DIYs » Stem Activities » Marvelous Mechanics Motion » Age 6 - 8 » Siphon Effect



Materials Needed

Glass filled with water Empty glass Food colouring Drinking straw Scissors Ruler Stirring stick



Step-by-step tutorial

Step 1

Bend the straw and use scissors to cut it horizontally to 10cm lengths.





Add food colouring to the glass of water and stir well.





Place the empty glass next to the full glass, then fill the straw with water before removing it.





Step 4

Cover both ends of the water-filled straw with your fingers, then place one end in each glass. Remove your fingers and watch the amazing siphon experiment in action!



The Science Behind It:

The siphon principle is a fascinating physical phenomenon that requires two conditions: first, the liquid level in one container must be higher than in the other, and second, there must be a tube connecting the two containers. During the process, liquid flows from high to low due to gravity, while the pressure difference in the tube helps maintain the flow until the liquid levels in both containers equalise. This process transfers liquid using natural forces - while it appears to "suck" the liquid, it's actually the result of atmospheric pressure and gravity working together.