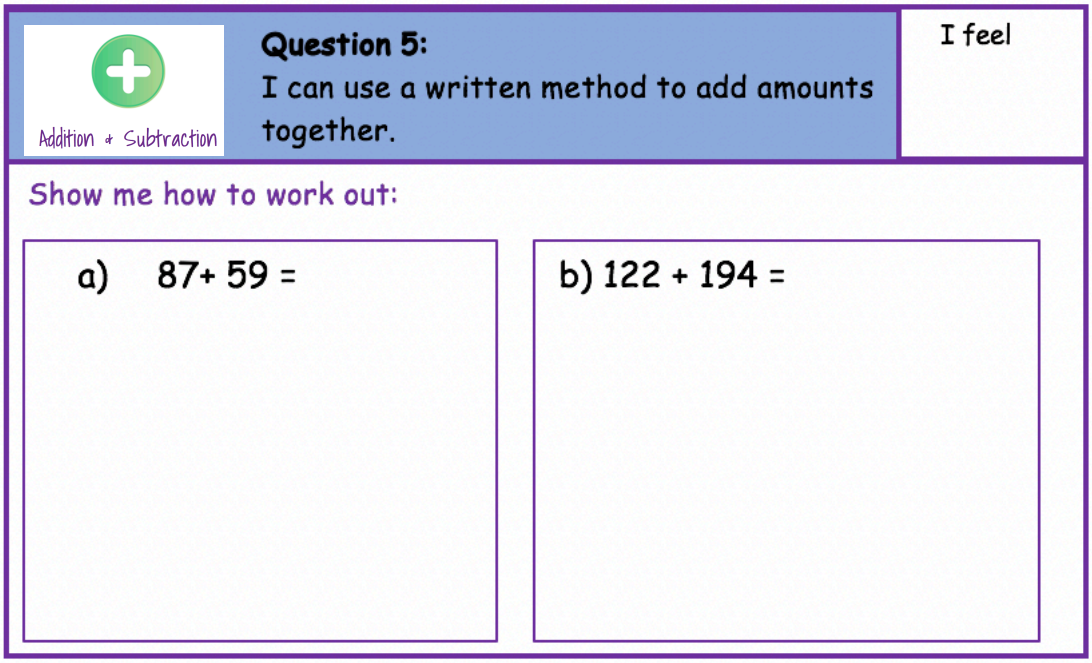
Addition Prior Learning Assessment Question 5:

LO: I am beginning to use a written method to add amounts (including carrying)

NC: NAS2 add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction

Assessment Questions:

Prior Learning:

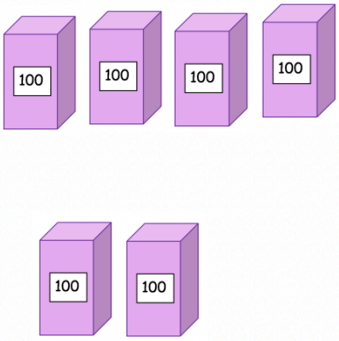
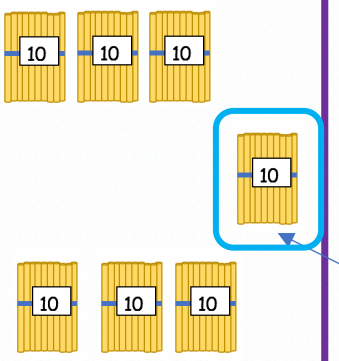
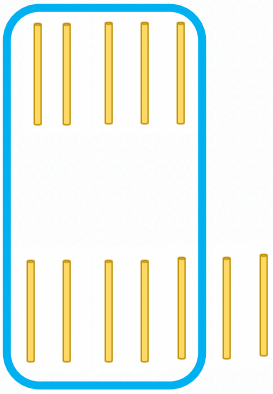


Teacher Input Ideas: The input and activities may need to be split over more than one lesson. The children should also have completed lesson Question 4 to ensure that they have been introduced to informal written methods before attempting these activities that include carrying.

Discuss and model strategies that the children have used for question 4 and 5 in the prior learning assessment. Encourage the children to suggest methods they can use and talk through each stage of the calculation. Below are suggestions as to how to model using the methods that have previously been taught with carrying.

435 + 237=

I have made a group of ten so I need to carry this/ place this in the tens column so it can be added with the other tens.

hundreds	tens	ones
		
600	+ 70	+ 2

Next step is to use a grid to help to partition.

hundreds	tens	ones	
400	30	5	
200	30	7	
600 +	60	+ 12	= 672

Encourage the children to suggest how else the twelve can be partitioned. Some children may suggest putting the ten with the other tens.

Children should then think about moving away from the grid and partitioning these into HTO in number sentences.

H T O

400 + 30 + 5

200 + 30 + 7

600 + 60 + 12 = 672

Encourage the children to suggest how else the twelve can be partitioned. Some children may suggest putting the ten with the other tens.

Purple Practice: Most suited for children who will benefit from practically adding amounts using images on a place value chart to develop understanding of how a group of ten or hundred is made when adding amounts.

Practical: Provide the children with digit cards to make their own three digit numbers. Ask the children to say what the amount is. Record the different numbers created as a group task and create addition sums together. Try to ensure that a range of sums are created so that the children also have opportunities to create new groups of ten and hundred. For this activity, the children should secure their understanding of partitioning to add 2 amounts together and use practical resources such as in lesson Question 4 to calculate the answer. Encourage the children to discuss what happens when the digits 7 and 5 are added. What has been created? How are we going to add this to the groups we already have? Also repeat with amounts that make a group of a hundred.

Green Practice: Most suited for children who demonstrate some understanding in Question 5 and are able to partition amounts when adding.

This activity is laid out the same as Question 4 Green Activity so the children should be familiar with using this format and are ready to complete addition sums where groups of ten or hundred are formed when added together. Activity 1 contains sums where a group of ten is made when the units are added. Activity 2 contains sums where a group of hundred is made when the tens are added.

Yellow Practice: **Most suited for children who show confidence in partitioning numbers without using a place value grid.**

This activity is laid out the same as Question 4 Yellow Activity so the children should be familiar with using this format and are ready to complete addition sums where groups of ten or hundred are formed when added together. The first half of the activity contains sums where a group of ten is made when the units are added and the second half contains sums where a group of hundred is made when the tens are added.

Mastery : Reasoning and fluency.

The children are presented with images of objects grouped in hundreds, tens and ones. The children are to look at how the straws are grouped : 100 straws in a box, 10 straws in an elastic band and individual straws. They are then to work out if the children in the problem need to put straws into a box or an elastic band when they add different combinations of straws together. They should explain how they have worked out the answers and show understanding of how groups of ten and hundred are formed.

Answers

Green:

Activity 1:

233	380	593

Activity 2:

415	406	629

Yellow:

281	93	97
353	583	119
827	603	754

Mastery:

First combination: a box of hundred straws will be created

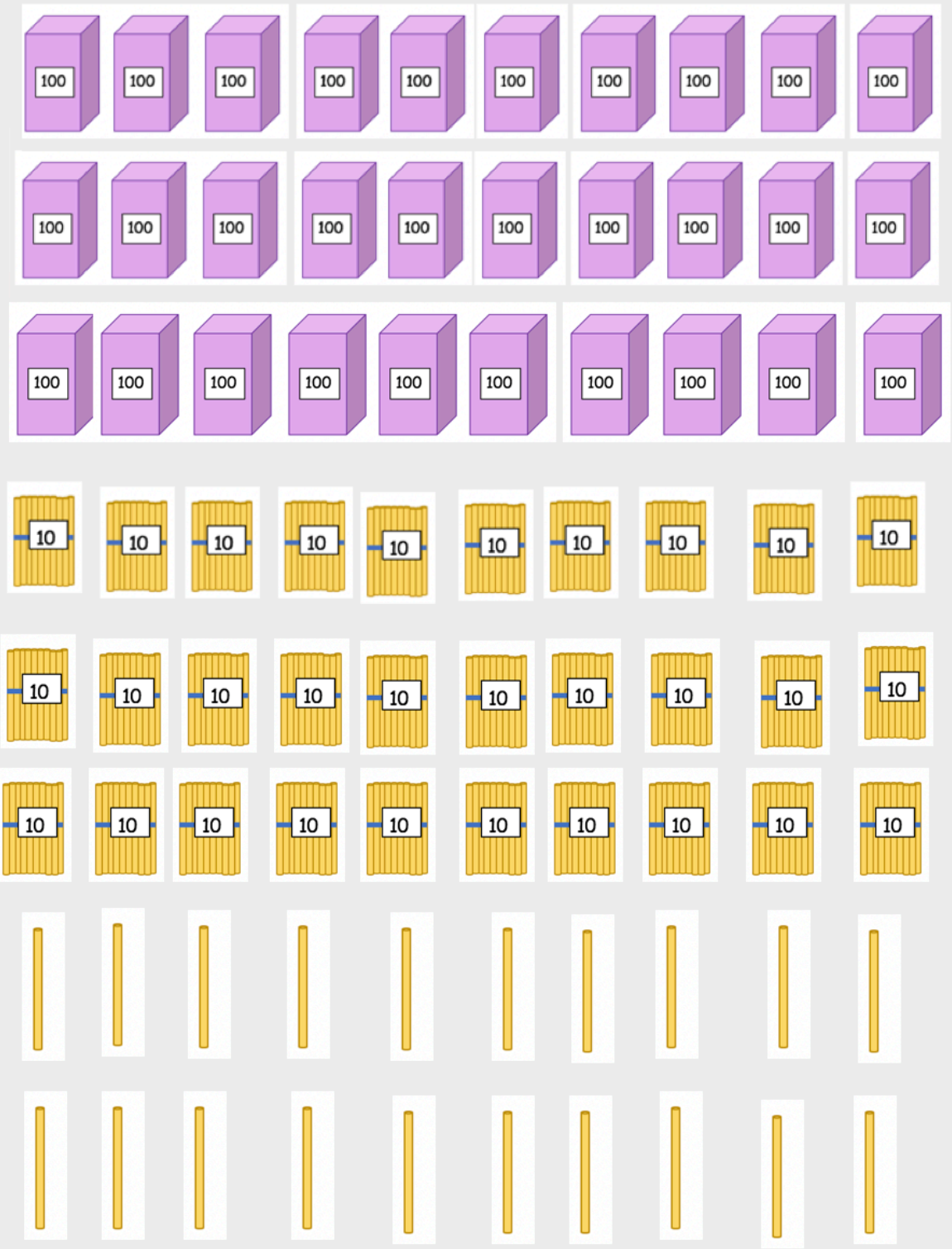
Second combination: a group of ten will be created

Third combination: a box of hundred straws will be created.

BRICKWORK Mathematics

Purple Practice

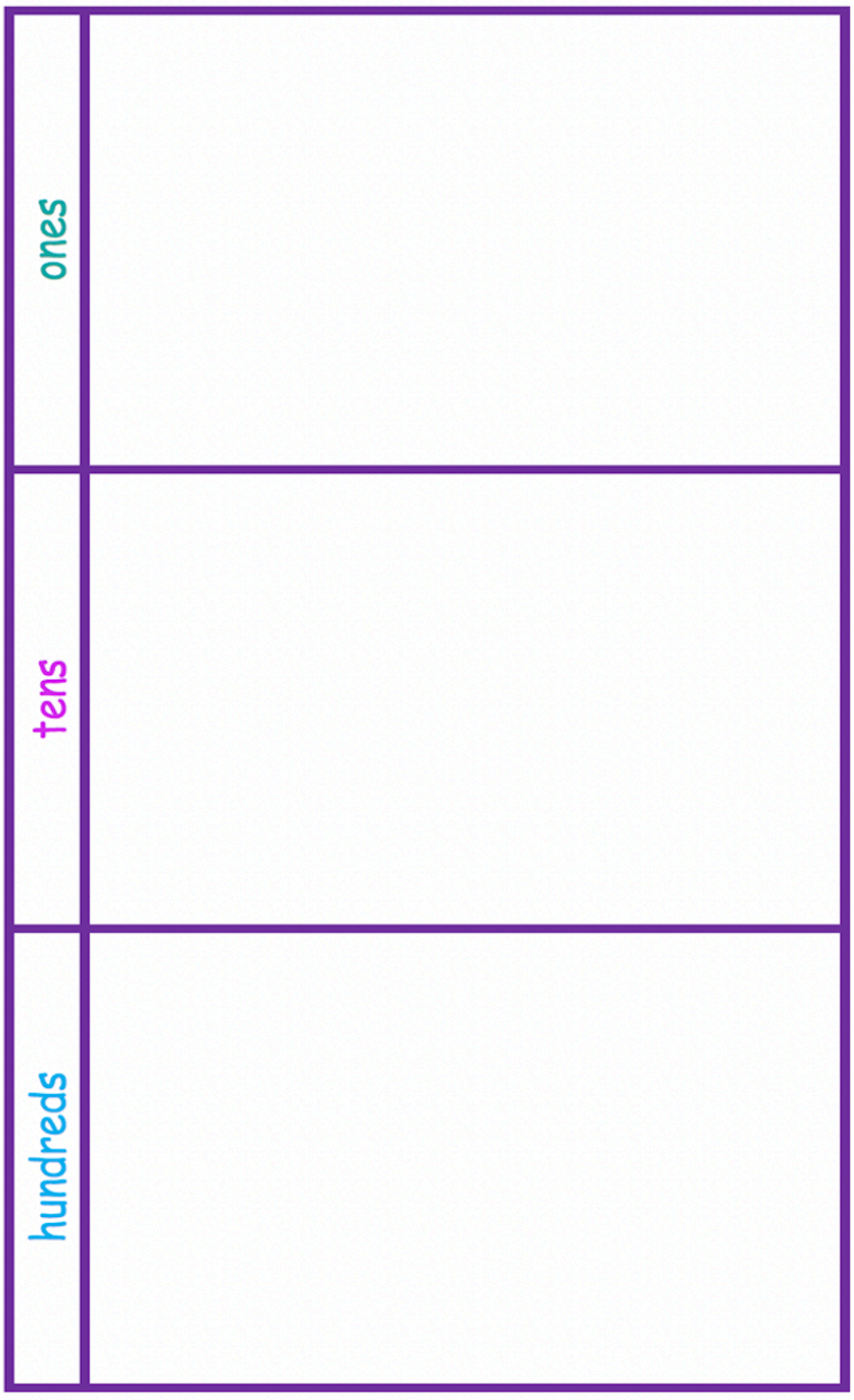
Resource Sheet



BRICKWORK Mathematics

Purple Practice

Practical resource



BRICKWORK Mathematics

Green Activity 1

LO: I am beginning to carry amounts when using a written method.

Add these amounts together. Can you use the place value chart and partitioning to help you?

109 + 124

hundreds	tens	ones

=

213 + 167

hundreds	tens	ones

=

435 + 158

hundreds	tens	ones

=

BRICKWORK Mathematics

Green Activity 2

LO: I am beginning to carry amounts when using a written method.

Add these amounts together. Can you use the place value chart and partitioning to help you?

252 + 163

hundreds	tens	ones

=

291 + 115

hundreds	tens	ones

=

365 + 264

hundreds	tens	ones

=

BRICKWORK Mathematics

Yellow Activity

LO: I can add 2 and 3 digit amounts using partitioning and a written method. (Carrying)

Add each set of amounts together using a written method.

145 + 136 =

H T O

100 + 40 + 5

100 + 30 + 6

200 + 70 + 11 = 281

68 + 25 =

T O

79 + 18 =

T O

119 + 234 =

H T O

256 + 327 =

H T O

67 + 52 =

H T O

256 + 571 =

H T O

371 + 232 =

H T O

456+ 298 =

H T O

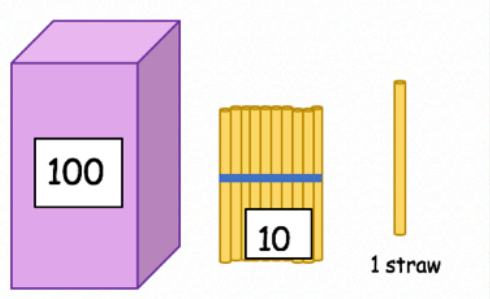
Can you explain how you worked out each answer?

Mastery

Sami and Aleena are collecting straws for the school fete.

They group the straws into hundreds, tens and ones.

When the children have ten straws they put them into an elastic band. When they have one hundred straws these are put into a box.



Look at the groups of straws they have collected so far. The children want to start adding groups of straws. Look at each combination and work out if a box of hundred straws will be created.