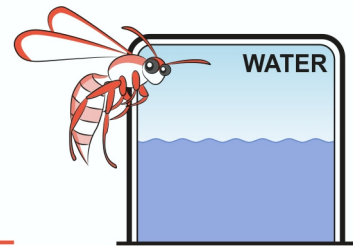


Filtering With Sand - Student Activity



Water from reservoirs and dams is often passed through sand beds to filter out solids.

Solids held back

Sand filter

Sand filtered clear water



Liquid collected from filtering is called **filtrate**.

Soldiers used to filter nasty water through a sock half filled with sand. They said it was better than drinking water with the “lumps” in!

Unfortunately neither of these methods can filter germs efficiently.

Do not drink the filtrate

Materials needed per student or group:

- Clean sand (How will you control this variable?) _____
- One empty washed plastic cool drink bottle with the top removed by scissors (How will you control this variable?) _____
- Thumb tack, map pin or compasses to puncture the base of the bottle 10 times
- Dirty water (How will you control this variable?) _____
- Beaker or base of larger cool drink bottle to collect and measure filtrate
- Measuring cylinder or jug



Half fill the bottle with washed sand. With the bottle held over a beaker, part fill with dirty water and collect the filtered water in the beaker beneath. This water will appear fairly clean but still could contain germs.