Activity Sheet

How to make a bore

Groundwater comes from rain that trickles down into our aquifers. Aquifers are mostly composed of sand, sandstone and limestone, but they can also be made of gravel, heavily fractured granite, or any other rock material that has enough connected spaces to store and move water through it. It's from here that we take water from the ground and feed it into our water supply. Have a go at making your own extraction bore in this activity.

Things you will need:

- Pump from the top of a liquid soap dispenser
- Transparent cup or bottle cut in half
- Piece of gauze (or muslin cloth) and rubber band (to fix cloth around pump tube)
- Water
- Sand (and pebbles, soil and limestone rocks if available)
- Tea leaves or coffee grounds
- Cup to catch the pumped groundwater

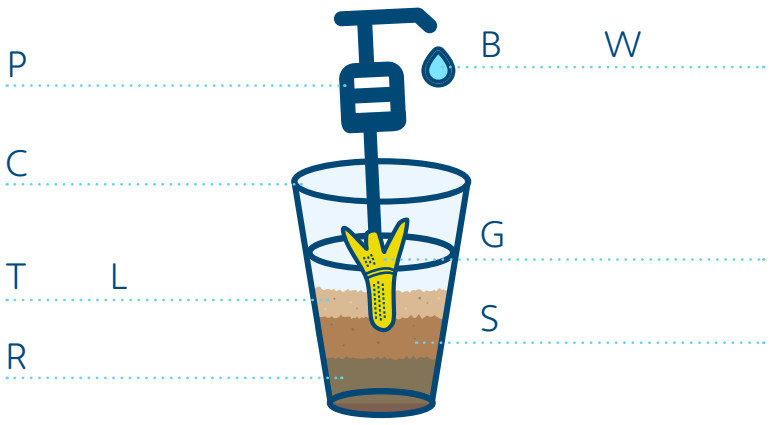
What to do:

1. Place a piece of gauze over the end of your bore tube and secure the gauze with a rubber band.
2. Sit the bore in the cup or bottle while rocks and sand are added.
3. Place a small layer of rocks or pebbles at the base followed by a layer of sand 70mm thick.
4. Gently pour enough water to reach 30mm up the sand layer. Watch as it seeps through to the bottom.
5. Before you begin pumping your bore, make sure you have a cup to catch the water.
6. Begin pumping!
7. Observe how long it takes the water to begin pumping out of your bore. Is it the same colour as when it went in?
8. Often leaves and organic materials seep into the ground. Try adding some tea leaves and coffee as organic matter to the ground.
9. Add clean water to your aquifer again. Observe how the bore water is affected by the additives.
10. Describe what happened to the water when you added the organic matter to your aquifer.

.....

.....

12. Label the diagram of the bore with the materials used.



WATER CORPORATION