

19.4.21

Decimals

Learning Objective:

We are learning to add decimals bridging the whole.

I will be successful if:

- *I can partition decimals in different ways.*
- *I can use complements to 1.*
- *I can use my knowledge of place value to explain the value of each digit in numbers with 3 decimal places.*

Key Vocabulary

complement

flexible partitioning

bridging

place value

decimal places

ones

tenths

hundredths

value

digit

Flashback 4

Year 5 | Week 2 | Day 1

- 1) Add 0.63 to 0.74
- 2) Subtract 0.35 from 0.78
- 3) Round 0.81 to the nearest whole number.
- 4) How many girls are there altogether?



	Boys	Girls
Age 9	53	74
Age 10	72	81



Challenge

- 5) 2480ml = l
- 6) 1740ml = l
- 7) 4300ml = l
- 8) 125ml = l

Flashback 4

Year 5 | Week 2 | Day 1

1) Add 0.63 to 0.74 **1.37**



2) Subtract 0.35 from 0.78 **0.43**

3) Round 0.81 to the nearest whole number. **1**

4) How many girls are there altogether?

	Boys	Girls
Age 9	53	74
Age 10	72	81

155



Challenge

5) $2480\text{ml} = 2.48\text{l}$

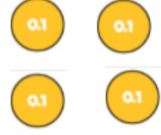


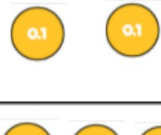


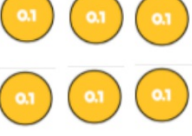


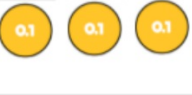


6) $1740\text{ml} = 1.74\text{l}$

7) $4300\text{ml} = 4.3\text{l}$

8) $125\text{ml} = 0.125\text{l}$

Use a place value grid to help you add these decimals.

$$0.453 + 0.664 =$$

Ones	Tenths	Hundredths	Thousandths
			
			
			
			

Which column do you begin adding with? Why?

How can you partition this number?

Is there only one way to do this?

0.42

Flexible partitioning can help you when adding two decimals.

For example: $0.74 + 0.48 =$

$$0.74 + 0.26 + 0.22 = 1.22$$

These numbers now add up to 1. Remember to use your number bonds to help you with this.

Does it matter which number you partition?

Use flexible partitioning to add these decimals.

$$0.39 + 0.84 =$$

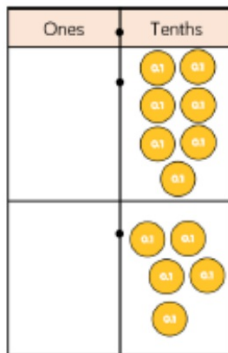
$$0.91 + 0.53 =$$

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Adding decimals that bridge the whole

Reasoning challenges

A place value grid is used to solve
 $0.7 + 0.5$



Alex thinks the answer is 0.12
What mistake has she made?

Reasoning 2 Adding – Crossing the Whole

You will need a partner and a six-sided dice for this game.



Take it in turns rolling the dice twice and placing the digits in the blank spaces above. Record the number in a table.

Swap over with your partner.

Roll the dice again and add your new number to the first number. The winner is the person who, after adding four numbers, is the closest to 1.5 without going over.

True or False ? Adding decimals – crossing the whole

Bridging can be used to add decimal numbers.