1. Draw a net to be used for finding the surface area of a rectangular prism.

2. Draw a net to be used for finding the surface area of a rectangular pyramid.

3. If the surface area of a cylinder is 400m<sup>2</sup>, what would be the surface area of a cylinder that is tripled in size?

4. If the surface area of a cylinder is 400m², what would be the surface area of the cylinder in square centimetres?

Conversions:

Conversions: (nearest tenth)

5. Estimate the volume of air in this room. Show how you arrived at this value. Include units.

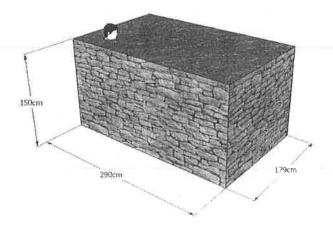
6. Find the radius of a sphere that has a volume of  $2304\pi$ .

7. Find the radius of a hemisphere that has a surface area of  $588\pi$ .

8. A volleyball has a circumference of 26 inches. What is the volume of the smallest cube that will hold this ball? (Nearest whole unit)

9. A cylinder has a surface area of 503 cm<sup>2</sup>. If the height is four times greater than the radius, what is the height of the cylinder? (Nearest tenth)

Hint: Let radius = x.

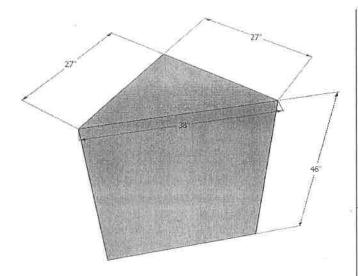


10. Calculate the surface area of stone required to cover the pool (excluding bottom). Nearest 100 square cm.

11. Calculate the volume of water required to fill the pool to the nearest 1000 cm<sup>3</sup>.

12. Water has a mass of 1 gram per cm<sup>3</sup>, or millilitre. What is the mass, in kilograms, of the water in the pool? In tonnes?

13. What is the volume in cubic metres. Answer to the nearest tenth.

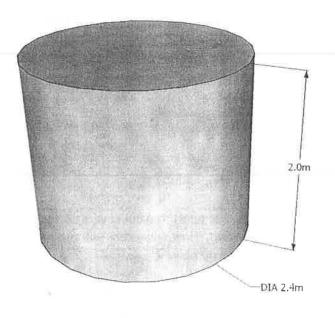


14. If you need to paint the shape to the left, what is the total area, in square inches, to be painted? (excluding the bottom)

15. One quart to paint covers 88 square feet. How many cans will you need to purchase?

16. Find the volume of the triangular prism to the nearest 100 in<sup>3</sup>.

17. If the prism is reduced by a factor of  $\frac{1}{3}$ , what would be the approximate volume to the nearest 100 in<sup>3</sup>.



18. Find the surface area of the cylinder to the left. Nearest tenth of a square metre.

19. Find the volume of the cylinder to the left. Nearest tenth of a cubic metre.

## Answer Key

1.	2.	3. 3600 = m <sup>2</sup>
4. 4 000 000 cm <sup>2</sup>	2200 mm	4.4 m
	1620 in	20917 m
	6.25 tons	3.6 kg
	60 oz	169327.5 in OR
	0.168 kg	169 291.3
9900	5.89 yd .	
5. 9000 cubic feet $/270 \text{ m}^3$	6. 12 units	7. 14 units
8. 567 in <sup>3</sup>	9. 16 cm > 7.787 tonnes	10. 140 700 cm <sup>2</sup> / 21 800 in <sup>2</sup>
11. 7 787 000 cm <sup>3</sup>	12. 7787 kg	13. 7.8 m <sup>3</sup>
14. 4597 square inches	15. Purchase 1 can (31.9 ft <sup>2)</sup> to cover)	16. 16800 in <sup>3</sup>
17. 600 in <sup>3</sup>	18. 24.1 m <sup>2</sup>	19. 9.0 m <sup>3</sup>

## Math 10. Measurement Practice test

Name	Block

## Answer Key

1.	2.	3. 3600 m²
4. 4 000 000 cm <sup>2</sup>	2200 mm 1620 in 6.25 tons 60 oz 0.168 kg 5.89 yd	4.4 m 20917 m 3.6 kg 169327.5 in OR 169 291.3
5. 9900 cubic feet $/ 270 \text{ m}^3$	6. 12 units	7. 14 units
8. 567 in <sup>3</sup>	9. 16 cm > 7.787 tonnes	10. $140700\mathrm{cm}^2$ / 21 800 in <sup>2</sup>
11. 7 787 000 cm <sup>3</sup>	12. 7787 10	13. 7.8 m <sup>3</sup>
14. 4597 square inches	15. Purchase 1 can (31.9 ft <sup>2</sup> to cover)	16. 16800 in <sup>3</sup>
17. 600 in <sup>3</sup>	18. 24.1 m <sup>2</sup>	19. 9.0 m <sup>3</sup>

