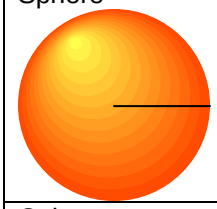
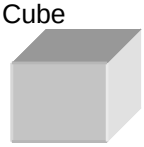
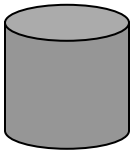
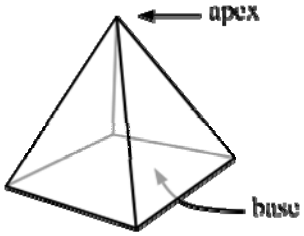
Volume & surface area of solid figures – sphere, cube, rectangular solid (box) with and without top, cylinder, and cone.

Figure	***Volume***	***Surface Area***
Sphere 	$V = \frac{4}{3}\pi r^3$, r radius	$S = 4\pi r^2$, r radius
Cube 	$V = s^3$, s side	$S = 6s^2$, s side
Rectangular Solid 	$V = A^2h$, A^2 is area of the base, h height. $V = lwh$, l length, w width, h height.	$S = 2lw + 2lh + 2wh$ $= 2(lw + lh + wh)$ l length, w width, h height.
Cylinder 	$V = \pi r^2 h$, r radius, h height	$S = \underset{\text{top \& bottom}}{2\pi r^2} + \underset{\text{lateral side}}{2\pi rh}$
Prisms: Parallel flat polygon top and bottom (bases). 	$V = A^2h$, A^2 is area of the base, h height.	Calculus topic – to come
Pyrimids (polygon base to a point) 	$V = \frac{1}{3}Ah$, A is area of the base, h height.	Calculus topic – to come
	$V = \frac{1}{3}\pi r^2 h$, r is the radius of the circular base, h height	$S_{total} = \underset{\text{base area}}{\pi r^2} + \underset{\text{lateral area}}{\pi r\sqrt{r^2 + h^2}}$, $\sqrt{r^2 + h^2}$ is slant height