Walking Water Experiment ■■

Aim:

To demonstrate capillary action and color mixing by making water ‘walk’ from one cup to another.

Materials:

• 6 clear cups or glasses
• Water
• Food coloring (red, yellow, blue)
• Paper towels (folded into strips, 3–4 cm wide)

Steps:

1. Line up 6 cups in a row.
2. Fill cups 1, 3, and 5 halfway with water. Leave cups 2, 4, and 6 empty.
3. Add food coloring: Cup 1 = Red, Cup 3 = Yellow, Cup 5 = Blue.
4. Fold paper towel strips and place one end in a colored cup and the other in an empty cup next to it.
5. Wait 1–2 hours (or overnight) and observe.

What Happens:

The water ‘walks’ up the paper towel fibers due to capillary action and drips into the empty cups. The empty cups fill and colors mix (red + yellow = orange, yellow + blue = green, red + blue = purple), creating a rainbow effect.

Science Behind It:

• **Capillary action:** Water moves upward in the tiny fibers of the paper towel due to adhesion and cohesion forces.
• **Diffusion:** Colors mix naturally as the water levels equalize.