If a cell has a length of 1 cm [all sides are 1 cm ) the surface are is 6 $\mathrm{cm}^{2}\left(1 \mathrm{~cm} \times 1 \mathrm{~cm} \times 6\right.$ sides $\left.=6 \mathrm{~cm}^{2}\right)$ and its volume is $1 \mathrm{~cm}^{3}(1 \mathrm{~cm} \times 1$ $\mathrm{cm} \times 1 \mathrm{~cm}$ ), what is its ratio of surface area to volume?

If the cell length is doubled, what is the new area? What is the new volume? What is the new cell ratio of surface area to volume?

What if the of the cell is tripled, what is the new area? What is the new volume? What is the new cell ratio of surface area to volume?

## Warm Up



