22 A 3-D shape consists of a hollow sphere made of metal.



The diagram shows a cross section drawn through the centre, O, of the sphere.

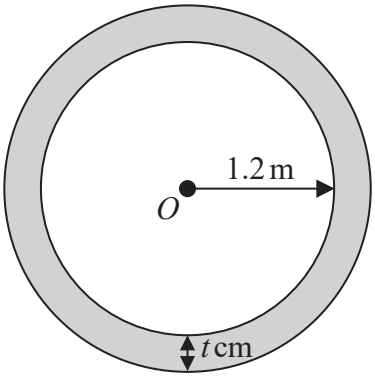


Diagram **NOT** accurately drawn

The internal radius of the sphere is 1.2 m.
The thickness of the metal is t cm.

The density of the metal is 2700 kg per m^3

The mass of the 3-D shape is 1980 kg.

Work out the value of t.
Give your answer correct to 2 significant figures.

$t =$ .....

(Total for Question 22 is 5 marks)

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