



WATER SCRUBBER

You Will Need:

- ✿ 1/2 Gallon plastic jug
- ✿ Scissors
- ✿ Nail
- ✿ Hammer
- ✿ Muddy water
- ✿ THE HELP OF AN ADULT
- ✿ Pebbles, gravel, sand (coarse and fine)
- ✿ Glass jar



Instructions

1. Cut off the bottom of a 1/2 gallon plastic jug. Then, unscrew the cap and ask an adult to punch a few small holes in it with the tip of a nail and a hammer. Screw the cap back on and turn the jug upside down.
2. Fill the jug with equal layers of pebbles, gravel, coarse sand, and fine sand. The pebbles go in first, the gravel next, then the coarse sand, and, finally, the fine sand on top. Don't fill the jug completely; leave a couple of inches free.
3. Hold the jug over a clear glass jar. If possible, prop up the jug so that it rests securely over the jar.
4. Now, pour some muddy water onto the sand. In a few minutes, clean water will trickle into the jar.

This Is What Happens:

You have just performed *filtration*. Filtration is the removal of material that is suspended in a liquid. The muddy water contained many impurities, and these were trapped-filtered-by the layers in your jug. The water itself, however, was free to pass through the layers and into the jar. Of course, you *shouldn't* drink this water because it is not really clean enough for drinking.

