around the bottle where you want to cut it, a little over half way up the bottle.
2. Carefully cut your plastic bottle in two.
  - This represents a lake, surrounded by mountains.
3. Pour the hot water into the bottom section of the bottle to about  $\frac{1}{4}$  full. (Blue food colouring was added).
  - This represents the ocean heated up by the sun.
4. Turn the top of the bottle upside down and place it in the bottom of the bottle, push it down firmly. (Leave the lid on the top half of the bottle).
5. Fill the top of the bottle with the ice cubes.
  - This represents the clouds.
6. Observe what happens.

*After a few minute you will see the water condensing under the ice*

### Student action (options for assessment)

1. Ask students draw and label a diagram of the experiment on the blank character worksheet.



Figure 1: Materials set up



Figure 2: Step 2, cutting the bottle in half using masking tape



Figure 3: Experiment underway