How to Empty a Glass by Blowing on It

It’s easy to empty a glass by pouring the water from it. But it’s more fun to blow on it to accomplish the same thing.

What to do: Run enough water into the kitchen sink so the water level is a little higher than the width of the glasses when they are turned on their sides. Here’s how:

Be sure the glasses are full of water. Press the two rims together. Get a firm hold on both glasses and lift them out of the sink with their rims still pressed together. Now turn them a quarter turn so that one glass is on top of the other. Set the two glasses in the empty pan.

Very carefully slide the top glass a bit to one side so the rims of the glass no longer meet exactly. Do this slowly and no water will run out of the top glass. Here’s how the glasses look in relation to each other.

Aim the drinking straw right at the point shown by the arrow where there is a tiny space between the rims of the glasses. Now blow gently through a straw. Then blow a bit harder.

What happens: Air bubbles will rise inside the top glass and a stream of water will flow down the side of the bottom glass into the container. Within a short time the top glass will be totally empty.

Why: Air pressure outside the glasses combines with surface tension to keep the water on the top glass from running out and into the container when you move their rims apart slightly.

When you blow, the air pressure from the end of the straw overcomes the water’s surface tension and forces air between the two glasses. Once inside the glasses, the air rises since it is lighter than water.

YOU NEED

• water
• 2 drinking glasses the same size
• pan
• drinking straw