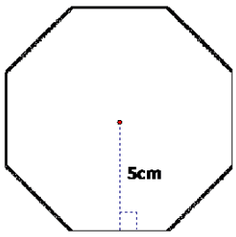
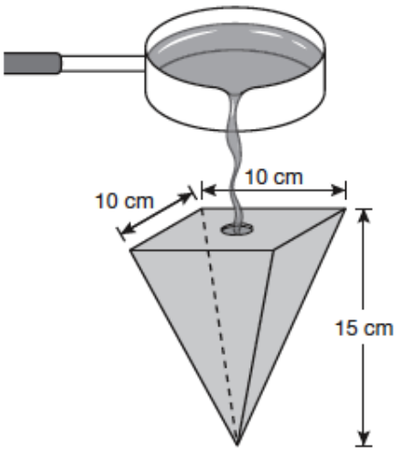
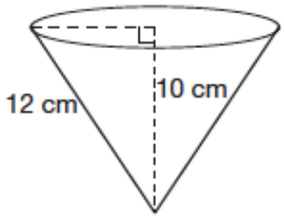
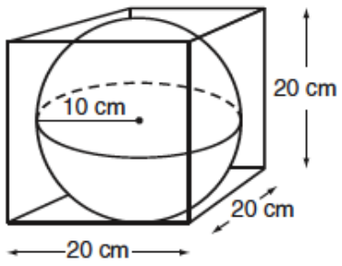
Unit 7: Measurement **Name:** _____
UNIT GUIDE and TICKET OUT

	Concept/Skill	Self Tracking	Practice Problems
0	**Getting Ready**		p.401#1-11
1	**I can solve problems involving areas and perimeters of composite two-dimensional shapes.** Determine the perimeter of the figure with an apothem of 5cm and an area of 125cm^2. 	☐ I'm an expert ☐ I need a bit more practice ☐ I will get extra help	p.406 #6-13, 17, 23
2	**I can solve problems involving the volumes of prisms, cylinders, cones, pyramids, and spheres, including composite figures.** a) The mould shown below is used to make a candle in the shape of a square-based pyramid. b) What is the volume of the mould? 	☐ I'm an expert ☐ I need a bit more practice ☐ I will get extra help	(prism, cylinder) p.413-14 #1-4, 6-8, 10, 15, 16 (cone) p.421-23 #2a, 3b, 5, 7, 9, 11, 14, 15 ***Homework presentations**
3	**I can solve problems involving the volumes of prisms, cylinders, cones, pyramids, and spheres, including composite figures.** a) Determine the volume of the cone.  b) Determine the volume of space around the basketball. 	☐ I'm an expert ☐ I need a bit more practice ☐ I will get extra help	(pyramid) p.421-23 #1, 2bcd, 3a, 6, 8, 10, 12, 13, 16 (sphere) p.427-28 #1, 2, 3ace, 4, 8-14, 16 ***Homework presentations**
4	**I can determine the surface area of prisms, cylinders, pyramids, cones and spheres.** a) Determine the surface area of the basketball in #2b above. b) Determine the surface area of the pyramid in #2a above.	☐ I'm an expert ☐ I need a bit more practice ☐ I will get extra help	(prism, cylinder) p.433 #2, 3, 6, 7, 9-11 (pyramid, cone, sphere) p.439 #4-6, 10-11(odd) p.455 #1, 4, 5, 8 ***Homework presentations**
5	**QUIZ Skills 1-4** Thursday April 30th		

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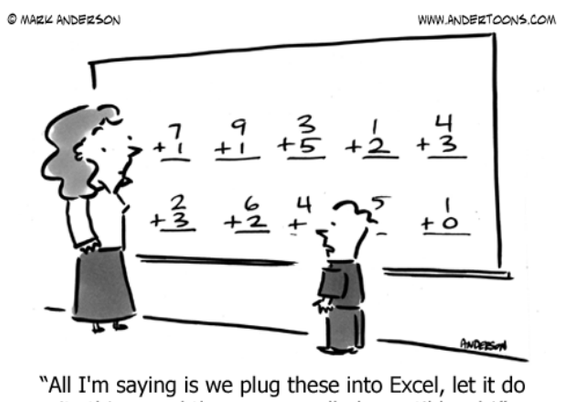
6	**I can determine the minimum perimeter of a rectangle given a fixed area.** What is the shortest amount of fencing required to surround an area of $250m^2$?	☐ I'm an expert ☐ I need a bit more practice ☐ I will get extra help	Optimization Handout ***Homework presentations**
7	**I can determine the maximum area of a rectangle given a fixed perimeter.** What is the maximum area of garden you could edge with 50m of edging?	☐ I'm an expert ☐ I need a bit more practice ☐ I will get extra help	
8	**I can explain the significance of optimal area, surface area, or volume.** a) When will a cylinder with a fixed volume have the minimum surface area? b) When will a prism with a fixed volume have the minimum surface area?	☐ I'm an expert ☐ I need a bit more practice ☐ I will get extra help	(cylinder) p.465 #6ac, 7ac, 8, 9, 10(odd), 14 (prism) p.471 #3-5(odd), 6, 7, 8-10(odd) ***Homework presentations**
9	**I can solve problems involving maximizing and minimizing measurements.** a) Determine the dimensions of a cylinder that will minimize its LATERAL surface area if the volume is $785cm^3$. b) Determine the dimensions of a prism with a maximum volume if the surface area is $216m^2$.	☐ I'm an expert ☐ I need a bit more practice ☐ I will get extra help	
10	**Review**	p.456 #1-9 p.477 #1-4(odd) p.479-80 #8-12 (odd) ***Homework presentations**	
11	TEST Thursday, May 14th, 2015	Unit Study Notes Due!	

*You will be assigned homework question(s) to present to the class. See handout for specific details.

For this unit, you will need to print out the **EQAO Academic Formula Sheet** to use as you solve problems. You can find this on the EQAO website, or by following the link on my website.

Other Important Dates:

- **Thursday May 28th – Mock EQAO**
- Friday May 29th and Monday June 1st – Mock EQAO returned and discussed
- **Tuesday June 2** (booklet 1) & **Thursday June 4** (booklet 2) – **EQAO** **(10% of final grade)**
- **Friday June 19th, 8:30 am FINAL EXAM ☺ (20% of final grade)**



"All I'm saying is we plug these into Excel, let it do its thing, and then we can all play until lunch!"