The Mysterious Moving Glass

Can you make a glass of water move without touching the glass?

What to do: Fill both glasses nearly full of water. On a flat surface, like a kitchen counter, place the pencil under the ruler, as shown in the drawing. Put one glass of water at each end of the ruler. Hold onto each glass until it is balanced.

Now move the pencil along under the ruler until the raised end is almost ready to tip downward.

Put two fingers into the water, but don't touch the glass. Push your fingers down into the water.

What happens: As your fingers move down in the water, that glass will move down as shown by the arrow in the drawing. The level of the water will rise in the glass as your fingers push into the water.

Why: As your fingers push into the water they move, or displace, water, which causes the water level to rise. The glass's weight is increased by exactly the amount of water that is displaced.

YOU NEED

- two glasses
- water
- pencil
- 12 inch (30 cm) ruler