

Varied Fluency

Step 4: Add and Subtract Mass

National Curriculum Objectives:

Mathematics Year 3: (3M1b) [Compare mass \(kg/g\)](#)

Mathematics Year 3: (3M2b) [Measure mass \(kg/g\)](#)

Differentiation:

Developing Questions to support adding and subtracting masses of 2 items, using various representations. Measures given in both kg and g, with no conversions within questions; multiples of 100.

Expected Questions to support adding and subtracting masses of up to 3 items, using various representations. Measures given in both kg and g, with some exchanging and crossing tens; multiples of 5 where some measures are represented as fractions i.e. $2\frac{1}{2}$ kg.

Greater Depth Questions to support adding and subtracting masses of up to 3 items, using various representations. Measures given in both kg and g of any number, with exchanging and crossing tens where some measures are represented as fractions i.e. $2\frac{1}{2}$ kg.

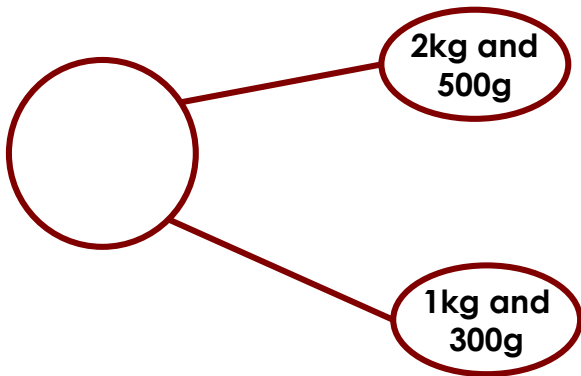
More [Year 3 and Year 4 Mass and Capacity](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Add and Subtract Mass

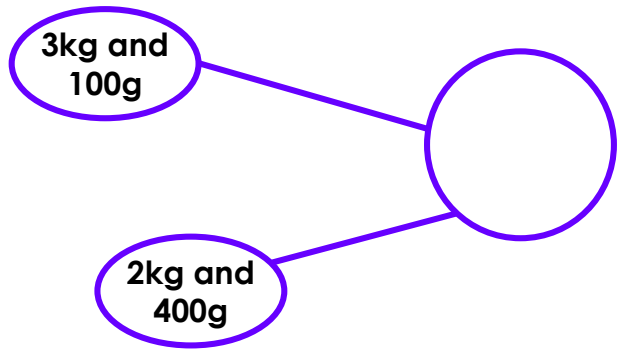
Add and Subtract Mass

1a. Complete the part-whole model.



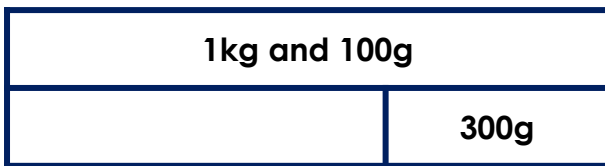
3 VF

1b. Complete the part-whole model.



3 VF

2a. Complete the bar model.



3 VF

2b. Complete the bar model.



3 VF

3a. Use place value counters to find the difference between 3kg and 300g and 1kg and 800g.

Thousands	Hundreds	Tens



3 VF

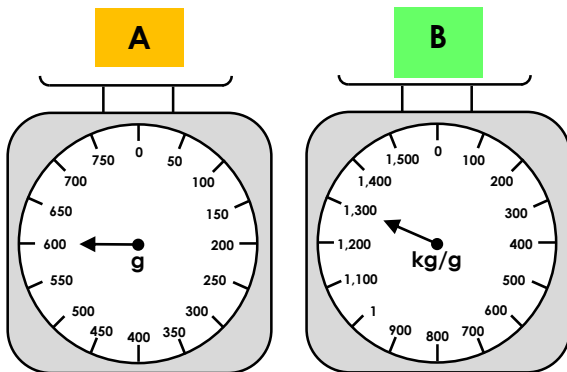
3b. Use place value counters to find the difference between 3kg and 400g and 1kg and 700g.

Thousands	Hundreds	Tens



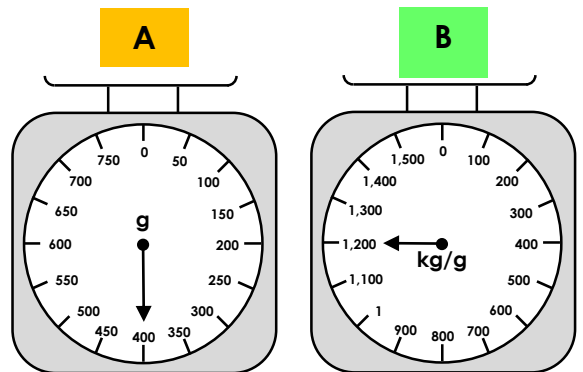
3 VF

4a. Find the total mass of these items.



3 VF

4b. Find the total mass of these items.

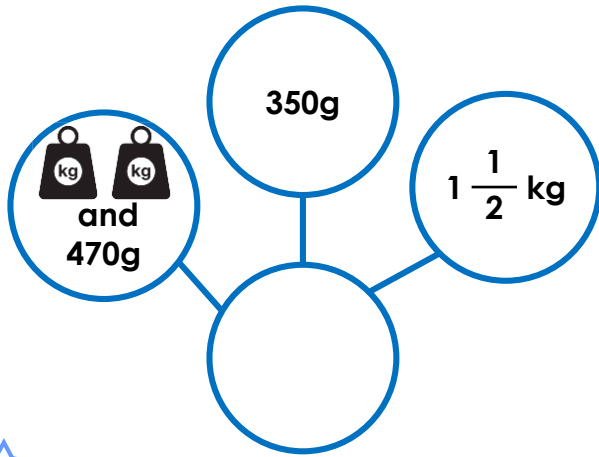


3 VF

Add and Subtract Mass

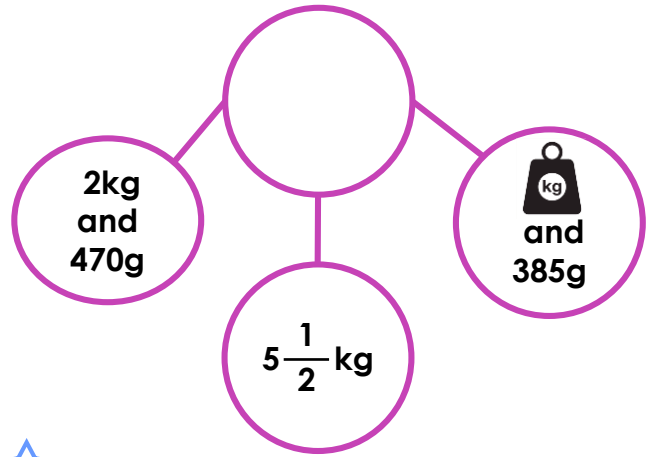
Add and Subtract Mass

5a. Complete the part-whole model.



3 VF

5b. Complete the part-whole model.



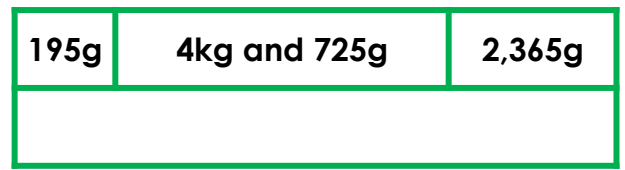
3 VF

6a. Complete the bar model.



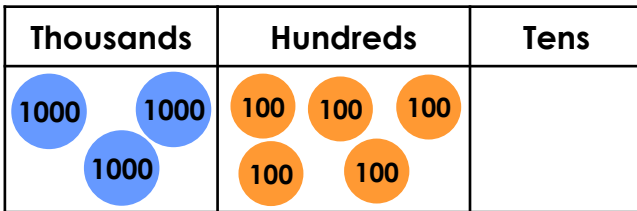
3 VF

6b. Complete the bar model.



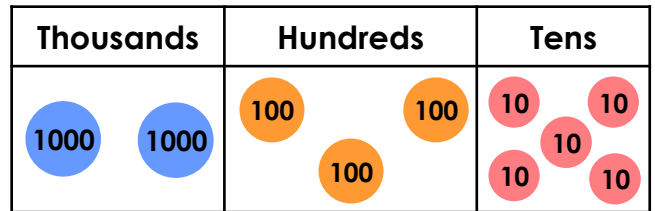
3 VF

7a. Use place value counters to find the difference between $3\frac{1}{2}$ kg and 1kg 150g.



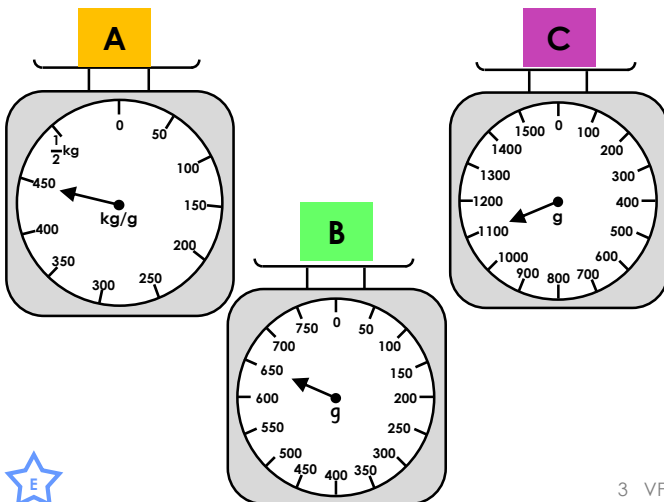
3 VF

7b. Use place value counters to find the difference between 2kg and 350g and 1kg and 500g.



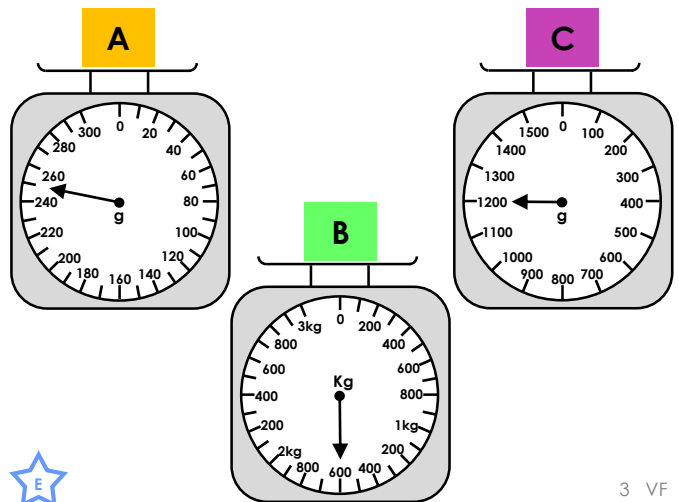
3 VF

8a. Find the total mass of these items.



3 VF

8b. Find the total mass of these items.

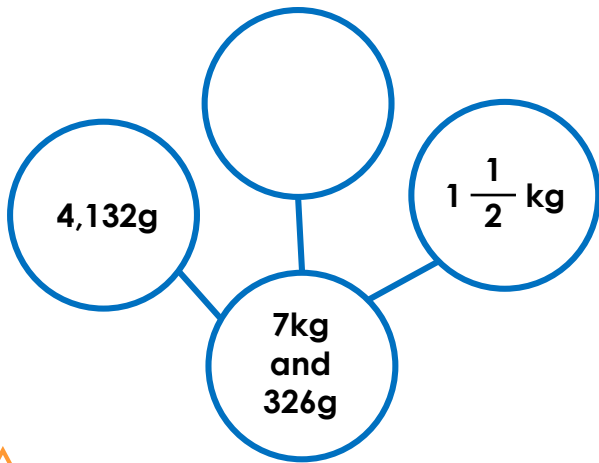


3 VF

Add and Subtract Mass

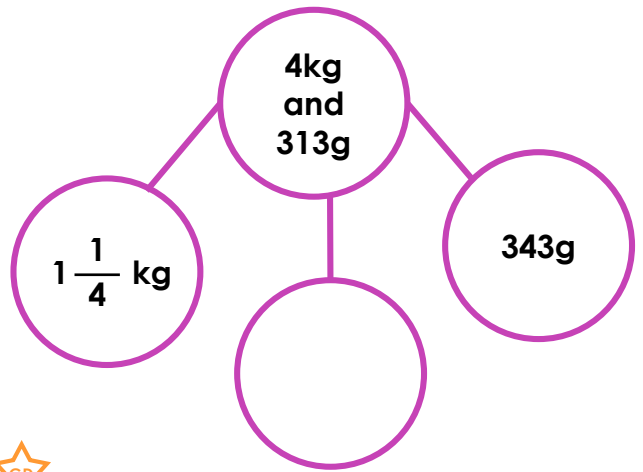
Add and Subtract Mass

9a. Complete the part-whole model.



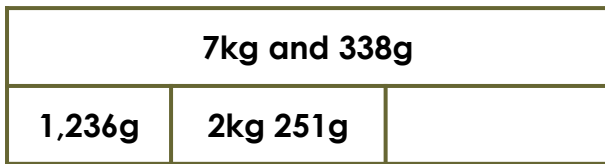
3 VF

9b. Complete the part-whole model.



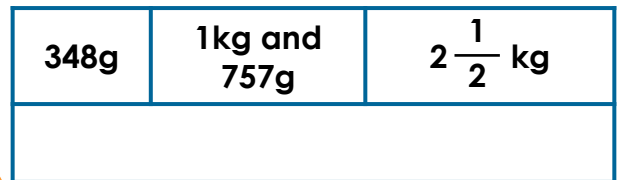
3 VF

10a. Complete the bar model.



3 VF

10b. Complete the bar model.



3 VF

11a. Use place value counters to find the difference between 3kg 432g and 2kg 824g.

Thousands	Hundreds	Tens	Ones
1000 1000 1000	100 100 100 100	10 10 10 10	1 1



3 VF

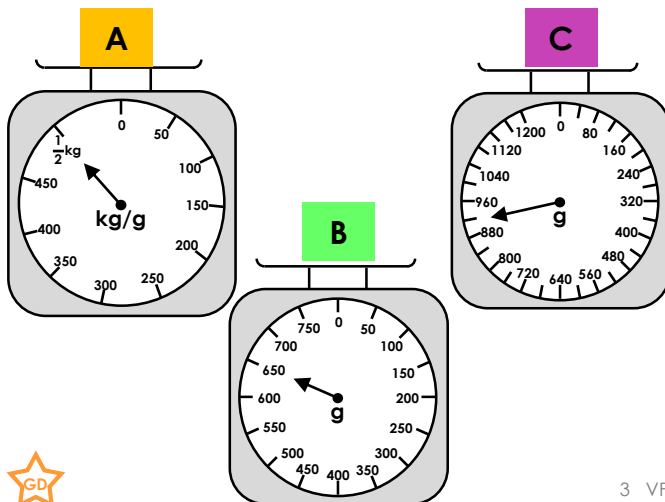
11b. Use place value counters to find the difference between 2kg 521g and 924g.

Thousands	Hundreds	Tens	Ones
1000 1000	100 100 100 100	10 10	1



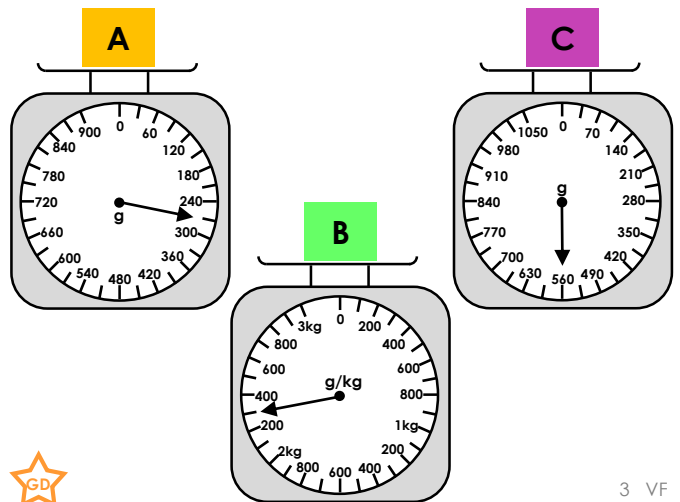
3 VF

12a. Find the total mass of these items.



3 VF

12b. Find the total mass of these items.



3 VF

Varied Fluency
Add and Subtract Mass

Developing

- 1a. 3kg and 800g
- 2a. 800g
- 3a. 1kg and 500g
- 4a. 1kg and 900g

Expected

- 5a. 4kg and 320g
- 6a. 6kg and 215g
- 7a. 2kg and 350g
- 8a. 2kg and 200g

Greater Depth

- 9a. 1kg and 694g
- 10a. 3kg and 851g
- 11a. 608g
- 12a. 2kg and 70g

Varied Fluency
Add and Subtract Mass

Developing

- 1b. 5kg and 500g
- 2b. 2kg and 600g
- 3b. 1kg and 700g
- 4b. 1kg and 600g

Expected

- 5b. 9kg and 355g
- 6b. 7kg and 285g
- 7b. 850g
- 8b. 2kg and 50g

Greater Depth

- 9b. 2kg and 720g
- 10b. 4kg and 605g
- 11b. 1kg and 597g
- 12b. 3kg and 130g