

APOLLO

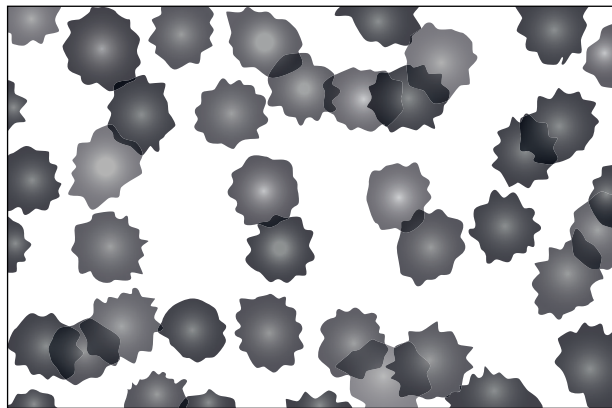
Water potential SL

Biology

First assessment 2025

3 questions | questions

12. The image shows human blood cells immersed in a solution.



What can be deduced from the image?

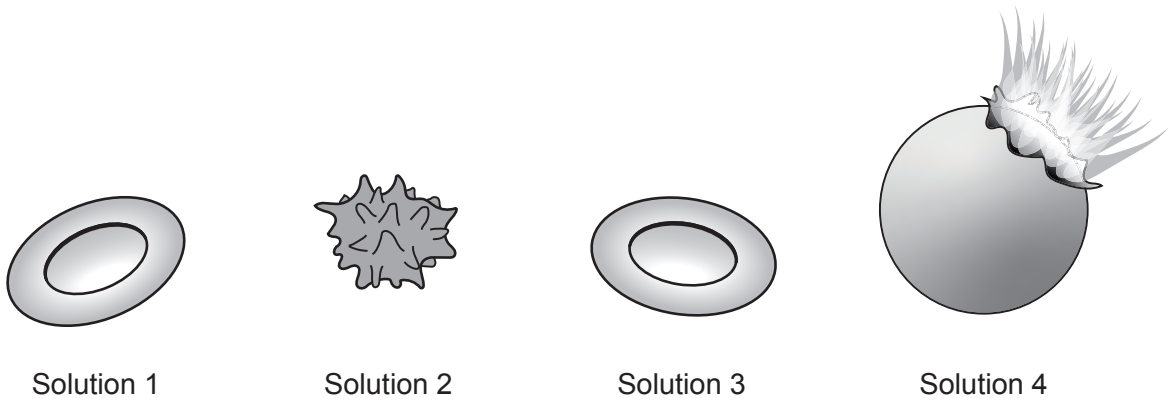
- A. The solution is hypotonic as the cells are crenated.
- B. The solution is hypotonic as the cells are turgid.
- C. The solution is hypertonic as the cells are crenated.
- D. The solution is hypertonic as the cells are turgid.

Section B

Answer **one** question. One additional mark is available for the construction of your answer.
Answers must be written within the answer boxes provided.

6. Water is one of the most abundant molecules on Earth. Living organisms must maintain homeostatic levels of water to survive.
- (a) Outline how the cohesive properties of water benefit living organisms. [4]
 - (b) Outline how environmental factors affect the rate of transpiration in plants. [4]
 - (c) Explain the process of osmosis with reference to its effects on plant cells. [7]

- 12.** Red blood cells were transferred from solution 1 to solution 2, 3 or 4. The images show the effects on these cells.



What can be concluded about the concentrations of the solutions?

- A. Solution 1 is hypotonic to solution 4.
- B. Solution 2 is hypotonic to solution 1.
- C. Solution 3 is hypertonic to solution 4.
- D. Solution 4 is hypertonic to solution 2.