

Worksheet 1.5.4 Exploring diffusion

1 Describing diffusion



Describe and draw a diagram to show what might happen in each of the following investigations:

- a) Hot water in a beaker with red food colouring and cold water in a beaker with blue food colouring. What differences would you see in each beaker?

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- b) Lead nitrate and potassium iodide react to make a yellow solid. What would happen if crystals of lead nitrate and potassium iodide were placed at opposite ends of a dish that had a small amount of water in it?

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2 Explaining diffusion



For each of the investigations in task 1, explain why you might obtain these observations. Use particle diagrams to help you.

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3 Factors affecting diffusion



How do the following factors affect diffusion? Use particle diagrams, where appropriate, to explain your ideas.

a) temperature

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b) particle size

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c) concentration gradient

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