## 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 $6 \times 10^{-8}\left(\mathrm{~m}^{2}\right)$, and the volume (vol) is $10^{-12}\left(\mathrm{~m}^{3}\right)$. So, the SA to vol $(\mathrm{SA} / \mathrm{vol})$ is $60,000 \mathrm{~m}^{-1}$.

