



Maths

Number and Place Value



Need a coherently planned sequence of lessons to complement this resource?

Assessment Statements
By the end of this unit;

children working towards the expected level will be able to:

- continue number sequences;
- recognise numbers in a variety of ways;
- partition numbers into hundreds, tens and ones;
- read simple numbers up to 1000 in numerals and words;
- count in multiples of 4, 8, 50 and 100 from zero;
- find 10 more or less than a given number up to 100;
- find 100 more or less than a given number up to 500;
- compare numbers using inequality and equality signs;
- order numbers up to 1000;
- solve simple problems involving place value of three digit numbers.

children working at the expected level will be able to:

- read numbers up to 1000 in numerals and words;
- recognise multiples of four;
- recognise multiples of eight;
- recognise multiples of 50;
- recognise multiples of 100;
- find missing numbers in a given sequence;
- solve problems involving multiples;
- solve problems involving place value;
- solve problems involving partitioning;
- solve problems involving comparing numbers;
- solve problems involving numbers, measurement;
- solve place value problems involving money.

Introduction

In this unit, the children will read and write numbers up to 1000 in numerals and in words and continue to identify the value of individual digits in a three-digit number. They will identify, represent and estimate numbers using different representations and compare and order numbers up to 1000 using mathematical vocabulary and symbols. Children will focus on counting from 0 in multiples of 4, 8, 50 and 100 and find 10 or 100 more or less than a given number. Finally, children will have the opportunity to use all of their number and place value skills to solve a range of problems.

Teacher Note: The year 3 place value objective count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number is closely linked to the Y3 Multiplication and Division objective recall and use multiplication and division facts for the 3, 4 and 6 multiplication tables. Please head over to the Multiplication and Division Topic Area to find some more super lessons to support counting in multiples of 4 and 8.

Resources
A range of practical apparatus to support children's understanding of place value, such as:

- base ten blocks
- interlocking cubes
- items which can be grouped into tens, such as straws
- place value grids
- place value flip charts
- place value counters
- ten-flames

Number and Place Value

Maths | Year 3 | Stage 16 Progression Overview

The aim of this overview is to support teachers using PlanIt Maths to show the most coherent and progressive sequence to teach each area of maths. We also want to fully support teachers who use the White Rose Maths scheme of learning to make full use of the resources available within PlanIt Maths. Wherever possible, lesson packs have been matched to each of the small steps on the White Rose Maths scheme of learning.

Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value			Number: Addition and Subtraction				Number: Multiplication and Division		Consolidation		
Spring	Number: Multiplication and Division		Measurement: Money	Statistics	Measurement: Length and Perimeter		Number: Fractions		Consolidation			
Summer	Number: Fractions		Measurement: Time		Geometry: Properties of Shape		Measurement: Mass and Capacity		Consolidation			



Counting in Hundreds





Aim

- To count in multiples of 100.

Success Criteria

- I can count forwards in steps of 100.
- I can count backwards in steps of 100.
- I can recognise multiples of 100.



Remember



Sort these numbers into the correct boxes:

75

50

300

610

150

60

250

200

350

180

105

450

500

1000

Not multiples of 50

Multiples of 50 less
than 300

Multiples of 50
that are 300 or
greater

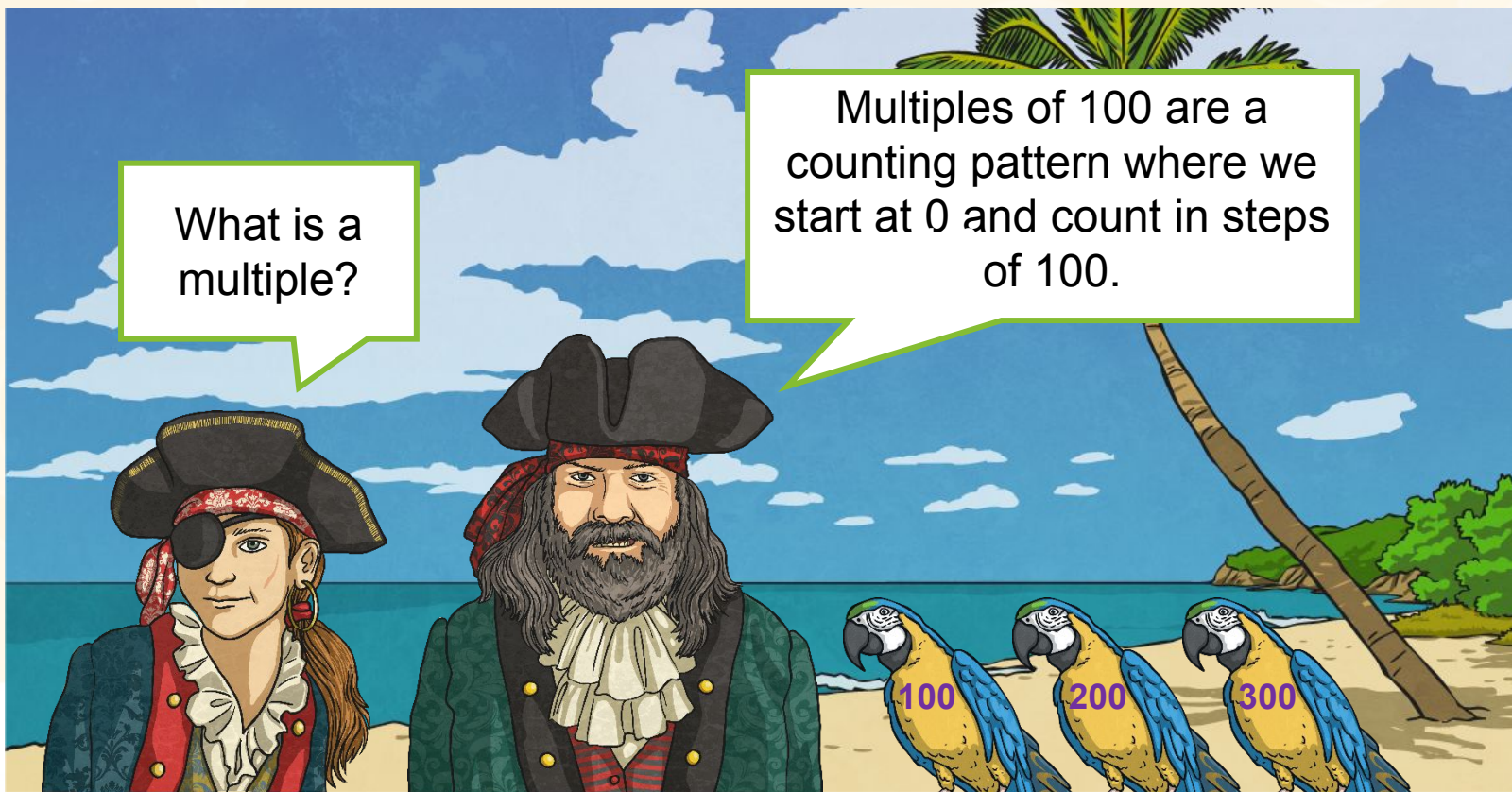


Ahoy,

Ahoy mateys! My name is Captain Greybeard. I love counting so much that I have named my parrots after multiples of 100.

What is a multiple?

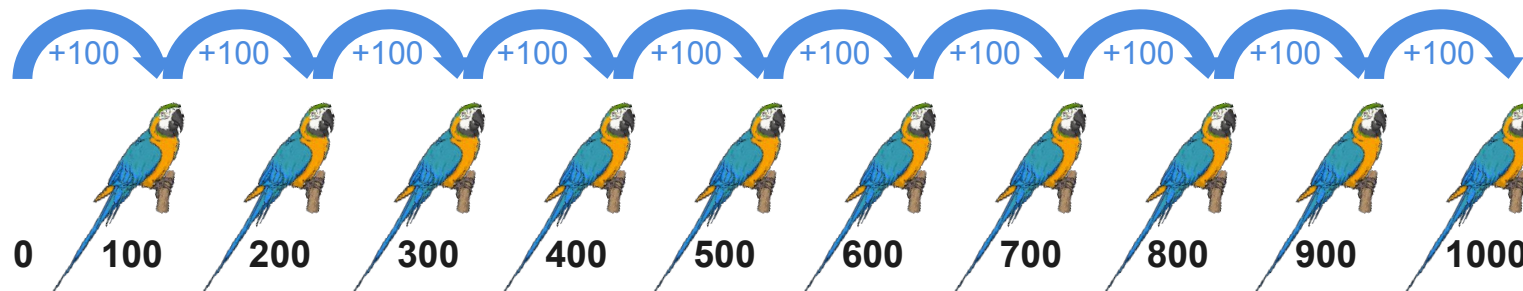
Multiples of 100 are a counting pattern where we start at 0 and count in steps of 100.





Ahoy,

Let's have a go at counting in multiples of 100.

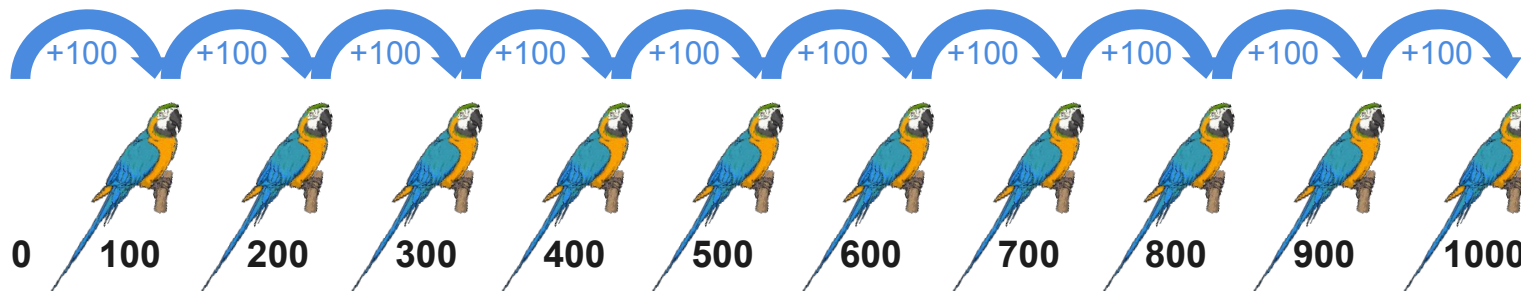


To count in multiples of 100, we are adding 100 each time.



Ahoy,

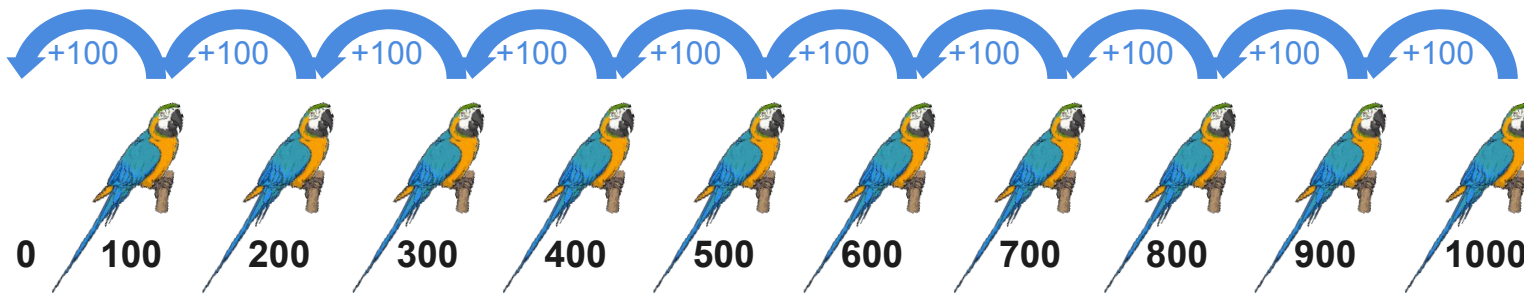
Let's have a go again, but this time I want you to predict the next number.





Ahoy,

Can you predict the next number, counting back from 1000 in multiples of 100?



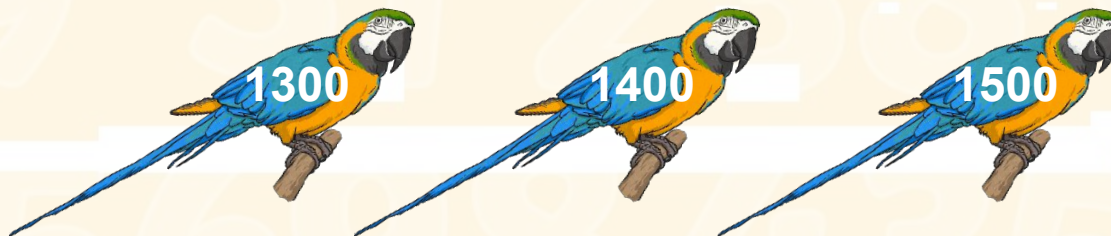


Ahoy,

What will the next parrot be?



What will be the next 3 parrots after that?



What do you notice about the multiples of 100?



Treasure



Captain Greybeard has sorted some coins into bags.

Some of the coins are in the wrong bag. Can you see the wrong ones?

Multiples of 100



Not Multiples of 100





Counting



What is the next number in the multiple of 100 sequence?





Counting



What is the next number in the multiple of 100 sequence?





Counting



What is the next number in the multiple of 100 sequence?





Counting



What is the next number in the multiple of 100 sequence?





Pirate



Multiples of 100

To count in multiples of 100.



Find the missing numbers.

700	600	<input type="text"/>	<input type="text"/>	300
900	1000	<input type="text"/>	1200	<input type="text"/>
<input type="text"/>	<input type="text"/>	1300	1200	1100

Captain Greybeard only wants coins that are multiples of 100. Circle the coins that are not multiples of 100.

700	560	120	1001	400
1500	1403	204	505	1713
870	900	1000	394	90

Captain Greybeard says, 'All multiples of 50 are multiples of 100, so all multiples of 100 are multiples of 50'. Is he correct?

S Multiples of 100 Coin Treasure Hunt

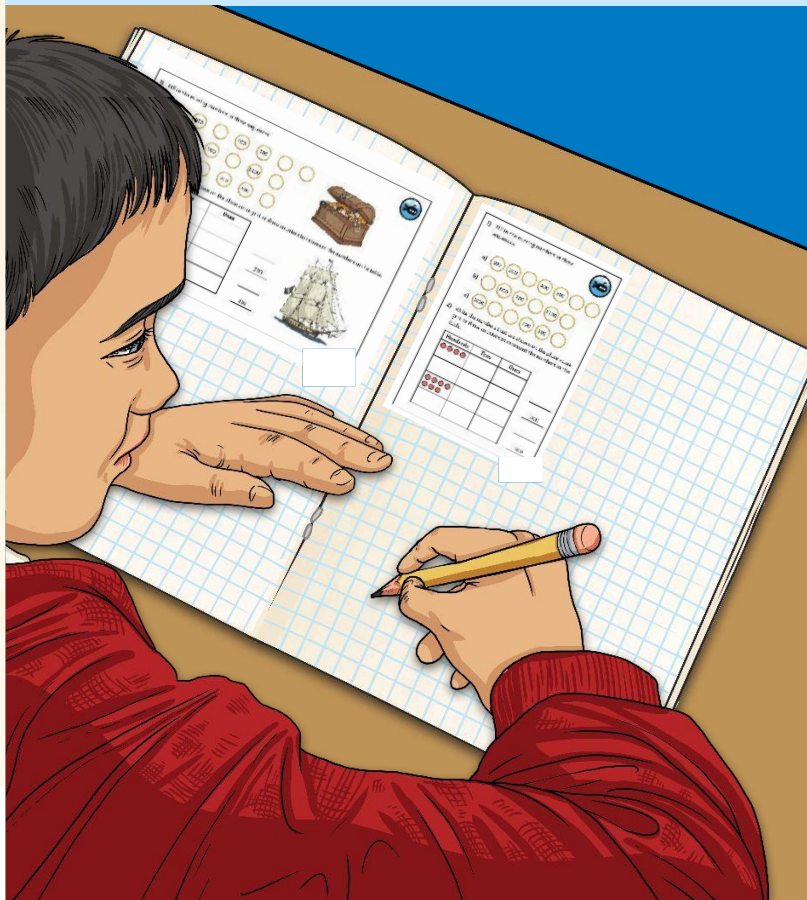




Diving into Mastery



Dive in by completing your own activity!



1) Fill in the missing numbers in these sequences:

a) 100 200 400 500

b) 800 900 1100

c) 1000 700 600

2) Write the numbers that are shown on the place value grid or draw counters to represent the numbers in the table.

Hundreds	Tens	Ones	
●●●			
●●●			700
●●●			300

1) Fill in the missing numbers in these sequences:

a) 100 200 400 500

b) 800 900 1100

c) 1000 700 600

2) Write the numbers that are shown on the place value grid or draw counters to represent the numbers in the table.

Hundreds	Tens	Ones	
●●●			
●●●			700
●●●			300

present the numbers in the table.

1) There are 100 coins in the pirate's bag.

a) How many coins would the pirate have if he had 9 bags?

b) How many bags would the pirate have to carry if he needed 600 coins?

2) The pirates' parrots have memorised some facts about hundreds. Tick or cross each fact to show whether it is true or false. Explain how you know.

a) All numbers with a zero in the ones column are multiples of 100.

b) All multiples of 100 have a zero in both the ones and tens columns.

c) All multiples of 100 have 3 digits.

d) Any number with a 1 in the thousands column is greater than 400.

1) There are 100 coins in the pirate's bag.

a) How many coins would the pirate have if he had 9 bags?

b) How many bags would the pirate have to carry if he needed 600 coins?

2) The pirates' parrots have memorised some facts about hundreds. Tick or cross each fact to show whether it is true or false. Explain how you know.

a) All numbers with a zero in the ones column are multiples of 100.

b) All multiples of 100 have a zero in both the ones and tens columns.

c) All multiples of 100 have 3 digits.

d) Any number with a 1 in the thousands column is greater than 400.



Treasur



Each bag has 100 gold coins. Here are Captain Yellowbeard's bags.
How many coins does he have altogether?

How could you use multiples of 100 to find the answer?

I have 800 gold coins altogether.





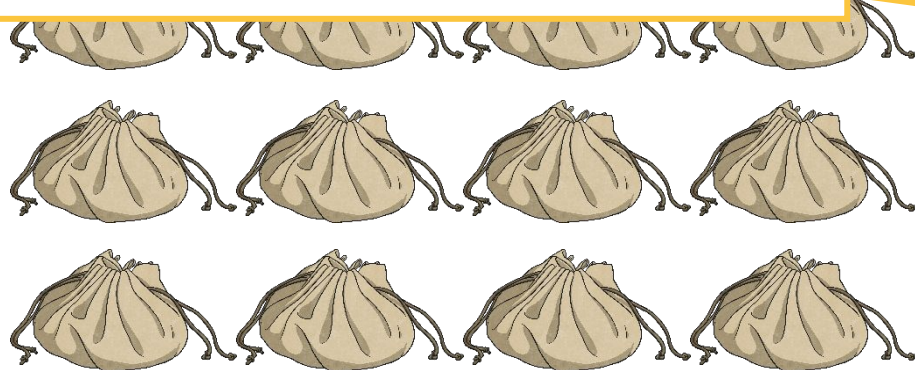
Treasure



Each bag has 100 gold coins. Here are Captain Pinkbeard's bags.
How many coins does he have altogether?

How could you use multiples of 100 to find the answer?

I have 1200 gold coins altogether.

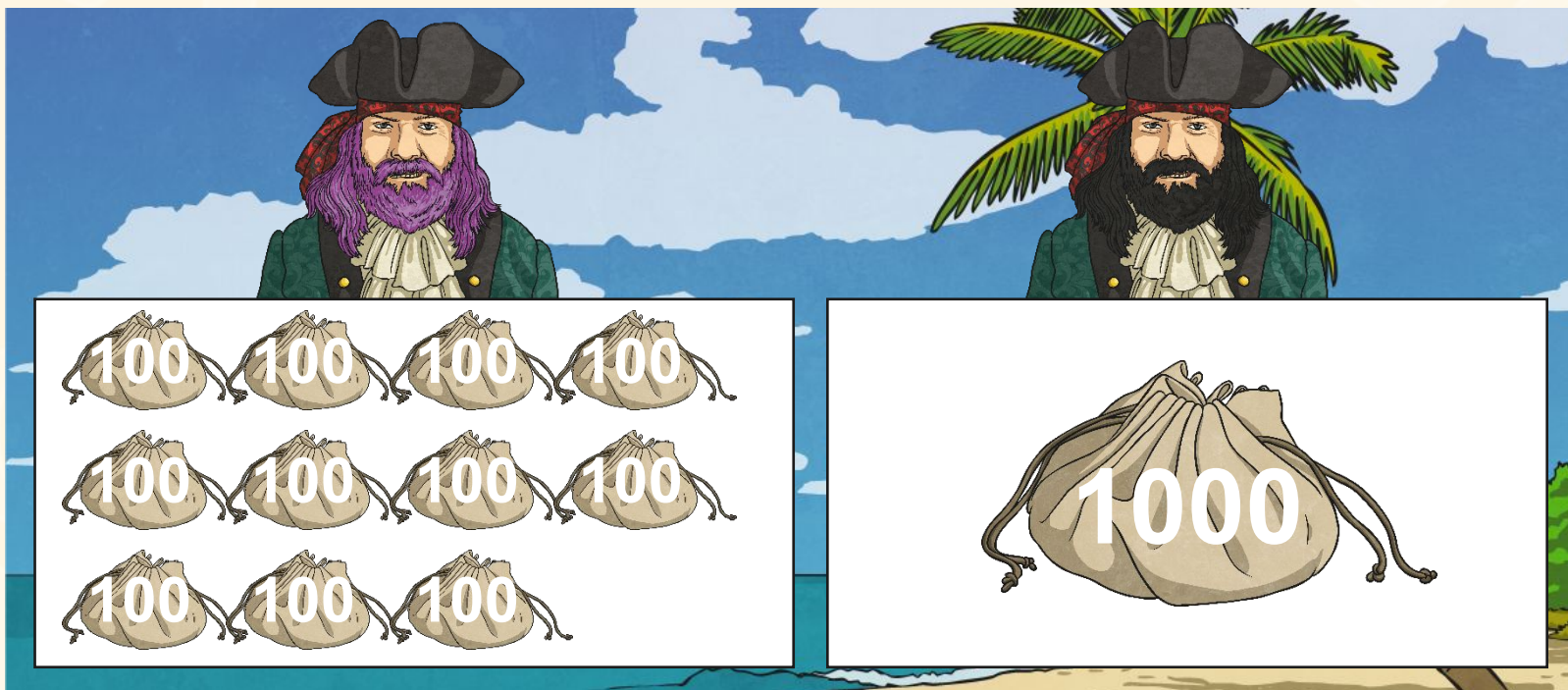




Treasur



Has Captain Purplebeard got more coins than Captain Blackbeard?
Who has the most?



Captain Purplebeard has 1100 coins.
He has 100 more coins than Captain Blackbeard.



Aim



- To count in multiples of 100.

Success Criteria

- I can count forwards in steps of 100.
- I can count backwards in steps of 100.
- I can recognise multiples of 100.

