

Dear Parents/Carers,
This powerpoint takes the children through the learning sequence. If possible please talk through the slides with your child and check their understanding. The slides start at a basic level to re-cap previous learning.

Mass, Capacity and Temperature

7.5.20

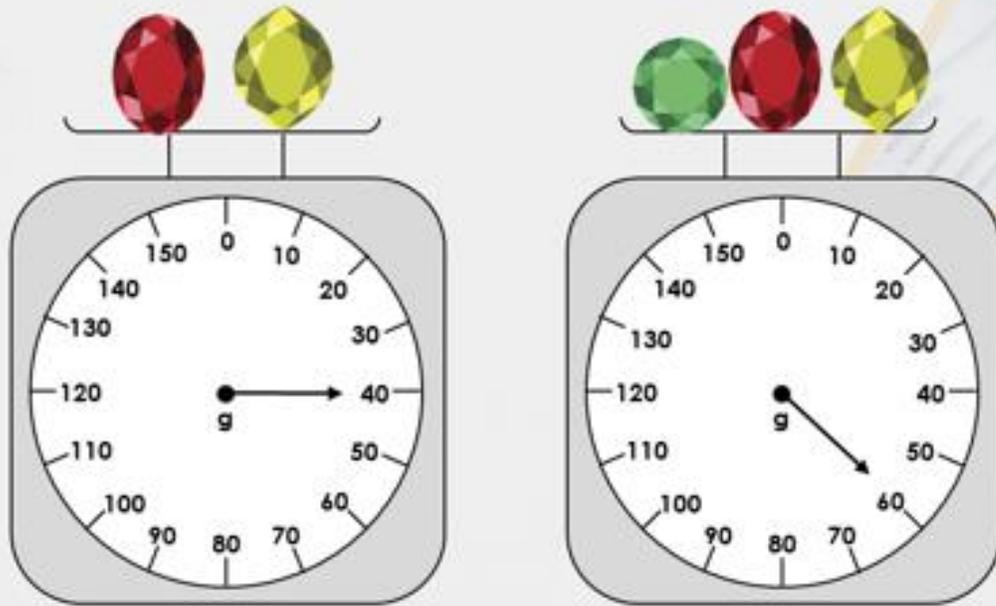
7.5.20

LO: I can add and subtract mass.



Starter

One yellow jewel weighs 10g.
How much does each red and green jewel weigh?



How much would two of each jewel weigh in total?

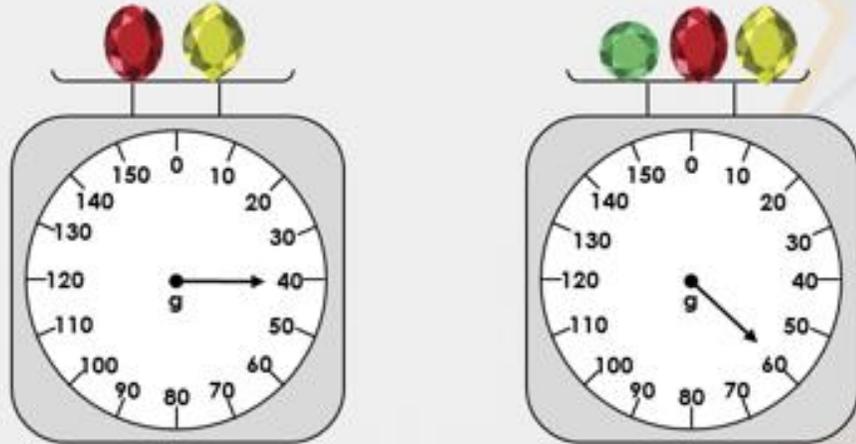
Work out the mass of the red jewel first.

$$40 - 10 =$$

Next, work out the mass of the green jewel.

Starter - answer

One yellow jewel weighs 10g.
How much does each red and green jewel weigh?



$40\text{g} - 10\text{g} = 30\text{g}$. The red jewel weighs 30g.
 $60\text{g} - 30\text{g} - 10\text{g} = 20\text{g}$. The green jewel weighs 20g.
How much would two of each jewel weigh in total?

$$10\text{g} + 10\text{g} + 20\text{g} + 20\text{g} + 30\text{g} + 30\text{g} = 120\text{g}$$

Descriptive Teaching

Complete the part-whole model.



$\frac{1}{2}$ kg = 500g.
So, 1kg + 285g +
500g =?

Descriptive Teaching - Answer

Complete the part-whole model.



The 3 parts add together to equal 2kg and 450g.

Descriptive Doing

Complete the bar model.

3kg and 100g	450g	
4kg and 650g		

Use the same method as last time to work out the missing weight.

Descriptive Doing - Answer

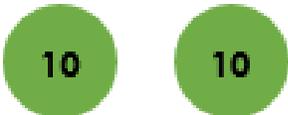
Complete the bar model.

3kg and 100g	450g	1kg and 100g
4kg and 650g		

The 3 parts of the bar model add together to equal 4kg and 650g.

Reflective Teaching

Use place value counters to find the difference between 4kg and 750g and $2\frac{1}{2}$ kg.

Thousands	Hundreds	Tens
		
		
		
		

Draw place value counters in your book. Remember, there are 1000g in 1kg. In $\frac{1}{2}$ kg there are 500g.

When finding the difference, what operation do we need to use?

Reflective Teaching - Answers

Use place value counters to find the difference between 4kg and 750g and $2\frac{1}{2}$ kg.

Thousands	Hundreds	Tens
		
		
		
		

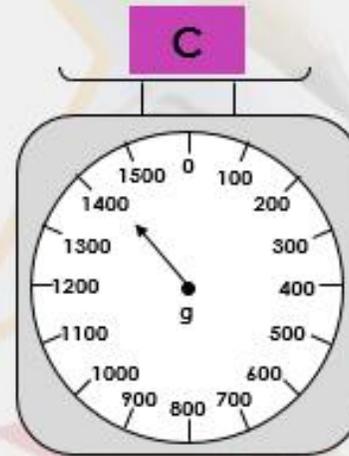
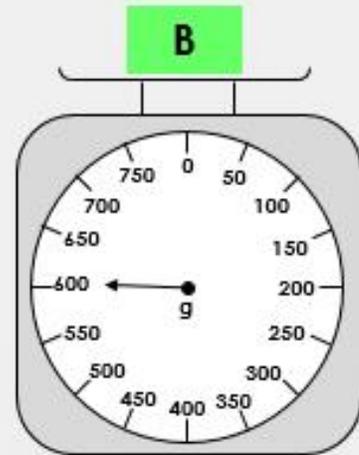
2,250g or 2kg and 250g

Y3

When finding the difference, we subtract!

Reflective Doing

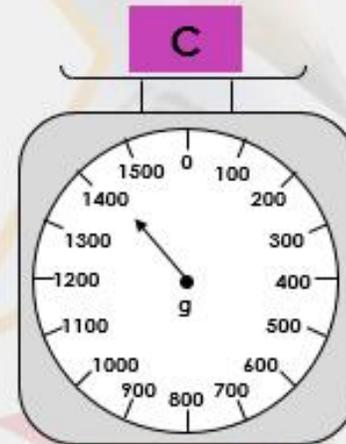
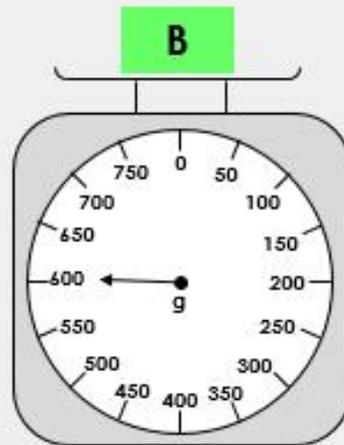
Find the total mass of these items.



To find the total, which operation do you need to use? Tell an adult and work out the problem in your book.

Reflective Doing - Answers

Find the total mass of these items.



450g + 600g + 1kg and 400g = 2kg and 450g

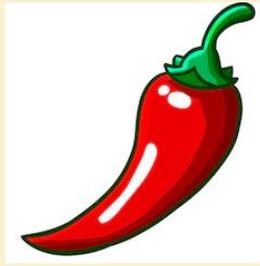
To find the total,
we use addition!

Independent work

The following slides are questions for you to work through independently.

There are 3 sets of work - 1 chili (the easiest), 2 chilies, 3 chilies (the hardest). Choose one set you feel most comfortable with.

Independent work



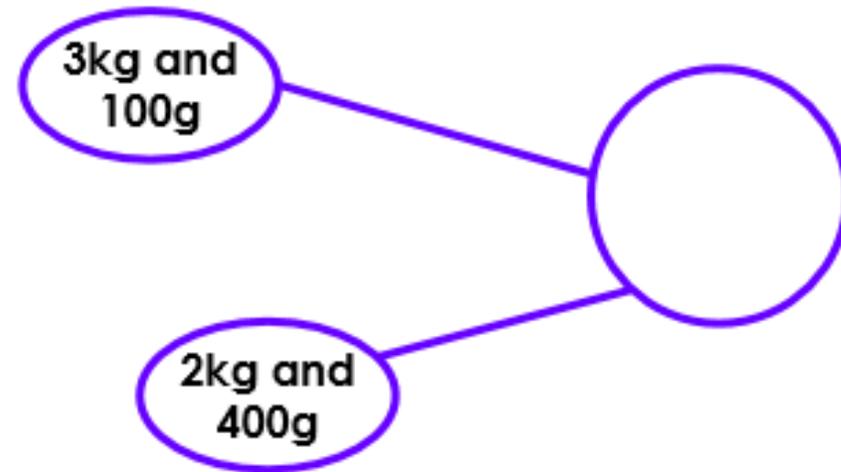
1a. Complete the part-whole model.



S VF



1b. Complete the part-whole model.

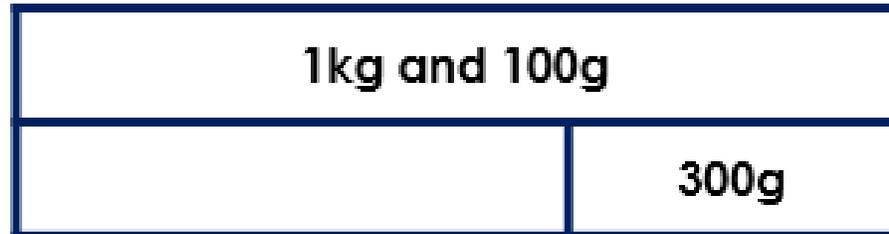


S VF

Independent work



2a. Complete the bar model.



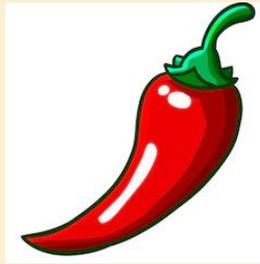
S VF

2b. Complete the bar model.

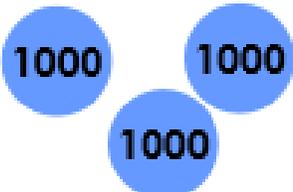
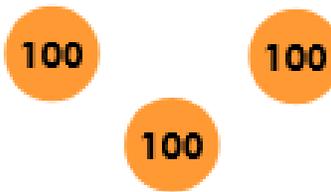


S VF

Independent work



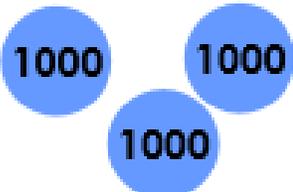
3a. Use place value counters to find the difference between 3kg and 300g and 1kg and 800g.

Thousands	Hundreds	Tens
		



S VF

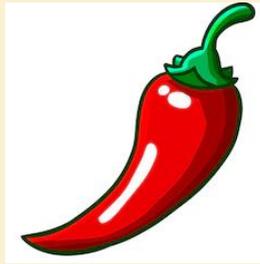
3b. Use place value counters to find the difference between 3kg and 400g and 1kg and 700g.

Thousands	Hundreds	Tens
		

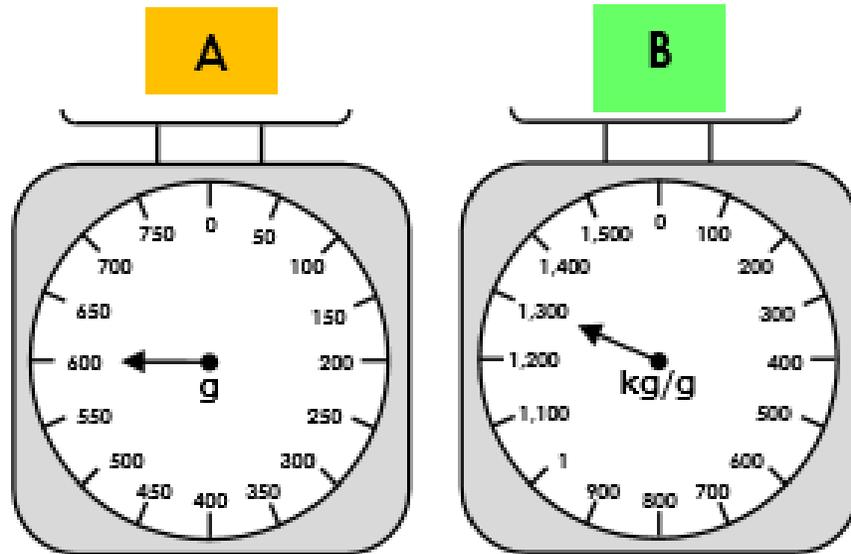


S VF

Independent work

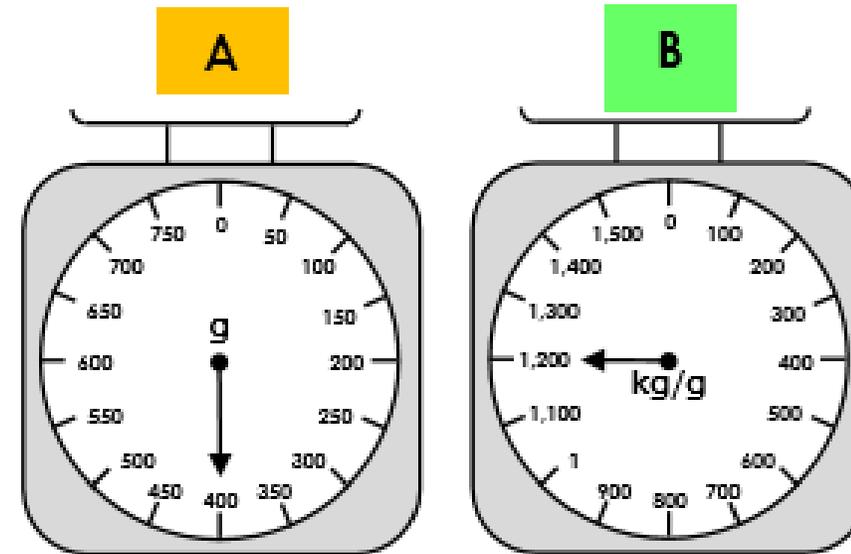


4a. Find the total mass of these items.



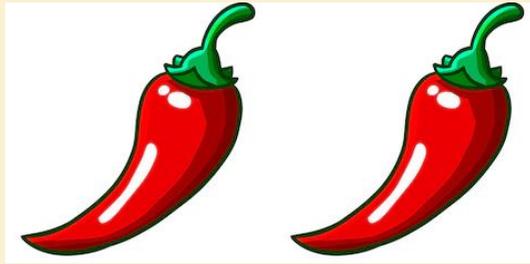
S VF

4b. Find the total mass of these items.

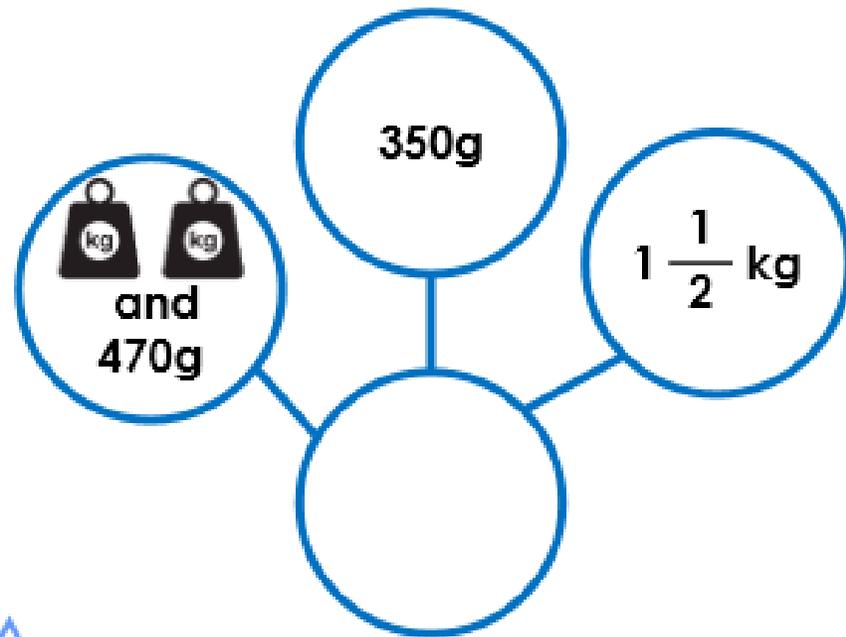


S VF

Independent work

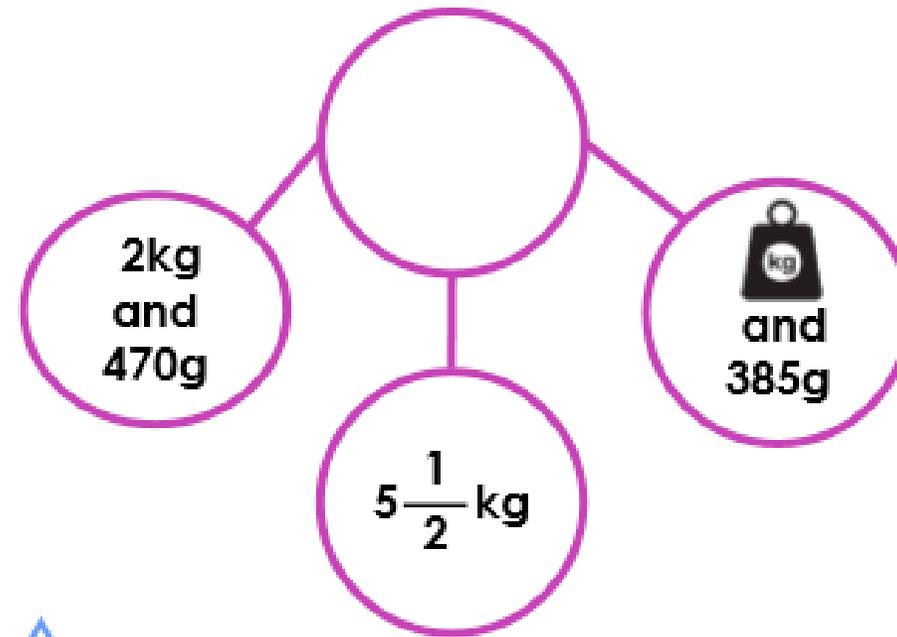


5a. Complete the part-whole model.



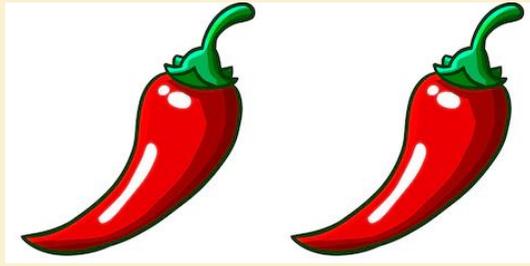
S VF

5b. Complete the part-whole model.



S VF

Independent work

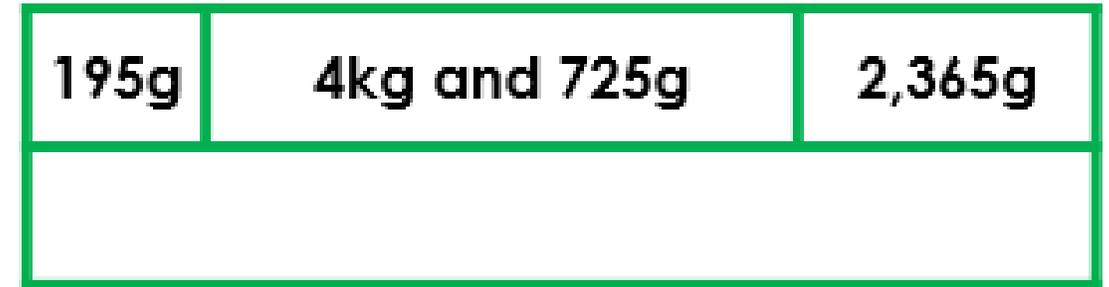


6a. Complete the bar model.



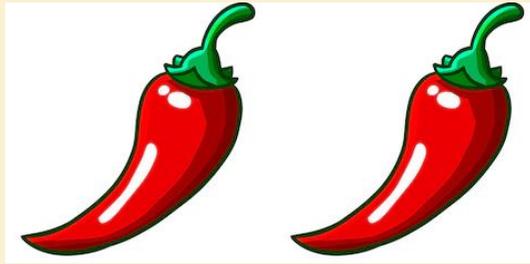
S VF

6b. Complete the bar model.

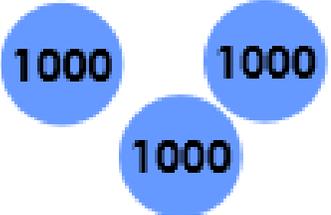
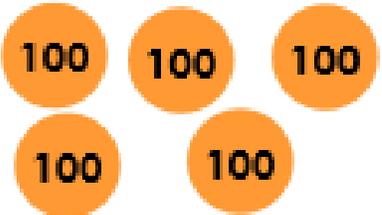


S VF

Independent work



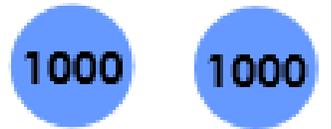
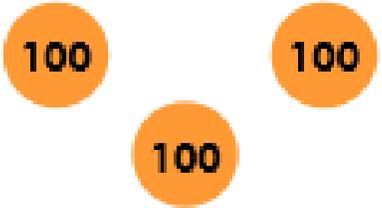
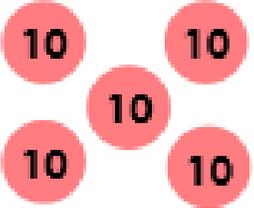
7a. Use place value counters to find the difference between $3\frac{1}{2}$ kg and 1kg 150g.

Thousands	Hundreds	Tens
		



S VF

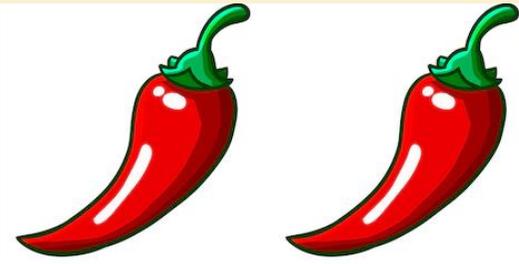
7b. Use place value counters to find the difference between 2kg and 350g and 1kg and 500g.

Thousands	Hundreds	Tens
		

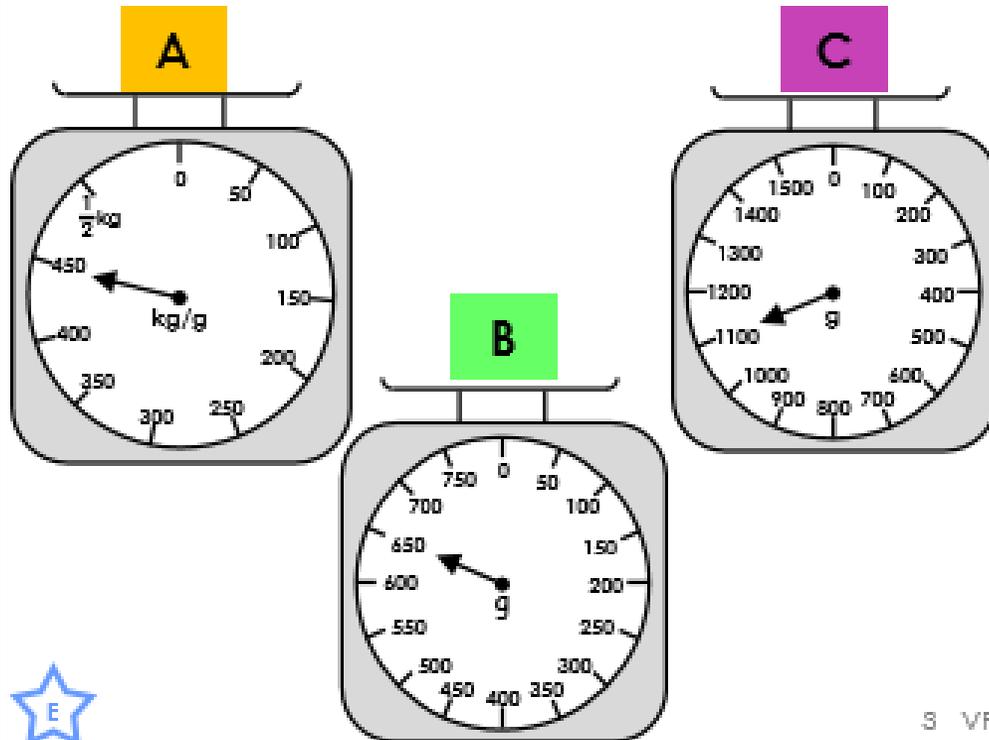


S VF

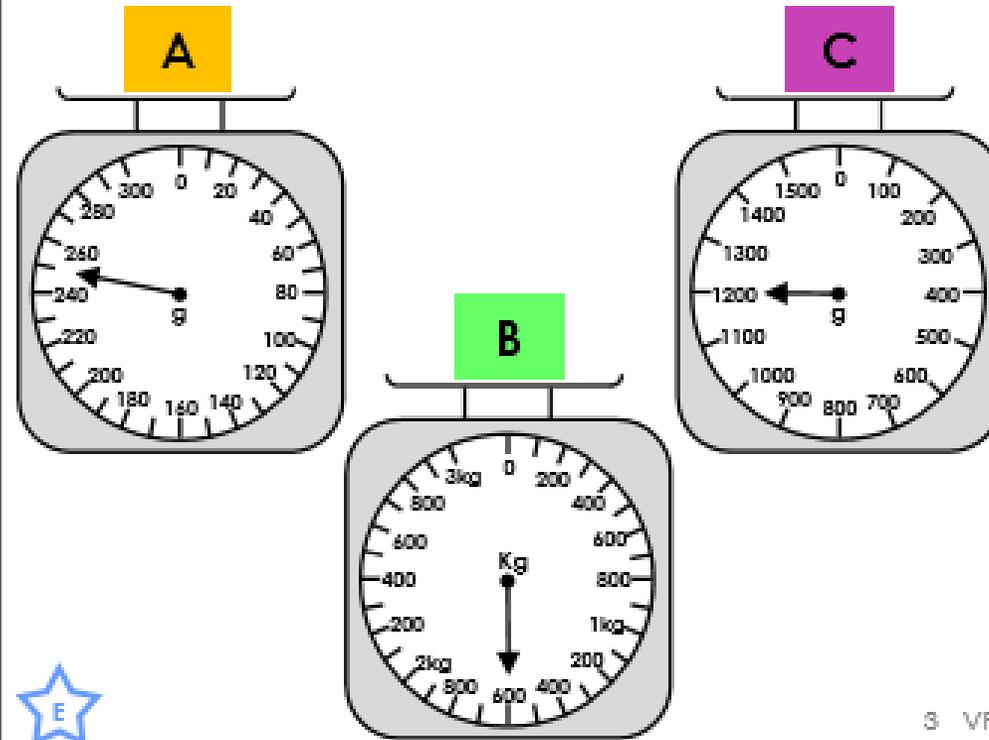
Independent work



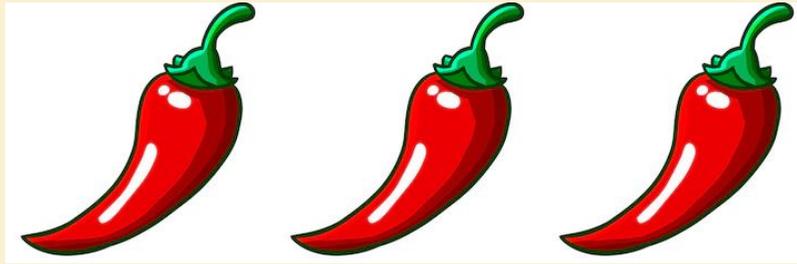
8a. Find the total mass of these items.



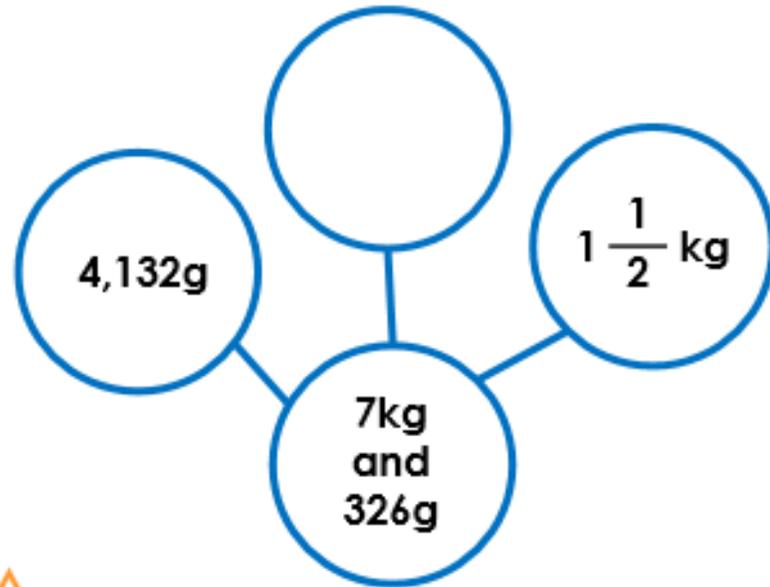
8b. Find the total mass of these items.



Independent work

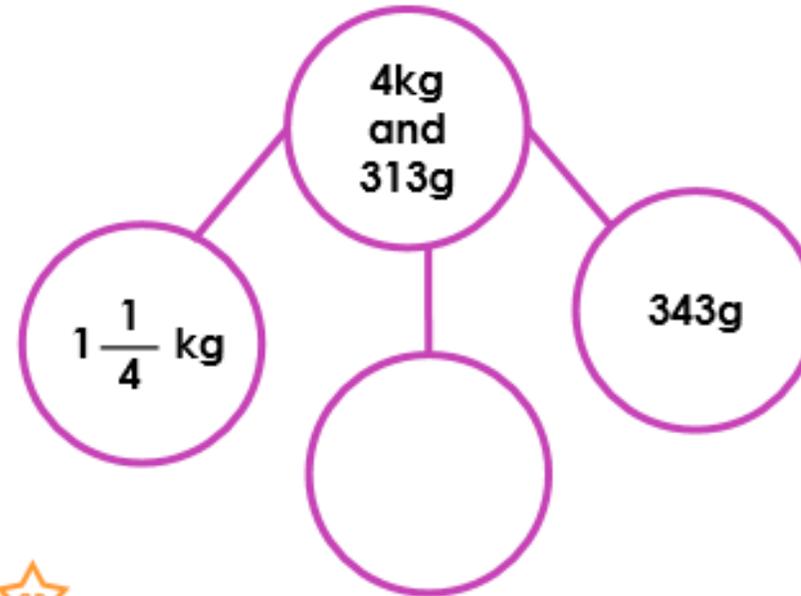


9a. Complete the part-whole model.



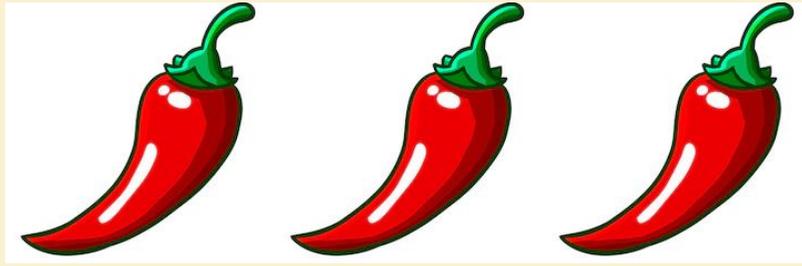
S VF

9b. Complete the part-whole model.



S VF

Independent work



10a. Complete the bar model.

7kg and 338g		
1,236g	2kg 251g	



S VF

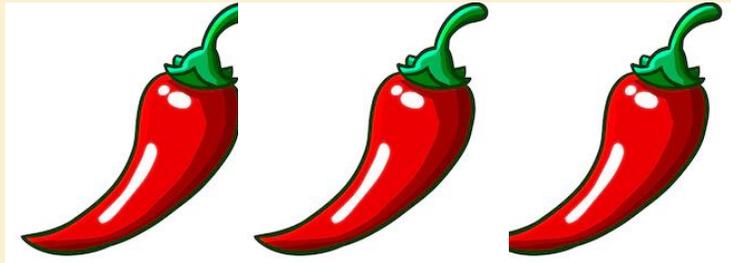
10b. Complete the bar model.

348g	1kg and 757g	$2\frac{1}{2}$ kg

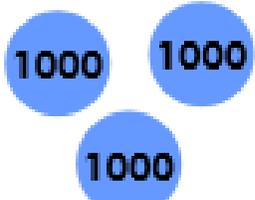
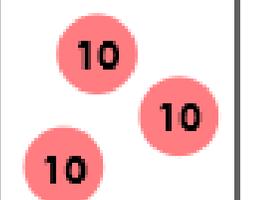
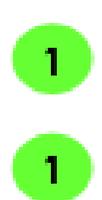


S VF

Independent work



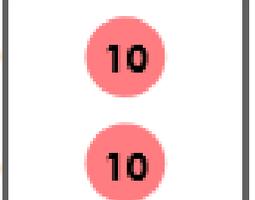
11a. Use place value counters to find the difference between 3kg 432g and 2kg 824g.

Thousands	Hundreds	Tens	Ones
			



S VF

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

Thousands	Hundreds	Tens	Ones
			

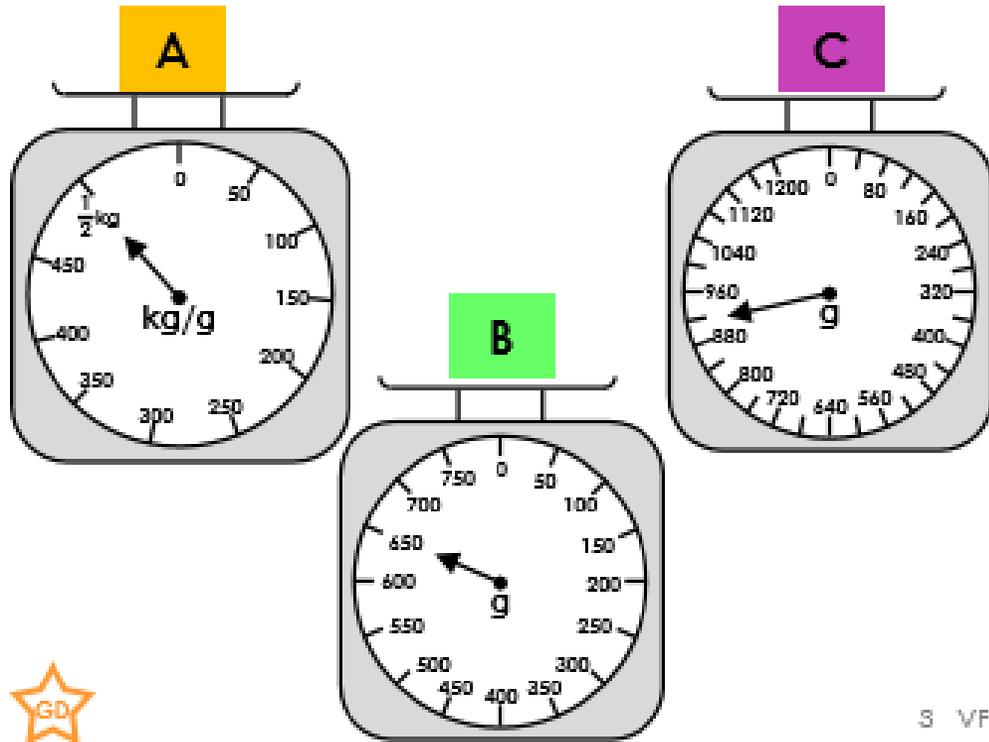


S VF

Independent work

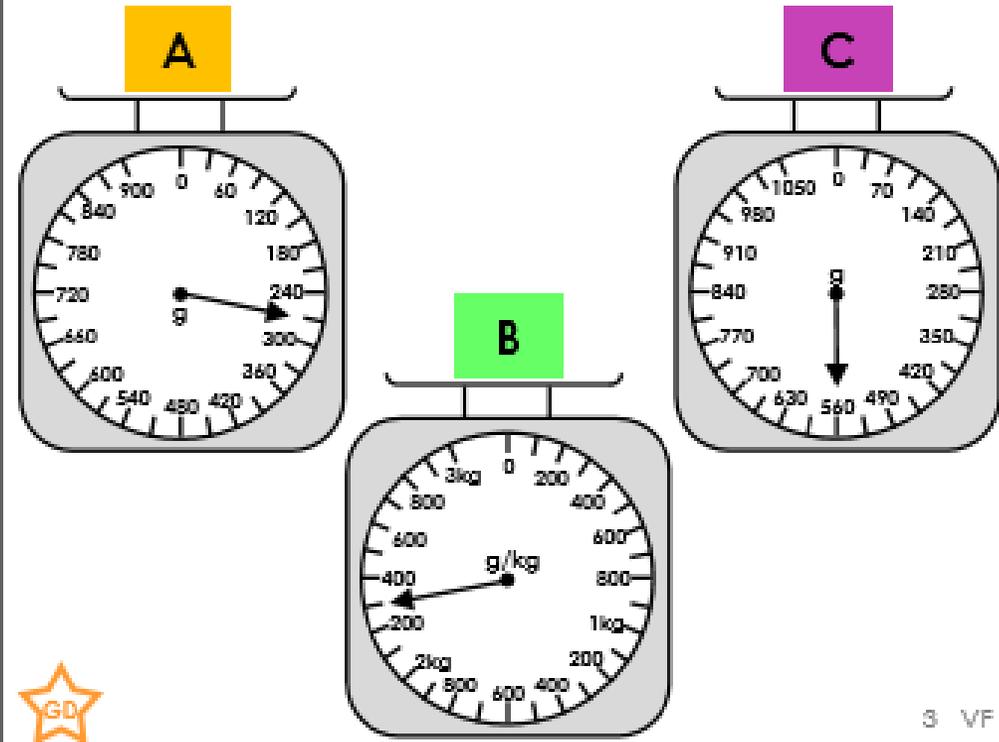


12a. Find the total mass of these items.



S VF

12b. Find the total mass of these items.



S VF

Answers

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**

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**

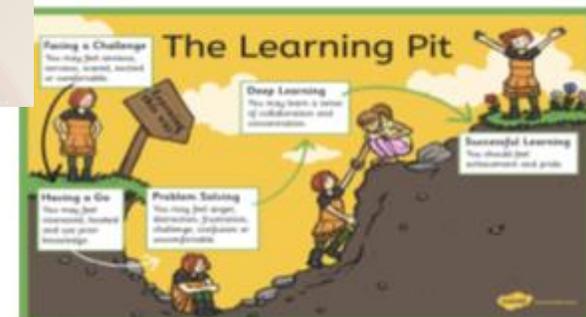
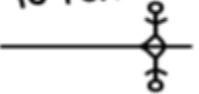
Reflection Time



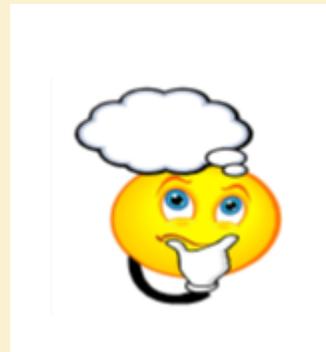
Yusuf is packing for his holiday. The maximum weight of his suitcase is 10kg. Find all of the possible combinations of three items he could put in his case. You must include the weight of the case.

- Case – 4kg and 700g
- Toiletry bag – 650g
- Shoes – 1400g
- Clothes – 2kg and 100g
- Swimwear – 850g
- Inflatable toy and pump – 2kg and 400g

Take time
to reflect



Reflection Time - Answers



Yusuf is packing for his holiday. The maximum weight of his suitcase is 10kg. Find all of the possible combinations of three items he could put in his case. You must include the weight of the case.

- Case – 4kg and 700g
- Toiletry bag – 650g
- Shoes – 1400g
- Clothes – 2kg and 100g
- Swimwear – 850g
- Inflatable toy and pump – 2kg and 400g

Various answers, for example:

1. Inflatable toy and pump, shoes and swimwear (9kg and 350g)
2. Inflatable toy and pump, shoes and toiletry bag (9kg and 150g)
3. Clothes, shoes and toiletry bag (8kg and 850g)

Take time
to reflect

