

Answers from yesterdays work:

Kilograms	Grams
4.795kg	4795g
6.238kg	6238g
15.089kg	15 089g
3.75kg	3750g
12.96kg	12 960g
14.1kg	14 100g

Grams	Kilograms
3467g	3.467kg
2119g	2.119kg
5008g	5.008kg
1250g	1.25kg
13 880g	13.88kg
12 500g	12.5kg

Maisie had 7.3kg – 7300g

Freya's was 3621g – 3.621g

1. 40mm
2. 50cm
3. 58cm
4. 540mm
5. 96 cm – 960mm

6. 8m
7. 954cm
8. 1000cm
9. 1058cm
10. 0.15m

11. 5000m
12. 0.750km/0.75km
13. 2500m
14. 11.584km
15. 14500m

L.O: To be able to convert between
different units of measure

Today we will be looking at capacity used, capacity is used when you are measuring liquid.

The measurement used are Millilitres and Litres

Again, these are measurement that are used in every day life. What can you think of in everyday life when this measurement is used? Write down a couple of examples.

Do you know how many
millilitres are in a litre ?

By the end of today's lesson you will be able to:

- Multiply by 1000 to convert measurements from litres to millilitres.
- Divide by 1000 to convert measurements from millilitres to litres.
- Convert between litres and millilitres to solve problems.

As you can see....the same maths again! You will be expert on dividing and multiplying by 1000 by the end of this week!

There are 1000ml in 1 Litre



100ml is one tenth of 1000ml. This means it is one tenth of 1 litre. How could we write one tenth of 1 litre as a decimal number?



In your books: complete the table.



Millilitres	Litres
100ml	0.1l
200ml	
400ml	
	0.6l
	0.9l

Miss Tysoe wanted to make a smoothie (the weather has been lovely) But to make it I had to use my knowledge of converting millilitres to litres and vice versa.



Which operation do you think I used to convert between litres and millilitres?



Converting from Litres to Millilitres

$$4\text{l} = 4000\text{ml}$$

What calculation did we do to convert from litres to millilitres?

To convert from litres to millilitres,
we multiply by 1000. This is
because there are 1000ml in 1
litre.

You should know how to do that
by now....

Converting from Litres to Millilitres

What happens to this decimal number when it is multiplied by 1000?

Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths
			6	4	0	5



Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths
6	4	0	5			

Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths
			3	•	2	

If there are any empty places **before** the decimal point, we must write in a zero to show the place value of the number. If we did not, it would look like this number said 32.

Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths
3	2	0	0	•		

Converting from Litres to Millilitres

In your book: Practise converting these measurements from litres to millilitres.

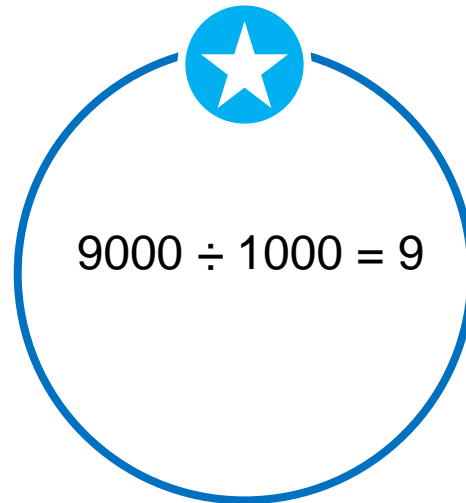
If the numbers include any zeros, pay attention to their position.

Litres	Millilitres
3.802l	
6.24l	
5.9l	
3.75l	
2.09l	
4.001l	

Converting from Millilitres to Litres

$$9000\text{ml} = 9\text{l}$$

What calculation did we do to convert from millilitres to litres?



$9000 \div 1000 = 9$

To divide by 1000, we move each digit three places to the left. Zeros that are **after the decimal place**, but are **not at the end of the number**, stay in the same position.

Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths
3	0	6	2	.		



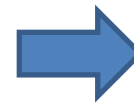
Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths
			3	0	6	2

Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths
7	5	0	0	.		



Zeros that are **after the decimal place and at the end of the number** have no value, so we do not need to write them.

Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths
			7	.	5	0 0



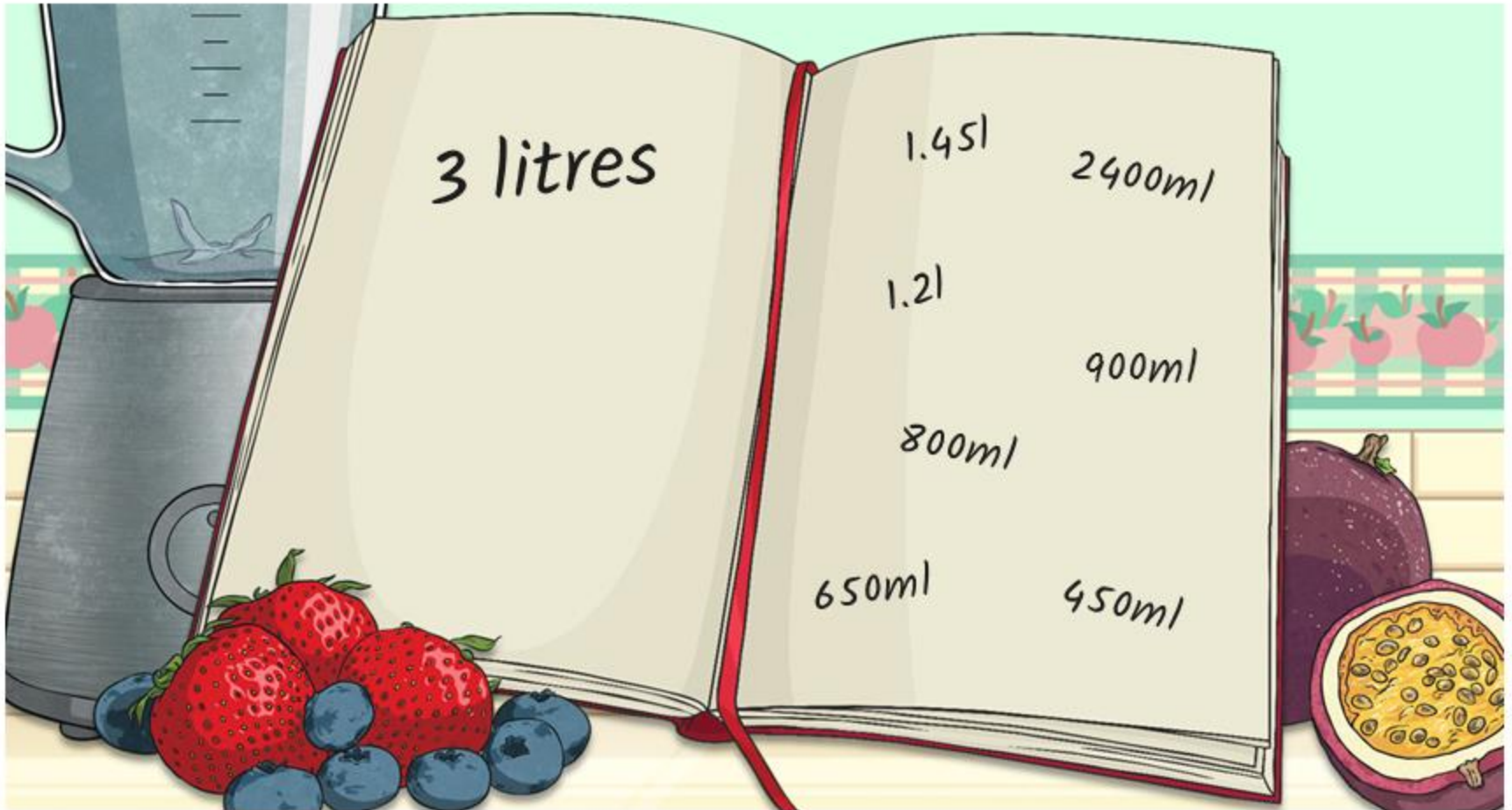
Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths
			7	.	5	

Complete in your book – Pay attention to zeros.

Millilitres	Litres
5692ml	
3460ml	
6150ml	
2800ml	
3060ml	
4006ml	

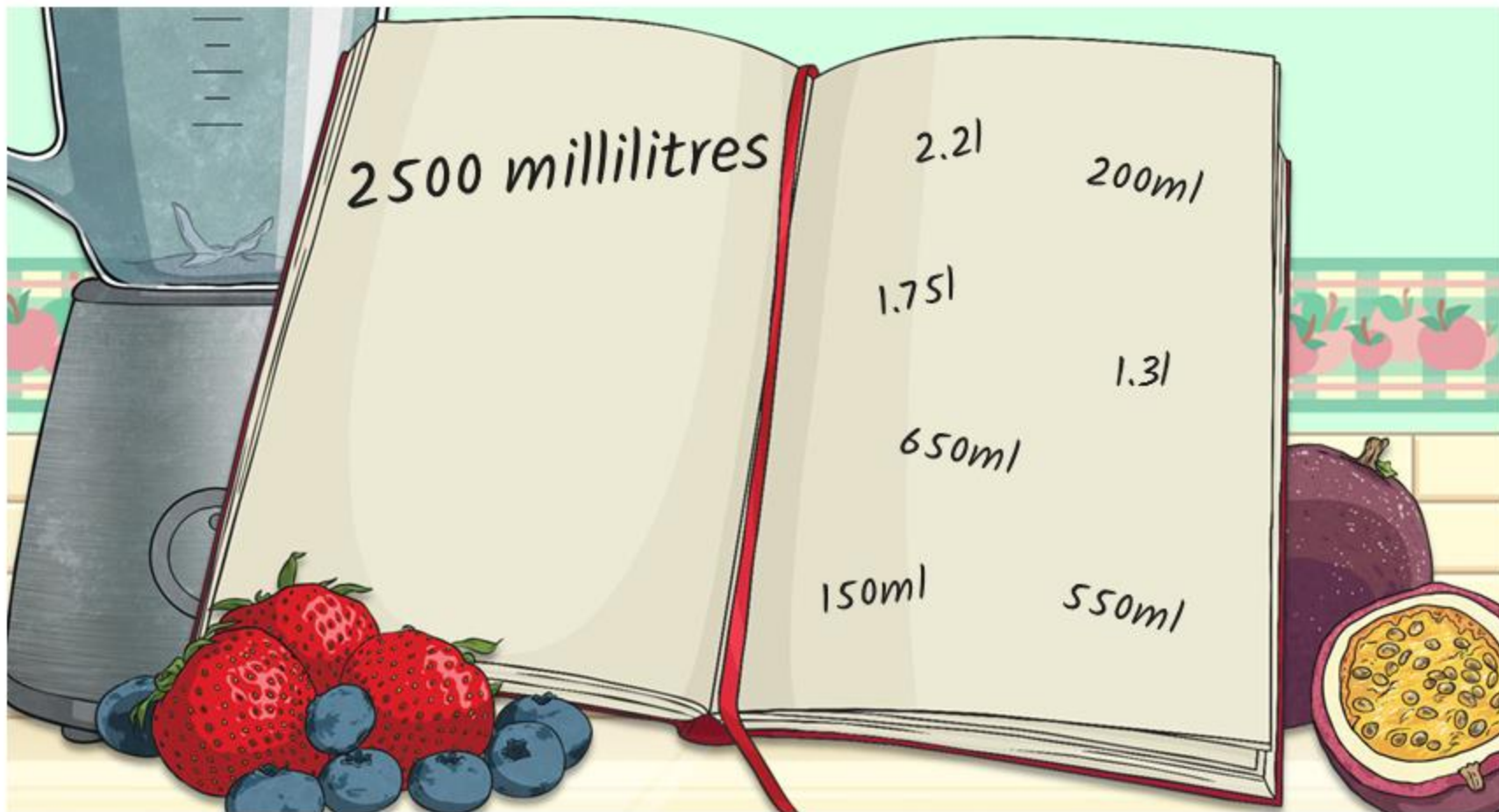
Juice Problems

Can you find the three amounts that add up to make the measurement shown on the left-hand page?



Juice Problems

Can you find the three amounts that add up to make the measurement shown on the left-hand page?



The capacity of this smoothie glass is 560ml.

To show how much smoothie juice would be needed to fill six glasses, in litres, I divide 560 by 100 and then multiply by 6.

Do you agree with this statement? Explain why.



Here are the volumes of four different smoothie ingredients.

Pineapple juice	Coconut water	Apple juice	Orange juice
1030ml	0.04 litres	800ml	1.25 litres

Meeta finds the total volume of all four smoothie ingredients using this calculation:

$$\begin{array}{r} 1030 \\ 0004 \\ 0800 \\ + 0125 \\ \hline 1959 \text{ ml} \end{array}$$

Is Meeta correct or incorrect? Explain your answer.

As an extension...if you have time, I would like you to make a 'smoothie' with different liquids you can drink at home and write the recipe in ml and l.

You have my e-mail from the times table toilet posters – would be great to see some of your creations – obviously with the maths included!