

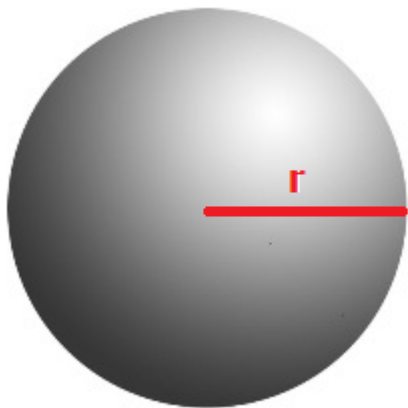
## Cone

curved surface area ( shaded green) =  $\pi r l$

area of base (shaded orange) =  $\pi r^2$

total surface area =  $\pi r l + \pi r^2$   
=  $\pi r (r + l)$

volume =  $\frac{1}{3} \pi r^2 h$



## Sphere

Surface area =  $4 \pi r^2$

Volume =  $\frac{4}{3} \pi r^3$