

Name \_\_\_\_\_

## Transfer of Water to Point of Use - Student Worksheet

#### **Gravity Feed**



Gravity feed water tank that increases water pressure for the Perth suburb of Coolbellup.

If the point of use is downhill from the source, water will naturally flow downhill. This is known as *gravity feed*.

### Height Increases Water Pressure/Rate of Flow

Draw a picture of water flowing out of a bottle below.



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## Height Affects Water Flow

#### **Materials**

- 3 paper cups (or three zip-lock sandwich bags), the same size
- 3 students to hold cups (or bags) and 3 students to test the strength of water flow.
- A large nail or scissors

#### Method

- 1. Make a hole near the base of each cup or corner of each bag and have a student seal it with their finger/s (or with a piece of plasticine).
- 2. Fill each cup (or bag) with the same amount of water.
- 3. One student holds their water container at head height, the second holds theirs at waist height and the third at knee height, above a sandpit or hard surface.
- 4. Hold the cups (or bags) with the hole pointing away from you, remove your finger.
- 5. Decide which flow was strongest, medium or weakest.
- 6. Observe what happened to the sandpit under each. If you're not using the sandpit, compare the splashing of the water on the hard surface.



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	Strength of flow	Depth of hole in sand / amount of splash
Head height		
Waist height		
Knee height		

When the cup is high the water pressure is MORE / LESS

Emergency Services suggest that in the warning of any oncoming natural disaster, it is a good idea to have containers (including the bath!) filled with water in case electricity is cut and water cannot be pumped to your house.

To detect a water leak - turn off all taps and listen to the water meter. If it continues to tick, there is a leak in the pipes underground. Would you expect a damp soggy spot to form on the ground?



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