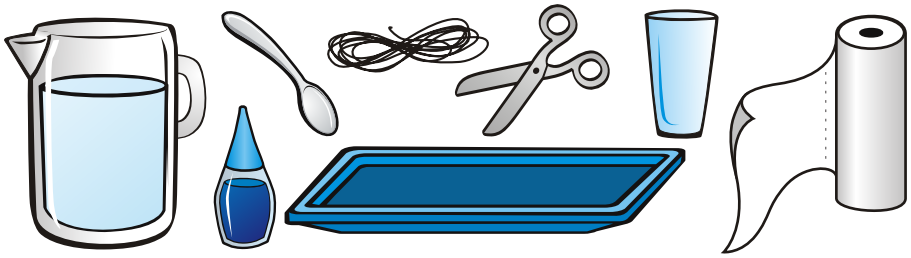
THE HOME LAB

Sticky Water

AS SEEN ON OUR YOUTUBE CHANNEL
MadScienceGroup

What you need:

- Pitcher of water
- Food coloring
- Spoon
- Cup
- Cotton string
- Scissors
- Tray
- Paper towel



What you do:

Step 1: Add a few drops of food coloring to the pitcher of water, and stir to mix.

Step 2: Cut a piece of string about 60cm (2') long.

Step 3: Soak the string in the colored water.

Step 4: Working over the tray, press one end of the string against the inside of the pitcher's spout. Press the other end against the inside of the cup. Make sure you pull the string so it is tight.

Step 5: Position the pitcher higher than the cup, and carefully pour. Can you get the water to pour along the string into the cup?

What's going on:

When you pour water, Earth's gravity pulls it down. Why does the water follow the string? Water molecules are attracted to each other. This is called "cohesion". Water molecules are also attracted to other molecules, like the ones in the string. This is called "adhesion". The water follows the string when you pour because of adhesion and cohesion.

Now try this:

Try using longer pieces of string, and have a friend hold one end. Experiment outside to see how far you can get the water to travel. What's the maximum distance you can get it to go?