C:\Users\Nindi\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\U1ZRT0SJ\MC900130271[1].wmfAssignment #1: Measurement /22

**MULTIPLE CHOICE (2 marks)**

1. Which expression would you use to calculate the lateral area of a right cone?  
A. π*r*2 + π*rs* B. π*dh* C.  D. π*rs*

2. Which equation could you *not* use to convert 5 in. to centimetres?  
A. 5 in. = 5 × 2.5 cm B.  =  C.  =  D. 5 in. = 5 in. × 

**SHORT ANSWER (20 marks)**

3. Determine the surface area and volume of each object. Give your answers to the nearest unit.

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| wncp10_tg_c01_m07_t01(a.) (4 marks) | wncp10_tg_c01_m07_t02(b.) (4 marks) |

4. A right prism and a right pyramid have the same base and the same height. Explain how their volumes are related. (1 mark)

5. The surface area of a sphere is 137.5 cm2. What is the radius of the sphere to the nearest tenth of a centimetre? (2 marks)

6. The volume of a right square pyramid is 126 cubic feet. The side length of the base is 8 ft.

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| a) Sketch the pyramid.  (1 mark) | b) Determine the height of the pyramid to the nearest foot.  (2 marks) | c) What is the slant height of the pyramid to the nearest foot? (2 marks) |

7. Nakkita used a pedometer to count the number of steps she took on her morning walk.   
At the end of her walk, the pedometer had recorded 4498 steps.

a) Nakkita’s typical step length when walking is 0.7 m. To the nearest mile, how far did Nakkita walk? (2 marks)

b) Use unit analysis to verify the conversion. (2 marks)