Food Dye Experiment

Introduction

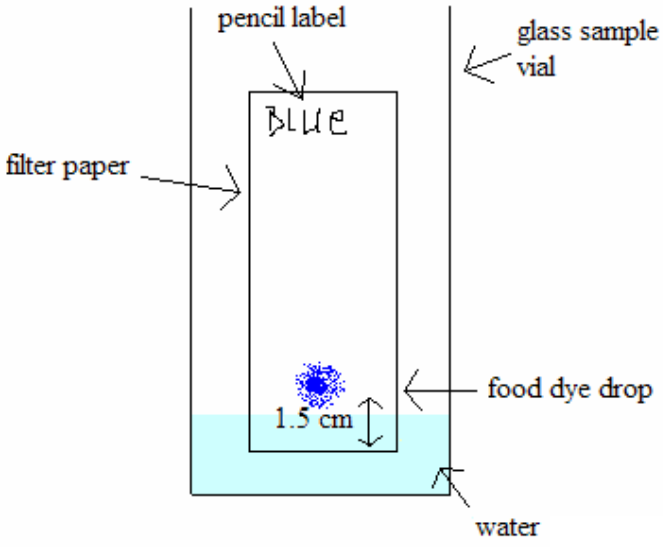
Paul was a lively kid. He enjoyed all the normal things that kids enjoy doing. However one day his mother, Mandy, noticed that whenever he ate fairy cakes with his favourite yellow coloured icing on top he was more lively than normal. She mentioned his to one of her friends, who said that some children are sensitive to some types of food. Yellow food colouring is known to cause some children to become hyperactive.

This made sense to Mandy, so she decided to avoid yellow food colouring. It was Paul's birthday, and so to stop him becoming hyperactive when she made his birthday cake she decorated it with red, green and blue icing. However on his birthday Paul was still hyperactive after eating the cake.

Being a scientist, Mandy knew that colours could be mixed to make new colours. She decided to find out if yellow food colouring was used in other food colourings. This is the experiment she carried out. What results did she find?

Practical

1. Place 1-2 ml of water into each of the 4 sample containers.
2. Label each piece of filter paper at the top in pencil with the food colour to be tested.
3. Use separate pipettes each time (to avoid contamination). Place one drop of food colour approximately 1.5cm from the bottom of each of the labelled filter papers
4. Place each filter paper upright into a different vial as shown in the diagram.
5. Wait at least 10 minutes and examine the colours.



Questions

Which other food colourings is Paul sensitive to and how do you know?

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Can you identify which substance Paul is sensitive to?

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