



Oxford Cambridge and RSA

## **GCSE Physics B (Twenty First Century Science)**

**J259/01** Breadth in Physics (Foundation Tier)

### **Question Set 28**

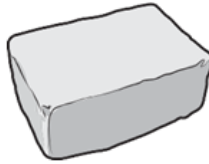
Multiple Choice Questions

1

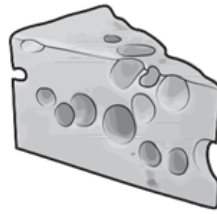
Jack wants to compare the density of three different foods.



milk



butter



cheese

(a) To calculate density, Jack needs to measure the mass and volume of a sample of each food.

(i) Which measuring instrument should Jack use to measure mass?

Tick (✓) **one** box.

- Balance
- Measuring cylinder
- Metre ruler
- Thermometer

[1]

(ii) Which measuring instrument should Jack use to measure the volume of milk?

Tick (✓) **one** box.

- Balance
- Measuring cylinder
- Metre ruler
- Thermometer

[1]

(b) Complete the sentences to describe how to measure the volume of the butter.

Use words from the list.

You can use each word once, more than once, or not at all.

**add    measuring cylinder    multiply    balance    divide    ruler**

Measure the length, width and height of the butter using a .....

To find the volume, ..... these three numbers together. [2]

(c) Jack makes these measurements for the block of butter:

mass = 2.22 kg volume = 0.0024 m<sup>3</sup>

Calculate the density of the butter.

Use the equation: density = mass ÷ volume

Density = ..... kg/m<sup>3</sup> [2]

(d) The cheese is an irregular solid shape.

Suggest how to measure the volume of the cheese.

[2]

**Total Marks for Question Set 28: 8**

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