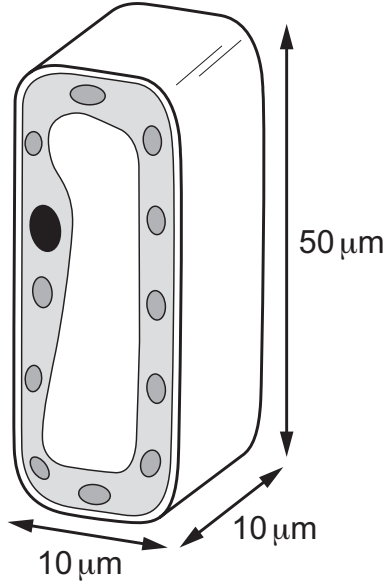
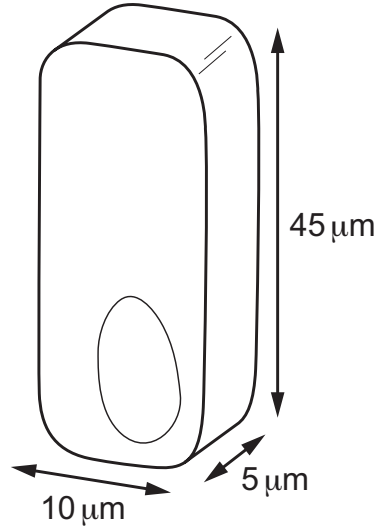


18 The diagrams show the shape and size of two types of cell.

palisade mesophyll cell
surface area = $2200 \mu\text{m}^2$



columnar epithelial cell
volume = $2250 \mu\text{m}^3$



not to scale

Which statement about the palisade cell and epithelial cell shown in the diagrams is correct?

- A An increase in surface area reduces the distance for gases to reach the centre of the cell.
- B The surface area of the palisade mesophyll cell is $500 \mu\text{m}^2$ greater than the columnar epithelial cell.
- C The surface area to volume ratio is greater in the columnar epithelial cell than the palisade mesophyll cell.
- D The volume of the palisade mesophyll cell is $2500 \mu\text{m}^3$ greater than that of the columnar epithelial cell.