

Name: _____

Date: _____

Block: _____

QUIZ CHAPTER 5 SURFACE AREA (Individual)

Question 1

Phillip measured a can of coffee grounds and he recorded the following measurements which he thought may be of use when trying to find the total surface area of the can. The diameter of the bottom of the can when measured with a ruler was 14 cm long. He laid the can down on it's side and when measured with a ruler was 22 cm long. He then stood the can up and took a piece of very stretchy string and wrapped it around the side of the can once. When he measured this string (that he wrapped around the tin once) with a ruler the measurement came to 30 cm.

- 1) Draw a 3 – D drawing for the above object and put the appropriate measurements with symbols included
- 2) Draw a net for the following object
- 3) Calculate total Surface Area for the can of coffee (**must show all work**)
- 4) Explain how you know that the measurement Phillip took with the string is **wrong**

Question 2

A triangular based prism has a scalene triangle for its bottom and top. The scalene triangular base is also a right triangle. The measurements for the sides of the triangle are 3 cm, 4cm, and 5 cm. When the triangular prism is laid down on its side and measured with a ruler it comes to 19 cm long.

- 1) Draw a 3 – D drawing for the above object and put the appropriate measurements with symbols included
- 2) Draw a net for the following object
- 3) Calculate total Surface Area for the right triangular prism (**must show all work**)