Place Value Question 7 and 8

Objective: I can write 3 digit amounts up to 300.

I can write 3 digit amounts when a zero is needed.

NPV5 read and write numbers up to 1000 in numerals and in words

Assessment Question 7 and 8

Prior Learning:

Number + Place Value	**Question 7:** I can write 3 digit amounts up to 300	I feel

Write these amounts down using digits.

One hundred and fifty four.	
One hundred and ninety one.	
Two hundred and sixteen.	

Prior Learning:

Number + Place Value	**Question 8:** I can write 3 digit amounts when a zero is needed	I feel

Write these amounts down using digits.

One hundred and seven.	
Two hundred	
One hundred and ninety.	

Input Ideas:

- Recap the word digits which is used in question 7/8. What is the meaning of this? Explore the meaning of the words numeral, digits and figures. Create a display of this vocabulary around the classroom so that the children become familiar with it.
- Following on from previous learning, place a large amount of items at the front of the classroom. Ideas are: pasta shapes, buttons, paper clips, stickers, rice grains, marbles and bottle tops. Ask the children to estimate how many items they think are there. Ask the children to write their estimate down in figures. Encourage the children to share their answers. Using a large place value chart, model how to write a number more than one hundred. How do we know it will have 3 digits? This can also be modelled alongside objects grouped in hundreds to show the children how they are formed, recapping on previous learning. Encourage the children to explain how the 3 digit number is created. Once the children have made one estimate, give the children more guidance to help them make more accurate estimates and to encourage them to write another 3 digit number. Such as showing them a group of 50 of the same item so that they can try to estimate and compare the 2 groups. Once the children have made 3 estimates and you have explored how these can be recorded in figures, count the objects together, looking for children who may make errors when crossing boundaries of ten and hundred.
- Ask one child to think of a number more than 100 but less than 300. Children to ask questions to work out what the number is? Does the number have an even number of hundreds? Does the number have more than 5 tens? Ask the children to write down their guesses ensuring that children can explain how they have written the number. Look for any misconceptions and ensure that these are addressed. Also ensure that numbers where a zero is needed as a place holder are suggested too. What if I wanted to write two hundred and forty? What digits will I need? Why? Why do I have to use a zero? What would this amount look like in objects grouped in tens or using base ten? What will this look number like on a place value chart? Can you explain how you knew what digits to use and where to place a zero? What if I want to write two hundred and four, how does this differ?

Practice Activities

Purple Practice: most suited for children who demonstrated difficulty in Question 7 and will benefit from using practical resources and place value charts to secure understanding .

Use the objects that you have already formed in pervious lessons. The children should be familiar with these and be able to state how many is in each group. Ask the children to explain how they know and why we have done this.

Then look at 3 digit numbers such as 121,234, 167, 114, 289. Ask the children to show you each amount using the resources. Place these on to the place value chart provided if this helps the children to see how 3 digit numbers are formed. Once the children show confidence, encourage the children to replace the objects with a digit, recapping what each digit means and why we have made a 3 digit number.

Green Practice: Most suited for children who need to secure writing 3 digit amounts and demonstrated some misconceptions in Question 7.

For this activity the children are provided with 3 digit amounts written in words. Encourage the children to read aloud the amounts written in words. Once the children are clear with this amount, ask them to write these amounts in figures. Discuss the use of the vocabulary such as digits, figures and numerals, as they children may not understand the meaning of this vocabulary. Some children may make errors with numbers that contain teen numbers so look for any misconceptions here.

Yellow Practice most suited for children who made errors in question 8 and will benefit from writing amounts when a zero is needed.

The yellow activity is the same as the green activity, however the amounts the children are provided with contain zeroes. The children need to be able to explain how they can write the number down using digits and why we use zeroes. What if the zero was not there, how will it change the amount? Why do we need to use 3 digits? Why can't we use 2 digits? Why can't we use 4 digits? For example if I have 100 sweets and add 1 more why can't I write 100 first and then add a one digit? (100 and 1 = 1001). Children may benefit from the use of a place value chart to explain their understanding .

Mastery

For this activity, the children are provided with amounts written in words. The children are to use their prior knowledge of how items can be grouped into hundreds, tens and ones to create 3 digit numbers. The children are to read the amount each person has and draw the correct amounts in the baskets using the images for hundred, tens and ones. If children are finding this difficult, you could have a shop set up and children take it in turns to be the customer and the shop assistant. The children could have sweets in groups of hundreds, tens and ones. The customers to take it in turns to read aloud amounts and then the sales assistant to make that many amounts with the grouped items and write the total amounts they have on a receipt.

Answers:

Green:

1 a) 154	b) 262	c) 182
d) 217	e) 191	f) 211

Yellow:

1) 107	2) 204	3) 120
4) 260	5) 53	6) 300

Mastery:

168 sweets

215 sweets

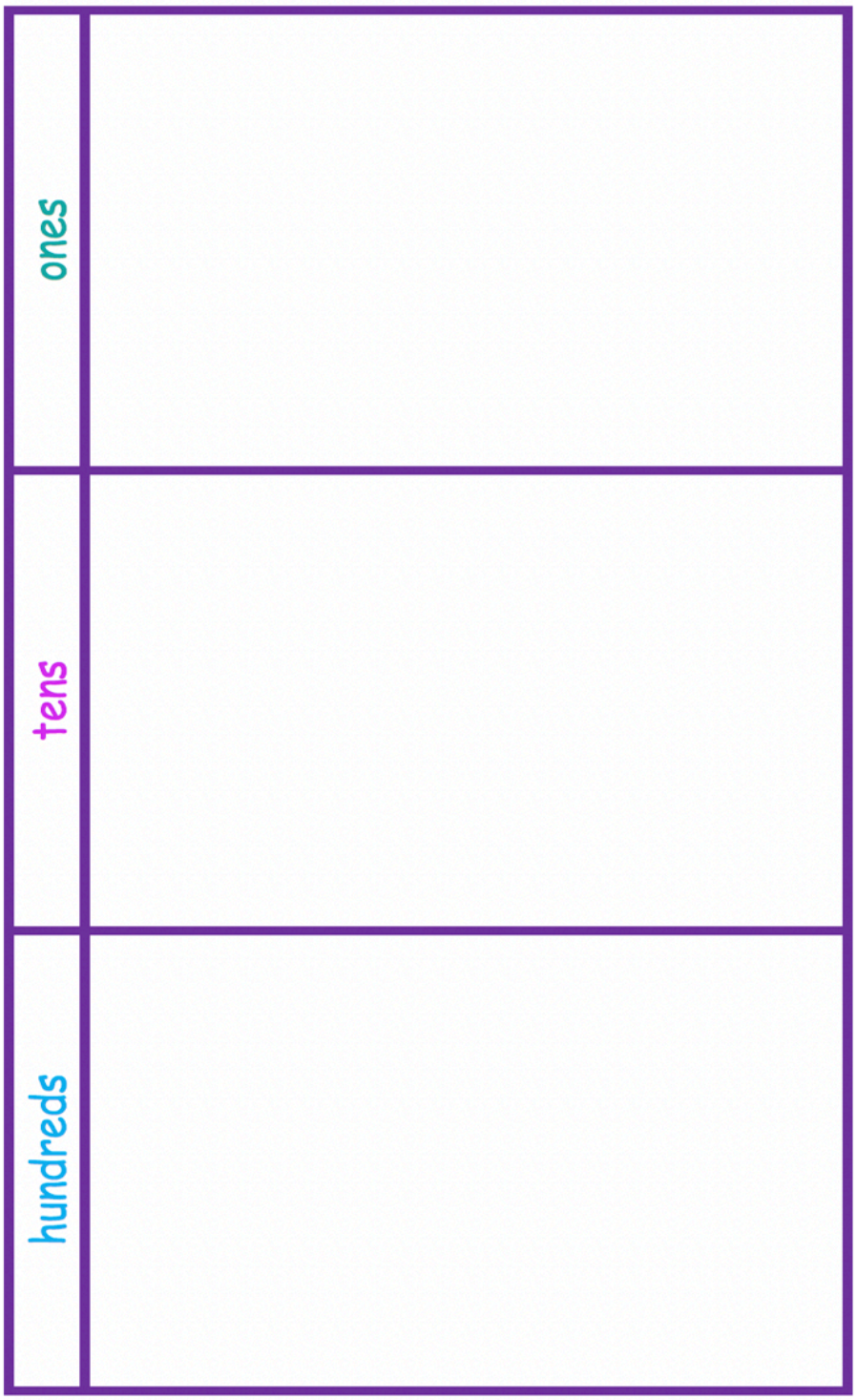
130 sweets

207 sweets

BRICKWORK Mathematics

Purple Practice

Practical resource



BRICKWORK Mathematics

Green Practice

I can write amounts in figures.

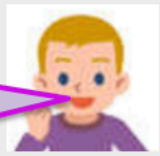
Read the amount said aloud by each child. Write these down using digits.

a)

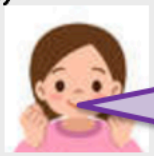
One hundred and fifty four.

b)

Two hundred and sixty two.



c)



One hundred and eighty two.

d)

Two hundred and seventeen.

e)

One hundred and ninety one.

f)

Two hundred and eleven.

Challenge:

Think of a number more than one hundred and fifty but less than two hundred and fifteen. Write this in figures.

BRICKWORK Mathematics

Yellow Practice

I can write amounts in figures.

Read the amount said aloud by each child. Write these down using digits.

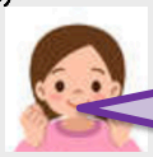
a)

One hundred and seven.

b)

Two hundred and four.

c)



One hundred and twenty.

d)

Two hundred and sixty.

e)

Fifty three.

f)

Three hundred.

Challenge:

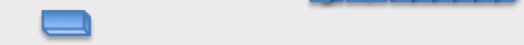
Think of an odd number more than two hundred but less than two hundred and fifteen. Write this in words and figures.

BRICKWORK Mathematics

Mastery

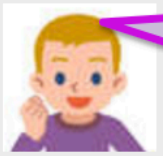
Fluency

Draw the correct amounts of sweets in each basket and write the total number of sweets underneath.



1 sweet

10 sweets



One hundred and sixty eight sweets please.

Two hundred and fifteen sweets please.

One hundred and thirty sweets please.

Two hundred and seven sweets please.