

Question #82951, Biology / Cell Biology

Question:

Surface to volume ratio in a single cell animal like Amoeba can be as low as how many.

Answer

Amoeba has a relatively large surface area to volume ratio. As the cell gets bigger, its surface area to volume ratio gets smaller. The surface area (SA) of Amoeba is $6 \times 10^{-8}(\text{m}^2)$, and the volume (vol) is $10^{-12}(\text{m}^3)$. So, the SA to vol (SA/vol) is $60,000 \text{ m}^{-1}$.