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



## Year 6 Addition and Subtraction Progression Steps

## Long Term Plan Coverage (taken from National Curriculum):

Pupils should be taught:

- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
- Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
*Make sure your problem solving includes units of measure throughout this unit and multi-step problems


## Pre Assessment I Coverage (this covers progression step I)

Year 5 curriculum for mental calculation including:
*counting forwards and backwards in multiple of powers of 10
*number bonds
*using place value knowledge of powers of 10 to add and subtract mentally


## Progression Step I:

- Add and subtract numbers with increasing value using mental methods (Make sure you teach the skill of estimation throughout this step)
Link to National - Use estimation to check answers to calculations and determine, in the context of a problem, Curriculum Possible Pre Learning to be revisited
White Rose Small Steps which could be used


## Post Assessment End Point

23,005 - $\square$ $=21,006$



| Cars for sale: price list |
| :---: |
| Car A $£ 2,750$ |
| Car B |
| Car C |
| £29,500 |
| Car D |
| $£ 45,099$ |

a) Estimate the total cost of all four cars.

Car B $£ 19,500$
Car C $£ 24,999$
Car D $£ 45,000$

Cars for sale: price list

$$
\begin{array}{ll}
\text { Car A } & £ 2,750 \\
\text { Car B } & £ 19.500 \\
\text { Car C } & £ 24,999 \\
\text { Car D } & £ 45,000 \\
\hline
\end{array}
$$

b) Estimote the difference in price between the most expensive car and the least expensive car.
$3,050,020=3,000,000+\square+20$


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

Year 5 abjectives to be recapped including:
*Addition of 4- and 5-digit numbers using a formal method (including regrouping)
*Addition of numbers with up to 3 decimals places using formal methods (including regrouping)


Progression Step 2:

- Column addition of whale numbers with more than 4 digits without exchanging including solving problems - Column addition of numbers with up to 3 decimals places without exchanging including solving problems

Link to National Curriculum

- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
- Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
Possible Pre Children will have been taught this knowledge in Year 5 and this unit should be heavily focused

Learning to be revisited
White Rose Small Steps which could be used.

## Progression Step 3:

- Column addition of whole numbers with more than 4 digits with exchanging including solving problems
- Column addition of numbers with up to 3 decimals places with exchanging including solving problems


## Link to National

 Curriculum
## Possible Pre

Learning to be revisited

## White Rose Small

Steps which could be used

- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
- Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
Children will have been taught this knowledge in Year 5 and this unit should be heavily focused on reasoning and problem solving following a quick retrieval of the fluency strategy. Your pre assessment will inform how long you need to spend on this retrieval. Children who are not secure in the earlier step will need targeted intervention before this step.
Add and subtract integers (new scheme)
*The old scheme breaks it down further which may be useful for children who require more support


## Post Assessment End Point

$89,994+7,643=\square$
207163
+421221


## Bilbo needs to restock his pantry.

He spends $£ 24.79$ on cheese, $£ 32.76$ on fruit and veg and $£ 56.90$ on plates.

What is the total cost of Bilbo's shopping?

Mr Green drives a lorry. Last week he drove 19,765 miles, 23,082 miles and 16,435 miles on his 3 journeys. This week he drove 30,932 miles and 26,975 miles on his 2 journeys.

How many miles has he driven altogether over the last two weeks?

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

## Year 5 objectives to be recapped including:

* Subtraction of 4- and 5-digit numbers using a formal method (including regrouping)
* Subtraction of numbers with up to 3 decimals places using formal methods (including regrouping)




## Progression Step 4:

- Column subtraction of whole numbers with mare than 4 digits without exchanging including solving problems (including missing digits)
- Column addition of numbers with up to 3 decimals places without exchanging including solving problems (including missing digits)
Link to National Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use Curriculum


## Possible Pre Learning to be revisited

White Rose Small Steps which could and why
Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
Children will have been taught this knowledge in Year 5 and this unit should be heavily focused on reasoning and problem solving following a quick retrieval of the fluency strategy. Your pre assessment will inform how long you need to spend on this retrieval.

Add and subtract integers (new scheme)
*The old scheme breaks it down further which may be useful for children who require more support be used

## Progression Step 5:

- Column subtraction of whole numbers with more than 4 digits with exchanging including solving problems (including missing digits)
- Column addition of numbers with up to 3 decimals places with exchanging including solving problems (including missing digits)
Link to National Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use Curriculum


## Possible Pre Learning to be revisited

## White Rose Small Steps which could be used

 and whyUse estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy.
Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate
Children will have been taught this knowledge in Year 5 and this unit should be heavily focused on reasoning and problem solving following a quick retrieval of the fluency strategy. Your pre assessment will inform how long you need to spend on this retrieval. Children who are not secure in the earlier step will need targeted intervention before this step.
Add and subtract integers (new scheme)
*The old scheme breaks it down further which may be useful for children who require more support

## Post Assessment End Point



- 80,978 people attended match 1
- 72,319 people attended match 2

How many people attended match 3 ?


Each shape stands for a number.


Total $=45$
Work out the value of each shape


