Q1. (June 2021 v1)

7 By which process do oxygen and carbon dioxide move between cells and capillaries?

A breathing

B diffusion

C excretion

D respiration

Q2. (June 2022 v1)

5 Which statement describes the net movement of particles during diffusion?

A from higher to lower concentration down a concentration gradient

B from higher to lower concentration against a concentration gradient

C from lower to higher concentration down a concentration gradient

D from lower to higher concentration against a concentration gradient

Q3. (June 2022 v2)

5 By which process does oxygen move from a region of higher concentration in the alveoli to a region of lower concentration in the blood?

A osmosis

B breathing

C diffusion

D active transport

Q4. (June 2022 v3)

5 Female moths release chemicals into the air. Male moths detect these chemicals and fly towards the females.

How do the chemicals spread through the air?

A active transport

B diffusion

C osmosis

D transpiration

Q5. (June 2025 v2)

6 Which row shows the conditions when diffusion of oxygen into the blood is fastest?

	alveolar surface area	concentration gradient	diffusion path distance
A	high	high	short
B	high	low	short
C	low	high	long
D	low	low	long

Q6. (Nov 2021 v1)

7 Which words complete the definition of diffusion?

'Diffusion is the net movement of particles from a region of their ……1…... concentration to a region of their ……2…... concentration, ……3…... a concentration gradient.'

	1	2	3
A	higher	lower	up
B	higher	lower	down
C	lower	higher	up
D	lower	higher	down

Q7. (Nov 2021 v2)

6 Which statement about diffusion is correct?

A The process requires energy from respiration.

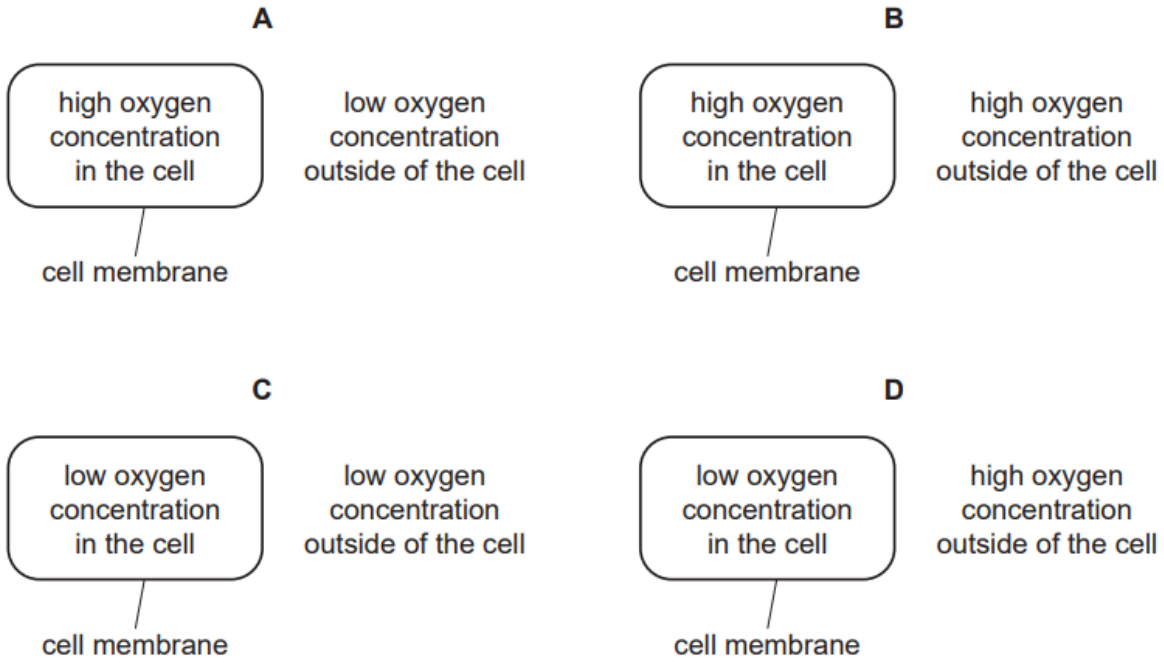
B The particles must cross a cell membrane.

C The net movement of particles is up a concentration gradient.

D The process involves the random movement of particles.

Q8. (Nov 2021 v3)

6 In which diagram would oxygen diffuse into the cell?



Q9. (Nov 2022 v3)

6 In which diagram would most oxygen molecules diffuse across the membrane per minute?

