Activity 6. The wishing well

Aims

To demonstrate the interaction of surface water and ground water.

To enable students to have a basic understanding of ground water occurrence and development.

Materials required

- Small aquarium or wide-mouthed glass jar
- Aquarium gravel
- Plastic drinking straws
- Small pebbles
- Simulated trees
- Plants

Procedure

1. Place the gravel in the aquarium at an approximated 45º angle.
2. Carefully introduce tap water into the aquarium until the water level covers approximately 50% of the gravel.
3. Place the pebbles and plants in the dry portion to simulate land conditions.
4. Note the interaction between the surface water (visible) and the ground water (visible only through the glass sides of the container).
5. Drill a well on the dry (land) side of the container by pushing the drinking straw into the gravel to the ground water.

Discussion

1. What would happen to the ground water if water was added to the visible pool? What natural condition does this illustrate?
2. What would happen to the surface pool if water was slowly poured onto the gravel? What natural condition does this illustrate?
3. Could we remove most of the water from the aquarium by sucking on the drinking straw? What ground water phenomenon does this illustrate?