

To make scones buns I need 275 g sugar, 525 g flour and 325 g sultanas.

Mark these quantities on the scale below.
sugar
flour
sultanas


## Reading Scales

I need to convert some quantities in the recipes I am going to try. Match the equivalent quantities below with a line.

I know the mass of the flour is as much as the sugar and butter together. What is the mass of the flour?

Challenge: The mass of sugar is, $\frac{2}{5}$ the mass of the butter is $\frac{3}{5}$. What is the mass of the sugar?


From the scales shown, state what each labelled interval represents.

$\qquad$
$\qquad$
$\qquad$

On this balance scale, is one exercise book heavier than one dictionary?

What is the mass of one exercise book compared to one dictionary? Record your answer as a fraction?


The total mass of a bowl and ingredients for cupcakes is 246 g . There is enough mixture to fill 7 equal cupcake cases. When 3 cupcake cases are filled, the mass of the bowl and ingredients is 225 g .

What is the mass of the bowl?


I have to put backing paper on four display boards in school. If I cut a 3 m roll of paper into 65 cm lengths will I have enough for all 4 boards?

Do I have any paper left? If so how much?

Record your answer in $\mathrm{m}, \mathrm{cm}$ and mm .


The school secretary is ordering supplies for KS2 classes. Fill in the missing items to scale the stock up or down.

| Quantity | Pencils | Rubbers | Rulers | Books |
| :--- | :--- | :--- | :--- | :--- |
| 5 | $50 p$ |  |  |  |
| 10 |  | $20 p$ |  |  |
| 50 |  |  | $£ 7.50$ |  |
| 75 |  |  |  | $£ 13.50$ |

## Answers

1. Sugar- $\mathbf{2 7 5 g}$

Flour - 525g
Sultanas-325g
2. Mass of flour: $\mathbf{7 6 0 g} \div \mathbf{2 = 3 8 0 g}$.

Challenge: Sugar $=\frac{2}{5}$ of remaining mass so $380 \mathrm{~g} \div 5 \times 2=152 \mathrm{~g}$
3. $470 \mathrm{~g}-\mathbf{0 . 4 7 0} \mathrm{kg}$
3.25l-3250ml
$500 \mathrm{~cm}-5.0 \mathrm{~m}$ and 5000 mm
2.65 kg - 2650g
4. Scale $1: \mathbf{5 0 g}$ intervals

Scale 2: 20g intervals
Scale 3: 1kg intervals
Scale 4: 250g intervals
5. $\mathbf{6 3 0 g}$ marked on scale. With an extra 90 g it would read $\mathbf{7 2 0 g}$.
6. Water: $\mathbf{1 7 5 0 m l}$ or $\mathbf{1 . 7 5 l}$. Milk: $\mathbf{7 5 0 m l}$ or $\mathbf{0 . 7 5 l}$.

Total volume: $\mathbf{2 5 0 0 m l}$ or $\mathbf{2 . 5 l}$.
7. No, one exercise book is not heavier than one dictionary.

Each exercise book is equal to $\frac{1}{4}$ the mass of each dictionary.
8. $246 \mathrm{~g}-225 \mathrm{~g}=21 \mathrm{~g}$
$21 \mathrm{~g} \div 3=7 \mathrm{~g}$ for each spoonful of cupcake mix
$7 \mathrm{~g} \times 7=49 \mathrm{~g}$ of cupcake mix
$246 \mathrm{~g}-49 \mathrm{~g}=197 \mathrm{~g}$. The bowl weighs 197g.
9. $65 \mathrm{~cm} \times 4=260 \mathrm{~cm}$. Yes I have enough paper.

There is 0.4 m or, 40 cm or, 400 mm paper left.
10.

| Quantity | Pencils | Rubbers | Rulers | Books |
| :--- | :--- | :--- | :--- | :--- |
| 5 | $50 p$ | $\mathbf{1 0 p}$ | $\mathbf{7 5 p}$ | $\mathbf{9 0 p}$ |
| 10 | $£ 1.00$ | $20 p$ | $£ 1.50$ | $£ 1.80$ |
| 50 | $£ 5.00$ | $£ 1.00$ | $£ 7.50$ | $£ 9.00$ |
| 75 | $£ 7.50$ | $£ 1.50$ | $£ 11.25$ | $£ 13.50$ |

