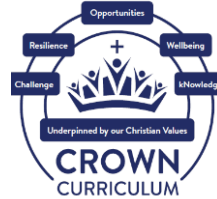


Queen's Park C.E/U.R.C Primary School Medium Term Planning: Maths



Year 5 Addition and Subtraction Progression Steps

Long Term Plan Coverage (taken from National Curriculum):

Pupils should be taught:

- *add and subtract numbers mentally with increasingly large numbers*
- *Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)*
- *use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy*
- *solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why*
- *solve problems involving number up to two decimal places*

Pre Assessment | Coverage (this covers progression step 1 and 2)

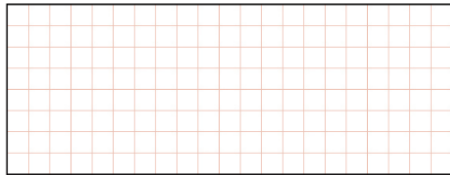
Y4 recap

Rounding numbers to the nearest 10, 100, 1000

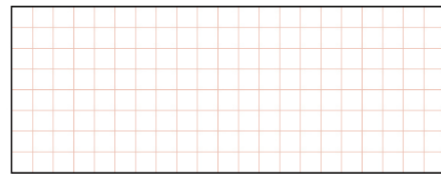
Add and subtract 1s, 10s, 100s and 1,000 (up to four digits)

Number bonds to hundred

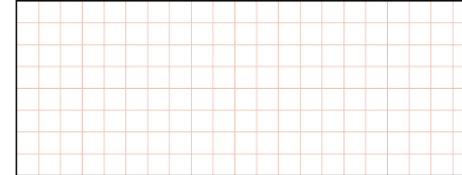
$\square = 4,500 + 600$



$\square + 3,500 = 8,400$



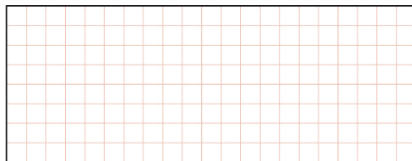
$550 - \square = 130$



7,546

Round this number:

$7,650 - 550 = \square$



to the nearest 1,000

to the nearest 100

to the nearest 10

Progression Step 1:

- add and subtract numbers mentally with increasingly large numbers

Link to National Curriculum

Add and subtract numbers mentally with increasingly large numbers

Possible Pre Learning to be revisited

Depending on your outcome of your pre-assessment, you may need to revisit the year 4 objectives (see pre-assessment coverage above)

White Rose Small Steps which could be used

Mental Strategies

Progression Step 2:

- Use rounding to calculate mentally and estimate

Link to National Curriculum

use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

Possible Pre Learning to be revisited

Depending on your outcome of your pre-assessment, you may need to revisit the year 4 objectives (see pre-assessment coverage above)

White Rose Small Steps which could be used

Round to check answers (new scheme)

Post Assessment

$370,000 + 41,000 =$

$500,000 - 5,000 =$

$980,000 - 450,000 =$

The original price of this car is £8,999



What is the sale price of the car?

£

Adam wants to use a mental method to calculate $182 - 97$

He starts from 182

Here are some methods that Adam could use.

Tick the methods that are correct.

add 3 then subtract 90

subtract 100 then add 3

subtract 7 then subtract 90

subtract 3 then subtract 100

Pre Assessment 2 Coverage (this covers progression step 3 and 4)

Y4 objectives to be recapped:

Addition of numbers up to 4 digits with no exchange

Addition of numbers up to 4 digits with one or more exchange

Progression Step 3:

- Column addition of whole numbers with more than 4 digits without exchange including problems
- Column addition of whole numbers with up to two decimal places without exchanging including solving problems (possible context of money)

Link to National Curriculum

Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
solve problems involving number up to two decimal places

Possible Pre Learning to be revisited

Children will be taught this knowledge in Year 4 and this unit should be heavily focused on reasoning and problem solving following a quick retrieval of fluency strategy. Your pre-assessment will inform how long you need to spend on this retrieval

White Rose Small Steps which could be used

No small step resource for these steps as WR includes exchange

Progression Step 4:

- Column addition of whole numbers with more than 4 digits with exchange including problems
- Column addition of whole numbers with up to two decimal places with exchanging including solving problems (possible context of money)

Link to National Curriculum

Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
solve problems involving number up to two decimal places

Possible Pre Learning to be revisited	Children will be taught this knowledge in Year 4 and this unit should be heavily focused on reasoning and problem solving following a quick retrieval of fluency strategy. Your pre-assessment will inform how long you need to spend on this retrieval
White Rose Small Steps which could be used	Add whole numbers with more than four digits

Post Assessment

(This should be a range of fluency, problem solving and reasoning questions assessing the objectives above)

Pre Assessment 3 Coverage (this covers progression step 4 and 5)

Y4 objectives to be recapped:

Subtraction of numbers up to 4 digits with no exchange

Subtraction of numbers up to 4 digits with one or more exchange

Progression Step 4:

- Column subtraction of whole numbers with more than 4 digits without exchange including problems
- Column subtraction of whole numbers with up to two decimal places without exchanging including solving problems (possible context of money)

Link to National Curriculum

Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)
solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why solve problems involving number up to two decimal places

Possible Pre Learning to be revisited	Children will be taught this knowledge in Year 4 and this unit should be heavily focused on reasoning and problem solving following a quick retrieval of fluency strategy. Your pre-assessment will inform how long you need to spend on this retrieval
White Rose Small Steps which could be used	No small step resource for these steps as WR includes exchange

Progression Step 5:

- Column subtraction of whole numbers with more than 4 digits with exchange including problems
- Column subtraction of whole numbers with up to two decimal places with exchanging including solving problems (possible context of money)

Link to National Curriculum	Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why solve problems involving number up to two decimal places
Possible Pre Learning to be revisited	Children will be taught this knowledge in Year 4 and this unit should be heavily focused on reasoning and problem solving following a quick retrieval of fluency strategy. Your pre-assessment will inform how long you need to spend on this retrieval
White Rose Small Steps which could be used	Subtract whole numbers with more than four digits

Post Assessment

(This should be a range of fluency, problem solving and reasoning questions assessing the objectives above)