

Rainbow in a glass

Materials

four different colours of food colouring (e.g. red, yellow, green, blue)
five beakers tall glasses or clear plastic cups
 $\frac{3}{4}$ cup (180 g) of granulated sugar
a tablespoon for measuring
water

In the first glass, add one tablespoon (15 g) of sugar. In the second glass, add two tablespoons of sugar, three in the third glass, and four in the last glass. Then add three tablespoons (45 ml) of water to each glass, and stir until the sugar is dissolved. If the sugar in any of the glasses will not dissolve, add one more tablespoon (15 ml) of water to all of the glasses, and stir again. When the sugar is completely dissolved, add two or three drops of red food colouring to the first glass, yellow to the second, green to the third, and blue to the last glass.

In the remaining glass we will create our rainbow. Fill the glass about a fourth of the way with the blue sugar solution. Next, carefully add the green solution to the glass. Do this by putting a spoon in the glass, just above the level of the blue solution. Slowly pour the green solution into the spoon, raising the spoon to keep it just above the level of the liquid, until the glass is half full. Add the yellow solution, and then the red one in the same manner