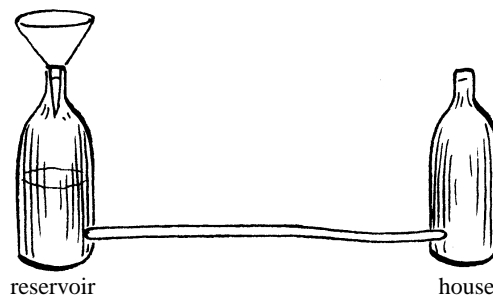


CAPTURING THE RAIN ACTIVITY NINE

Have you ever held your finger over the opening of a tap or hose then turned it on? (Don't try this inside ~ it can be very messy!) There is a feeling like your finger is being blown away by the escaping water. What you are feeling is called "Water Pressure". This activity shows how gravity can change water pressure.

You will need:

- Two plastic soft drink bottles (1litre), one labelled "reservoir" the other, "house"
- One x 750 millimetre length of plastic tubing (15 - 20 millimetre diameter)
- Funnel
- Ruler
- Stopwatch
- 1 litre of water
- Jug



1. Set up the equipment so that it looks like the diagram above. Ask your teacher to help you make a hole near the base of each bottle. This should be just big enough to fit the plastic hose so that it makes a waterproof join.
2. Tip all the water into the jug and raise the reservoir 100 millimetres above the house.
3. Fill the "reservoir" bottle with water and time how long it takes to flow to the "house". Write this result onto the recording sheet below.
4. Tip all the water into the jug and raise the reservoir 200 millimetres above the house.
5. Once again, fill the "reservoir" bottle with water and time how long it takes to flow to the "house". Write this result onto the recording sheet below.
6. Keep repeating these steps until you have recorded how long it takes water to flow into the house when the reservoir is 500 millimetres above the house.
7. Prepare a report telling what this activity shows you about gravity, water pressure and height. Use your data to give examples.
8. Use this equipment to design your own experiment about water pressure.

	time
reservoir 100mm above house	
reservoir 200mm above house	
reservoir 200mm above house	
reservoir 400mm above house	
reservoir 500mm above house	

