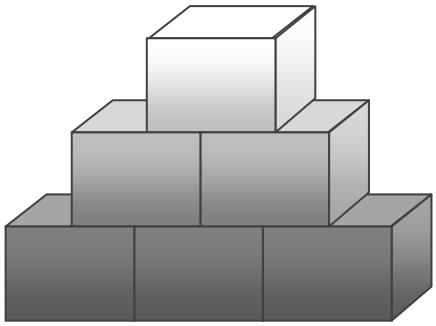
Can Water Flow Uphill?

Watch how it is possible for water to do the impossible – flow uphill!

Materials

- Sugar Cubes
- Water
- Food Coloring
- Paper plate
- Teaspoon



Process

1. Build a pyramid with 6 sugar cubes on the paper plate
2. Mix a drop of food coloring into the water
3. Add a few spoonfuls of colored water to the paper plate
4. Watch what happens to the water? How does it move uphill?

So What's Happening?

The starting point of all rivers is higher than their end point. However, under the right conditions, small amounts of water can be drawn upwards, against the tug of gravity, through a *phenomenon* known as "*capillary action*". For this to occur, however, the water must be confined into a small flow space.

Vocabulary

- **Phenomenon** – a fact or occurrence that can be observed
- **Capillary Action** – is the ability of a liquid to flow against gravity where liquid spontaneously rises in a narrow space such as a thin tube, or in porous materials such as paper or in some non-porous materials such as liquefied carbon fiber

For More Information

Science Encyclopedia. "Capillary Action." Last Modified 2011.
http://science.jrank.org/pages/1182/Capillary-Action.html