## Circle Formulas



$$
\begin{aligned}
\text { Circumference } & =2 \cdot \pi \cdot \text { radius }=\pi \cdot \text { diameter } \\
\text { Circle Area } & =\pi \cdot r^{2}=\frac{1}{4} \cdot \pi \cdot \mathrm{~d}^{2}
\end{aligned}
$$

Volume :- Area $\times$ Thickness
Weight :- Volume $X$ density
Sphere Formulas
Sphere Surface Area $=4 \cdot \pi \cdot r^{2}=\pi \cdot d^{2}$
Sphere Volume $=4 / 3 \cdot \pi \cdot r^{3}=\left(\pi \cdot d^{3}\right) / 6$
Weight :- volume $x$ density

## Rectangular Prisms (or Solids)



The above figure is called a rectangular prism. Volume $=$ length $\times$ width $\times$ height
Area of Face 'A' $=$ height $\times$ width
Area of Face ' B ' $=$ height $\times$ length
Area of Face 'C' $=$ width $\times$ length
Weight $=$ volume $\times$ density

## Cylinder Formulas



Surface Area $=\left(2 \cdot \pi \cdot r^{2}\right)+(2 \cdot \pi \cdot r \cdot$ height $)$
Where $\left(2 \cdot \pi \cdot r^{2}\right)$ is the surface area of the "ends" and ( $2 \cdot \pi \cdot r \cdot h e i g h t$ ) is the lateral area (the area of the "side").

$$
\frac{\text { Volume }=}{} \frac{\pi \cdot r^{2} \cdot \text { height }=\frac{1}{4} \cdot \pi \cdot d^{2} \cdot \text { height }}{\text { Weight }=\text { volume } \times \text { density }}
$$

