

SUGAR WATER SCIENCE EXPERIMENT

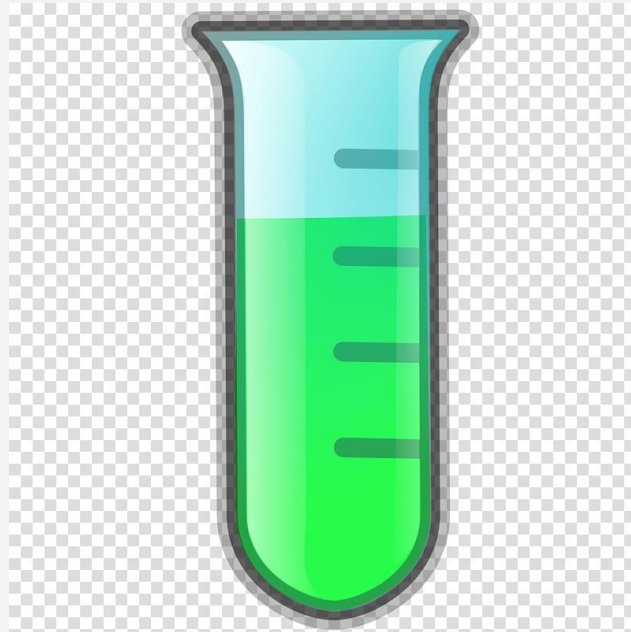
BY DANNY

6J

EQUIPMENT

To do this experiment, I will need:

- 4 plastic cups
- Food colouring
- Syringe
- Sugar
- Teaspoon
- Small cylinder glass
- Hot water



alamy stock photo

JCHE19
www.alamy.com

METHOD

1. In the first cup, I have poured no sugars in. In the second cup, I have poured 3 tablespoons in. In the last cup, I have poured 5 tablespoons of sugar in.



2. Now, I have carefully poured hot water into all four of the cups.

3. Then, I mixed the sugar and water together until the sugar has all dissolved and formed a solution.

4. After that, add some food colouring to each solution, a different colour for each cup.

5. Finally, fill a syringe with some solution from the cup that contains 5 teaspoons of sugar. Slowly and carefully release the solution into an empty cup (aim the point of the syringe at the inside wall of the cup).

6. Next, repeat step 5 until all of the different solutions have been added to the empty cup, making sure that the point of the syringe is aimed at the inside wall of the cup.

PREDICTIONS

Can anyone predict what might happen?

Can you explain why you think this?



WHAT HAPPENED?

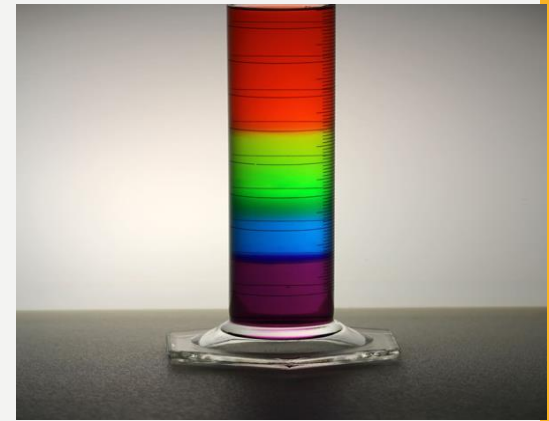
- As you can probably see, there has been a rainbow formed in the cylinder cup.
- You may also be able to see a little gap between some of the colours.
- Can anyone tell me or guess why this might have happened?



<https://www.youtube.com/watch?v=WNyFUmKiqAU>

CONCLUSION

- When hot water is added to the cup, the sugar dissolves.
- Everything has a different density (mass).
- By keeping the amount of water the same but altering the amount of sugar that is being added to each cup, each cup has a different density.
- Due to their different densities, they won't mix with each other. Instead, they each form their own layer.
- The more sugar there is in the cup, the higher the density.
- The solution with the highest density –the most sugar- will stay on the bottom.
- The solution with the lowest density –the least sugar- will stay on the top.



THANK YOU FOR LISTENING



- I hope you enjoyed this science experiment!
- Remember to check out the school science page for ideas you can try at home with an adult:
- All the house captain presentations
- All the Year 6 science carousel activities
- Duckling web cam link
- Photos of the decorated classroom doors when they have been completed

