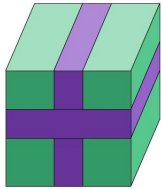


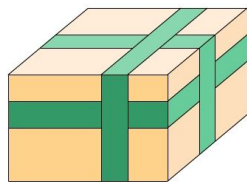
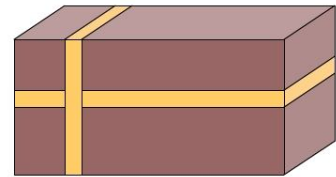
Santa spends many hours each year making plans for his Christmas Eve drop offs. One of his planning tasks is to make sure that knows the mass of each of the presents he will deliver, to avoid overloading the sleigh. Use the density and dimensions given for each of the presents below to find the mass, giving solutions to 3sf where necessary, and with appropriate units.

**Present Group 1 - Density 1g/cm^3**

- a) Present is a cube with sides 10cm
- b) Present is a cube with sides 20cm
- c) Present is a cube with sides 7.7cm
- d) Present is a cube with sides 0.09m
- e) Present is a cube with sides 114mm

Present Group 2 - Density 1g/cm^3

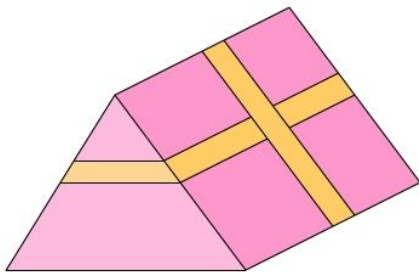
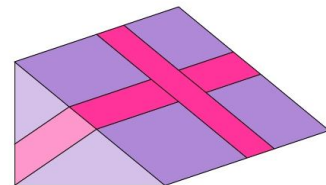
- a) Present is a cuboid with height 10cm, width 8cm, depth 10cm
- b) Present is a cuboid with height 11cm, width 7cm, depth 6cm
- c) Present is a cuboid with height 20cm, width 18cm, depth 24cm
- d) Present is a cuboid with height 1m, width 8cm, depth 9cm

**Present Group 3 - Density 1.1g/cm^3**

- a) Present is a cuboid with height 5cm, width 18cm, depth 15cm
- b) Present is a cuboid with height 3cm, width 10cm, depth 16cm
- c) Present is a cuboid with height 0.03m, width 0.08m, depth 0.06m
- d) Present is a cuboid with height 13.1cm, width 10.9cm, depth 16.8cm
- e) Present is a cuboid with height 138mm, width 181mm, depth 108mm
- f) Present is a cuboid with height 36cm, width 104mm, depth 0.06m

Present Group 4 - Density 0.75g/cm^3

- a) Present is a triangular prism with a triangle base of 15cm, triangle height of 12cm, length of 25cm
- b) Present is a triangular prism with a triangle base of 18cm, triangle height of 22cm, length of 15cm
- c) Present is a triangular prism with a triangle base of 14.6cm, triangle height of 11.9cm, length of 10.5cm
- d) Present is a triangular prism with a triangle base of 283mm, triangle height of 126mm, length of 32mm

**Present Group 5 - Density 0.07g/cm^3**

- a) Present is a triangular prism with a triangle base of 20cm, triangle height of 18cm, length 3cm
- b) Present is a triangular prism with a triangle base of 210mm, triangle height of 16cm, length 12.7cm
- c) Present is a triangular prism with a triangle base of 145mm, triangle height of 213mm, length 94mm
- d) Present is a triangular prism with a triangle base of 0.65m, triangle height of 0.43m, length 67mm

This is a free sample of a worksheet available in the Not Just Sums Christmas resource pack 3. For further sample resources (including interactive games) and information about purchasing the full pack for just £10 or all three festive packs for £24, please visit www.notjustsums.com or email admin@notjustsums.com with your query.