

Name:	Class:	Date given:
		Date due in:

Physical Changes of Matter

1. Jodie is making a drink of diluted squash. She starts with 200ml of water. Circle the most likely volume of the drink after Jodie mixes the concentrated squash into the water. [1]

- | | | | |
|--------|--------|--------|--------|
| 100ml | 120ml | 200ml | 220ml |
| 1000ml | 1200ml | 2000ml | 2200ml |

2a. Sort these reactions into chemical or physical changes by drawing a line to the correct heading. [4]

dissolving sugar baking a cake boiling water burning toast

physical change

chemical change

frying an egg

melting chocolate

freezing milk

popping corn

2b. How can you tell if a reaction is a chemical or a physical change? [1]

3a. Complete diagram 2 below to show the arrangement of shaded particles after diffusion. [1]

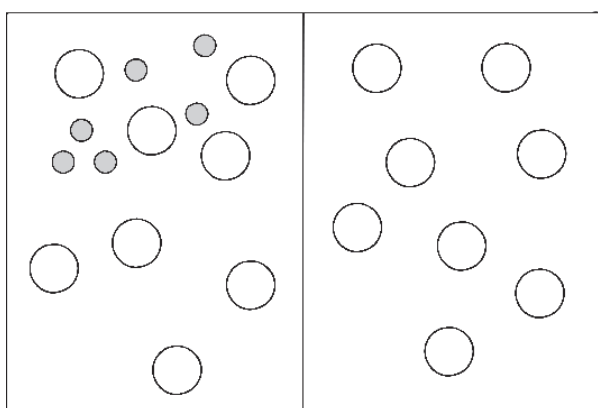


Diagram 1

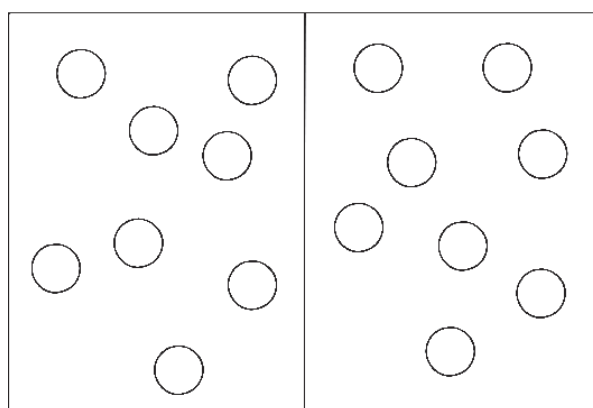


Diagram 2

3b. Complete the sentences below choosing only the most appropriate words. [3]

Diffusion is the movement of particles from an area of _____ to an area of _____, until they reach _____.

high concentration

high temperature

energy

low concentration

low temperature

equilibrium

Learning Outcomes (tick if achieved)

Q1	I understand conservation of mass	
Q2	I can distinguish chemical and physical changes	
Q3	I can describe Brownian motion	
Q4	I can describe diffusion	

Physical Changes of Matter Answers

1. Jodie is making a drink of diluted squash. She starts with 200ml of water. Circle the most likely volume of the drink after Jodie mixes the concentrated squash into the water. [1]

100ml

120ml

200ml

220ml

1000ml

1200ml

2000ml

2200ml

- 2a. Sort these reactions into chemical or physical changes by drawing a line to the correct heading. [4]

dissolving sugar

baking a cake

boiling water

burning toast

physical change

chemical change

frying an egg

melting chocolate

freezing milk

popping corn

- 2b. How can you tell if a reaction is a chemical or a physical change? [1]

new substance / product is made

- 3a. Complete diagram 2 below to show the arrangement of shaded particles after diffusion. [1]

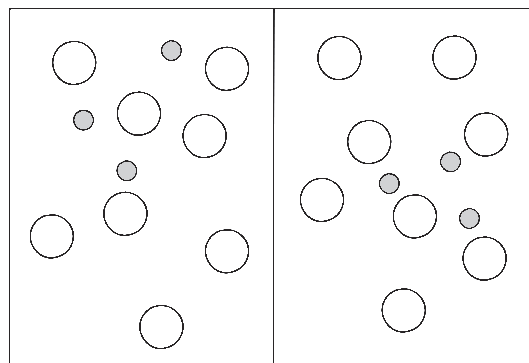


Diagram 2

- 3b. Complete the sentences below choosing only the most appropriate words. [3]

Diffusion is the movement of particles from an area of **high concentration** to an area of **low concentration**, until they reach **equilibrium**.