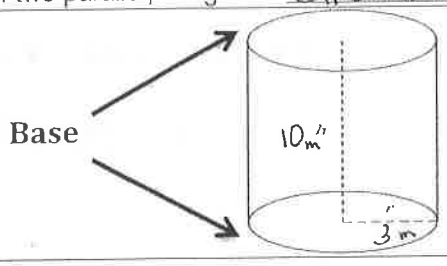
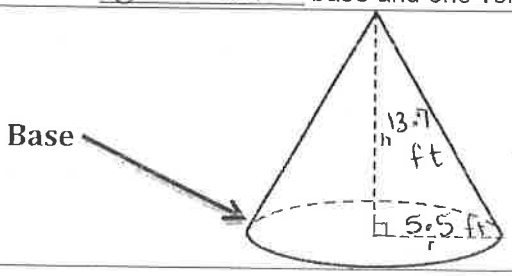
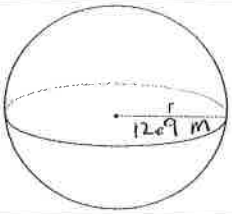
Cornell Notes	Topic/Objective: Volume of Cones, Cylinders, and Spheres (TEKS 8.7A)	Name: KEY
AVID Decades of College Dreams		Class/Period:
		Date:

Essential Question:

Questions:	Notes:
	Volume is the amount of space inside a 3-D object; how much an object can hold.
	Units are always written to the third power because there are three dimensions. in^3, ft^3, m^3
	A polyhedron with two parallel, congruent Circular faces called bases.
	 Cylinder
	V = Bh
	V = volume of the solid
	B = area of the base. The base is a Circle.
	Remember, to find the area of a circle, use the formula $A = \pi r^2$
	h = height of the cylinder.
	Find the volume of the figure above: V = Bh
	B = Circle h = 10 m V = 28.26 · 10
	$A = \pi r^2$
	$A = 3.14 \cdot 3^2$
	$A = 28.26\ m^2$
	$V = 282.6\ m^3$
Summary:	

Questions:	Notes:
	A polyhedron with one Circular base and one vertex that is opposite the base.
	 Cone
	$V = \frac{1}{3}Bh$
	V = volume of the solid
	B = area of the base. The base is a Circle.
	Remember, to find the area of a circle, use the formula $A = \pi r^2$
	h = height of the Cone.
	Find the volume of the figure above: $V = \frac{1}{3}Bh$
	B = Circle h = 13.7 ft $V = \frac{1}{3} \cdot 94.985 \cdot 13.7$
	$A = \pi \cdot r^2$ $A = 3.14 \cdot 5.5^2$ $A = 94.985\ m^2$ $V = 433.176\ m^3$
	A polyhedron zero bases and zero vertices.
	 Sphere
	$V = \frac{4}{3}\pi r^3$
	V = volume of the solid
	r = radius of the sphere. The radius is half of the diameter.
	$\pi \approx 3.14$
	Find the volume of the figure above: $V = \frac{4}{3}\pi r^3$
	r = 12.9 m $V = \frac{4}{3} \cdot 3.14 \cdot 12.9^3$ $V = 8987.5\ m^3$