­­­­­**Vocabulary:** verbs: run, move, soak, fill; adjectives: muddy, brown, clear

# A purification centre

**Material:**

* two plastic bottles with screw caps
* coffee filter
* sand
* small pieces of charcoal
* gravel
* container
* cord
* muddy water
* scissors
* hole punch
* two pieces of duct tape (each with a length of approximately 7 cm)

**Procedure:**

1. Let the teacher make a hole in a bottle. The hole has to be a couple of centimetres from the bottom and has to be big enough to be used as a starting point for cutting off the bottom of the bottle.

2. Use the scissors to cut the bottom of the bottle.

3. Place a piece of duct tape on the bottom of the bottle. The duct tape has to stick on both the outer and the inner sides of the bottle to strengthen the bottle around the holes that have to be made.

4. Place in the same way another piece of duct tape opposite the first piece of duct tape.

5. Use a hole punch to make two holes in the bottle. The holes have to be placed opposite each other and are made where the bottle is strengthened with duct tape. If possible, place the holes a couple of centimetres from the edge of the bottom.

6. Put some cord through the holes, so the bottle is ready to hang up.

7. Hold the bottle upside down and place the coffee filter at the bottom.

8. Put 4-5 cm of sand on top of the coffee filter.

9. Put 4-5 cm of broken charcoal on top of the sand.

10. Put 4-5 cm of gravel on top of the charcoal.

11. Hang the bottle up, remove the lid and place a container underneath it.

12. Pour some muddy water into the second bottle.

13. Carefully pour the muddy water into the hanging bottle and watch what happens.

14. Does the water in the container look like the muddy water you poured in the bottle?

Alternatively, the purification centre could be made like this.