Water's Great Escape

You've heard that water doesn't run uphill. Here's an experiment that shows how you can coax water to do it. Just in case there's a leak it's a good idea to do it in the kitchen sink.

What to do: Fill the glass nearly full of water. Put it next to the bowl.

The plan is to have the water move up and over the rim of the glass and down into the bowl. To do this you need a wick through which the water can travel. A wick is a tight roll of paper or cloth that will absorb water. Just as a candle wick carries melted wax up to the flame, your water wick will carry water along its length. Twist the paper towels together fairly tightly to form the wick. Bend the wick in the middle. Then place one end in the glass. Be sure the other end reaches into the bowl, like this:

What happens: Within just a minute or so you'll see the wick getting wet as water begins to travel along it. After a few minutes some water will appear in the bottom of the bowl.

Water won't flow from the glass into the bowl. Instead of flowing, it sort of oozes. This experiment takes time. Check back once in a while to see how it is coming.

When the water level in the bowl is as high as the level of the water left in the glass, the water stops moving. If you set the glass on something higher than the bowl you get most of the water out of it.

Why: There are thousands and maybe millions of tiny spaces between the fibers of the paper towel. Water moves into these openings and advances along the twisted material. Its movement is known as capillary action. Moisture moves from plant roots into the rest of the plant in this same way.

YOU NEED

- drinking glass
- water
- bowl
- two paper towels

365 Simple Science Experiments
Churchill, Loeschnig, Mandell, 1997