

Q1. Three items were bought at a car boot sale.

Item A	Item B	Item C
Mass = 9.5 grams Volume = 2 cm ³	Mass = 57 grams Volume = 3 cm ³	Mass = 76 grams Volume = 4 cm ³

The density of gold is **approximately** 19 grams per cm³.

Which item or items **cannot** be gold?
You **must** show your working.

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Answer

(Total 4 marks)

Q2. Jack is making spheres out of clay.

A box of clay contains 25 packs.
Each pack is a cuboid measuring 10 cm by 10 cm by 4 cm.

(a) How many spheres of radius 6 cm can Jack make from a **box** of clay?

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Answer

(6)

(b) A **pack** of clay has a mass of 500 grams.

Work out the density of the clay.

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Answer grams/cm³

(2)

(Total 8 marks)