

Rainbow in a Jar

You will need:

- Skittles
- Glass jar (or glass)
- 5 separate cups
- Water
- Pipette or syringe
- Mug



1. Separate the Skittles into the cups in these amounts: 2 red, 4 orange, 6 yellow, 8 green, and 10 purple.
2. Heat a mug of water in the microwave for a minute and a half (or long enough that the water is hot - but not boiling).
3. Measure and pour two tablespoons of hot water into each cup on top of the Skittles.
4. Stir each cup then leave to cool completely, stirring every so often.
 5. Using the pipette or syringe, carefully add the colours to the jar (starting with the purple and working up). Slowly squirt the liquid down the side of the jar to add it so the colours don't mix.

THE SCIENCE

Skittles are mostly made of sugar. When you add hot water to them, the sugar dissolves and the colouring on the shell of the Skittles turns the water different colours. The cup with only two red Skittles doesn't have as much sugar as the cup with ten purple Skittles but they both have the same amount of water. The amount of matter packed into a certain amount of space causes density. The red water is less dense than the purple water so it will float on top.



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