



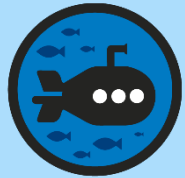
Adding Decimals – Crossing the Whole

Diving into Mastery Guidance for Educators

Each activity sheet is split into three sections, diving, deeper and deepest, which are represented by the following icons:



Diving



Deeper



Deepest

These carefully designed activities take your children through a learning journey, initially ensuring they are fluent with the key concept being taught; then applying this to a range of reasoning and problem-solving activities.

These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.

Aim

- Solve problems involving number up to three decimal places.





Use partitioning and complements to 1 to add these decimals.

$$0.63 + 0.53 = 1.16$$

$$0.63 + 0.37 + 0.16 =$$

$$1 + 0.16 = 1.16$$

$$0.87 + 1.36 = 2.23$$

$$0.87 + 0.13 + 1.23 =$$

$$1 + 1.23 = 2.23$$



Use the column addition method to add these decimals.

	0	.	4	6	5
+	0	.	5	7	8
	1	.	0	4	3
	1		1	1	

$$0.59 + 0.829 = 1.419$$

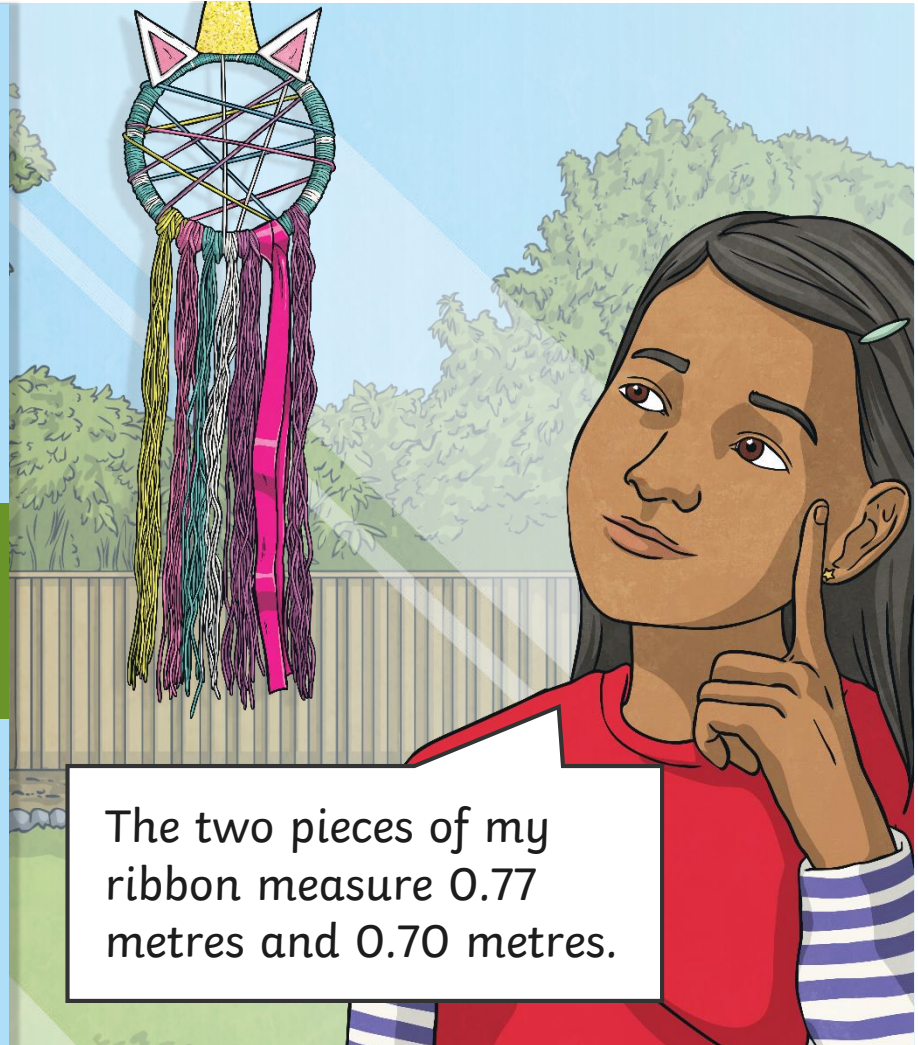
	0	.	5	9	
+	0	.	8	2	9
	1	.	4	1	9
	1		1		



Alma has a piece of ribbon which measures 1.47m long. She cuts it into 2 different length pieces.

Is Alma correct?
Explain your reasoning.

Yes. Alma is correct because the two different lengths of ribbon $0.77 + 0.70 = 1.47$ metres in total.



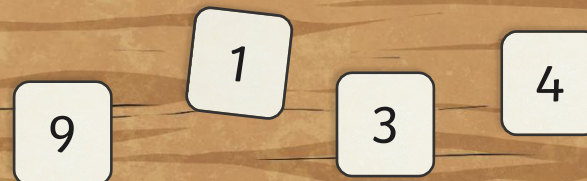
The two pieces of my ribbon measure 0.77 metres and 0.70 metres.



Sammy can use the digits 1-9 only once to make a sum with a total greater than 1.

I can use the digit 4 to complete this calculation.

Sammy



	0	.	2	6	5
+	0	.	7		8
	1	.	0	0	3
			1	1	

Do you agree with Sammy?
Explain why.



George is making some juice mocktails for his friends. He is making 1.5 litres of mocktails in total. Here is his recipe:

Does George use more than 0.305 litres of apple juice in his mocktail? Explain how you know.

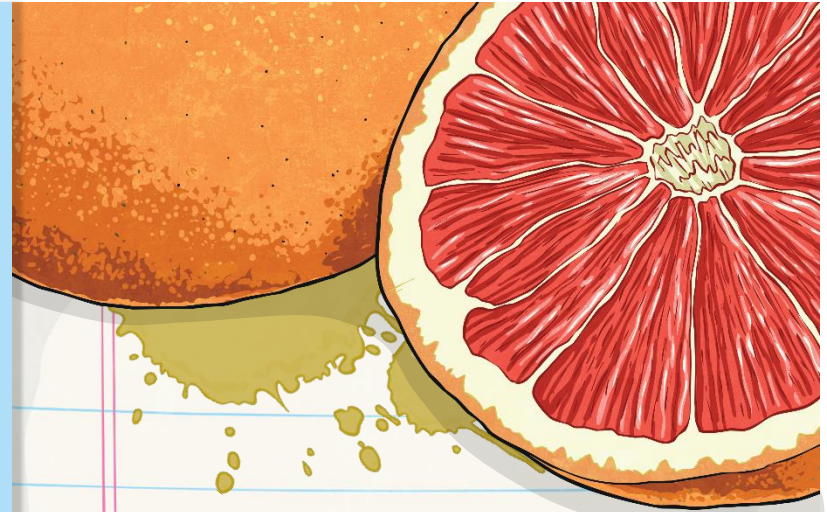
Yes.

$$0.58 + 0.465 + 0.125 = 1.17$$

$$1.5 - 1.17 = \mathbf{0.33}$$

Therefore, George needs to use 0.33 litres of apple juice to make 1.5 litres of mocktail.

This is more than 0.305 litres.



- 0.58 litres orange juice

- 0.465 litres raspberry juice

- litres apple juice

- 0.125 litres peach juice



Complete the statements using each of the decimal numbers once.

0.64

0.587

0.49

0.479

$$\boxed{} + 0.88 > \boxed{} + 1.04 < 0.837 + 0.687$$

$$\boxed{} + 0.742 = 0.78 + 0.452 < \boxed{} + 0.86$$





Strawberry Surprise will fill Roma's jug exactly.

$1.323 - 1.2 = 0.123$ so Mango Mayhem is 0.123 litres over the jug's capacity.

$1.2 - 1.146 = 0.054$ so Cranberry Craze is 0.054 litres below the jug's capacity.

Mango Mayhem

0.465 litres coconut milk

0.32 litres mango puree

0.158 litres peach juice

0.38 litres water

1.323 litres

Strawberry Surprise

0.467 litres milk

0.35 litres strawberry puree

0.125 litres strawberry syrup

0.258 litres water

1.2 litres

Cranberry Craze

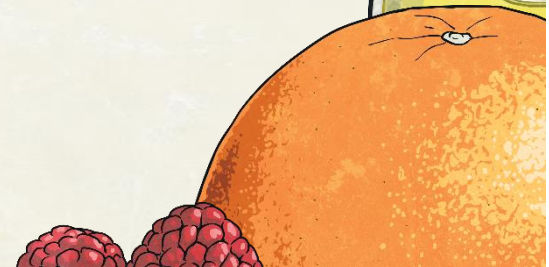
0.443 litres orange juice

0.328 litres raspberry juice

0.125 litres cranberry juice

0.25 litres raspberry syrup

1.146 litres

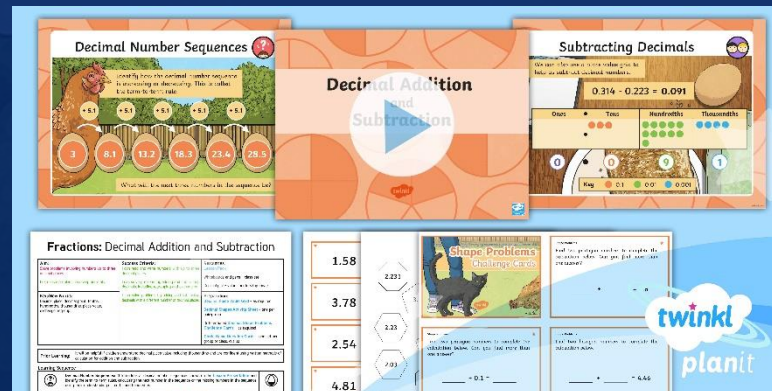


Need Planning to Complement this Resource?

National Curriculum Aim

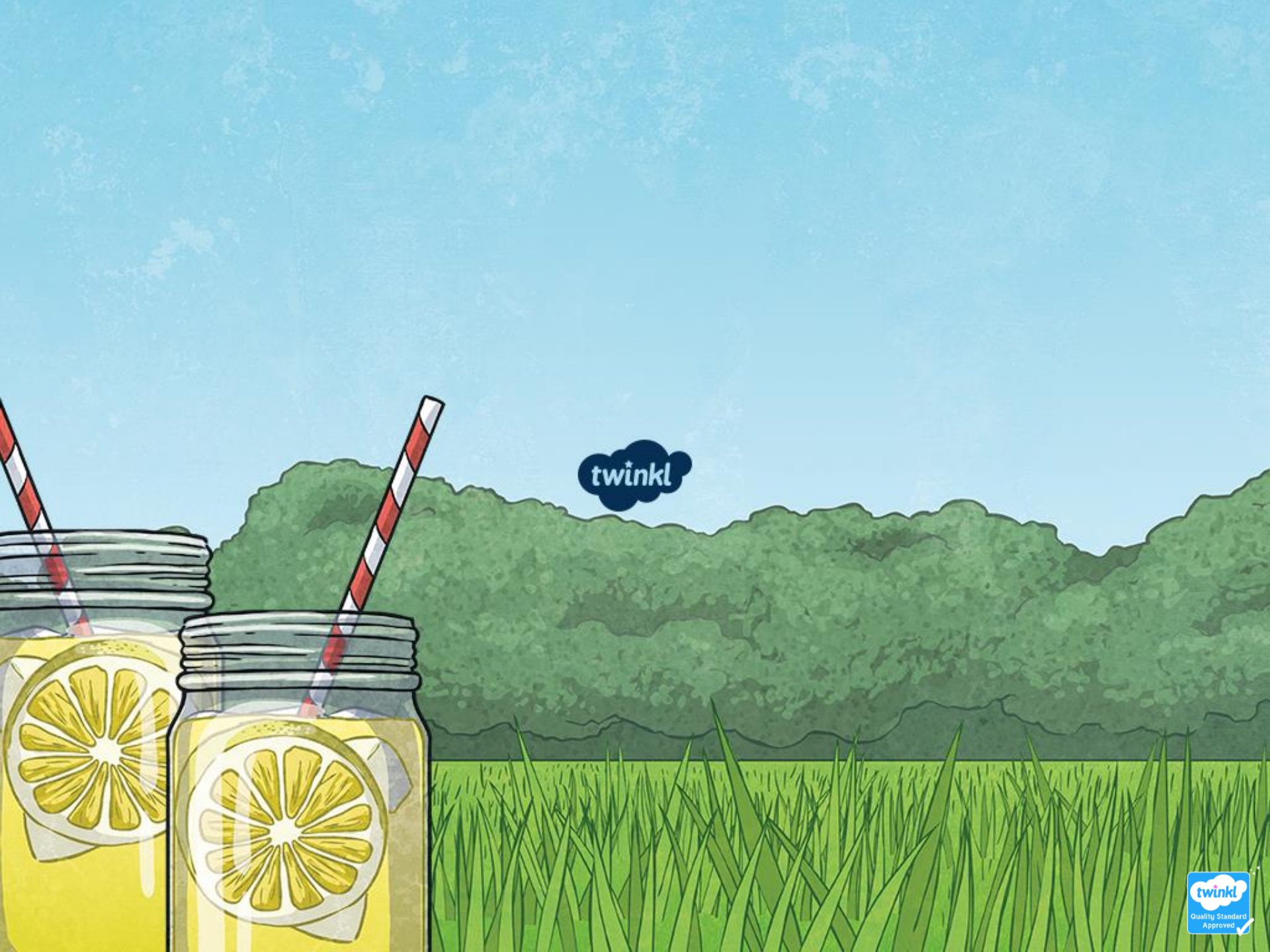
Solve problems involving number up to three decimal places.

For more planning resources to support this aim, [click here](#).



Twinkl PlanIt is our award-winning scheme of work with over 4000 resources.





twinkl