

# GENERATION Year 4: Science

### **Experiment - Build a mini water cycle**

Now that students are familiar with the water cycle, let's see if we can create our own miniwater cycle.

Materials required	Number
Large clear glass bowl	1 per experiment
Ceramic mug (shorter than the bowl)	1 per experiment
Cling wrap	
Masking tape	
Ice	
Blue food colouring (optional)	
Hot water*	
Activity 4 – Draw your own water	1 each
cycle	

<sup>\*</sup>Use appropriate safety precautions when handling hot water, adult supervision may be necessary.

#### Method

- 1. Place the glass bowl in a visible location.
- 2. Place the ceramic mug in the middle of the bowl.
  - This represents a lake, surrounded by mountains.
- Fill the glass bowl to just below half way with hot water. (Blue food colouring was added at this point).
  - This represents the ocean heated up by the sun.

(Hint: hotter water created better results, please use appropriate safety measures)

- 4. Cover the bowl tightly with cling wrap.
- 5. Use masking tape to secure the cling wrap tightly and ensure there are no gaps.
- 6. Place a large ice cube (or a couple of smaller ones) on top of the cling film directly over the mug.
  - This represents the clouds.
- 7. Observe what happens.
- 8. After a few minute you will see the water condensing under the ice.
- 9. Carefully dry the ice melt on the cling wrap to see your results.

## **Student action (options for assessment)**

1. Ask students to predict what will happen when the ice is added to the experiment.

2. Ask students to draw and label a diagram of the experiment.

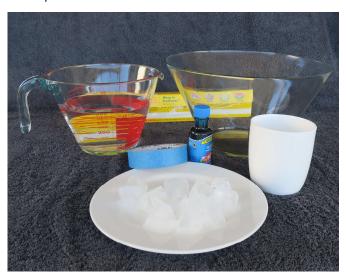


Figure 1: Materials set up



Figure 2: Experiment underway

#### **Extension activities**

Explore the importance of heat.

- Try two side by side experiments:
  - i. one using hot water and
  - ii. one using cold water
- Compare and discuss the results.
- Have students draw what they observed and encourage them to use a science word i.e. evaporation, condensation.

