



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 five;
- recognise multiples of 50;
- 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 8 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-sticks

Number and Place Value

Maths | Year 3 | Scope in Progression Overview

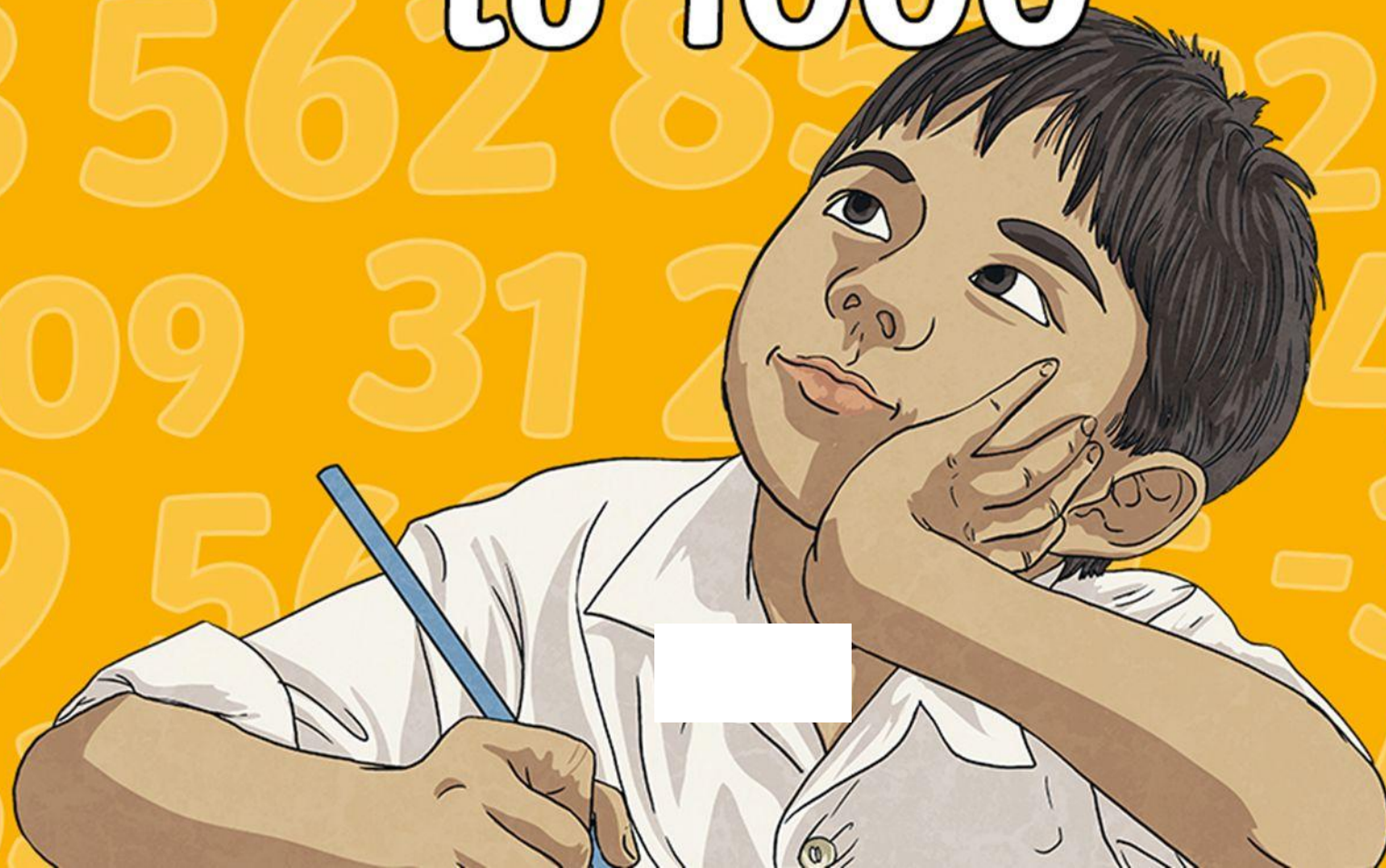
The aim of this overview is to support teachers using PlanIt Maths to show the most coherent and progressive sequence to teach each area of maths. We also want to fully support teachers who use the White Rose Maths scheme of learning to make full use of the resources available within PlanIt Maths. Wherever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



Ordering Numbers to 10000





Aim

- To order numbers up to 1000.

Success Criteria

- I can use place value to compare numbers ready to order.
- I can order numbers up to 1000 from smallest to largest.
- I can order numbers up to 1000 from largest to smallest.



Remember



Choose numbers and comparing words/phrases to make comparing sentences. One has been done for you.

319

218

550

723

598

298

499

177

508

319

628

553

is
greater
than

is
smaller
than

is
equal
to

<

>

=

218

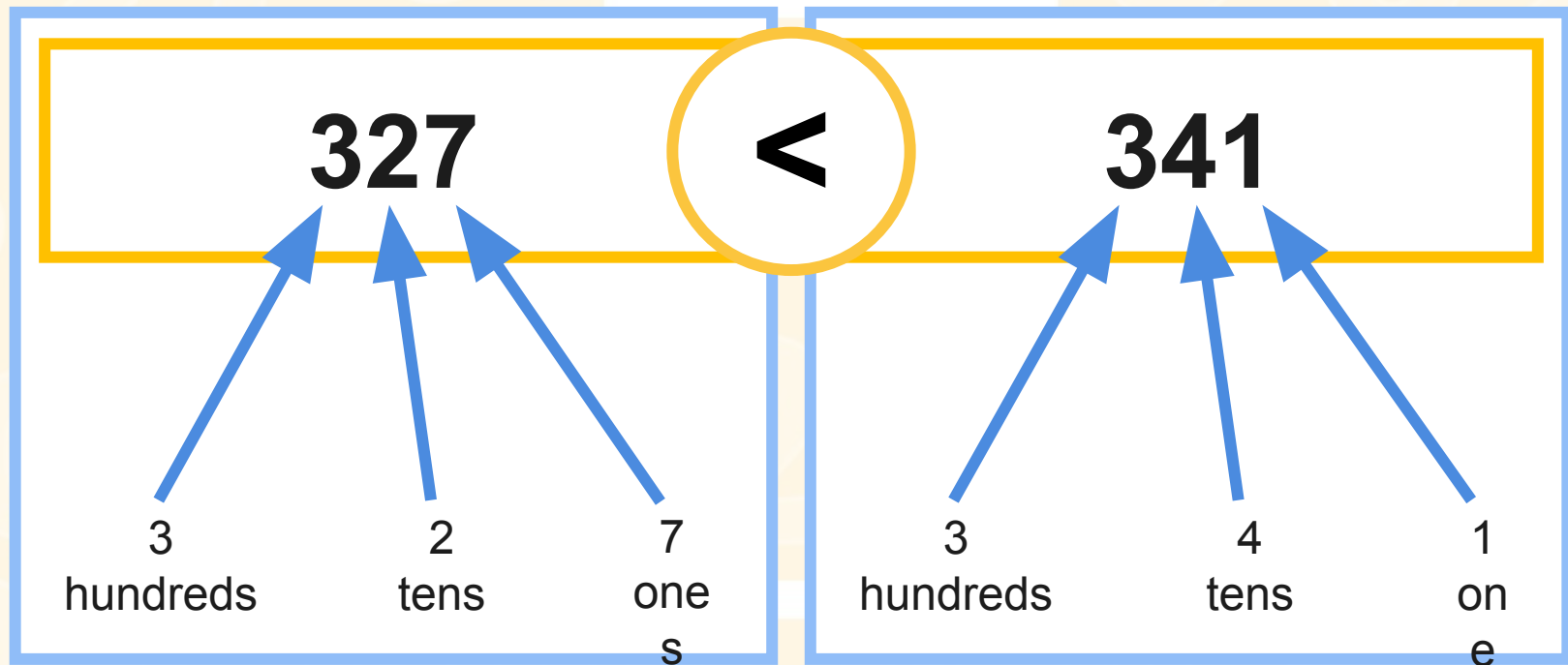
is
smaller
than

628



Comparing and Ordering Numbers

We can partition the numbers to help us compare our ideas.



Both numbers have **3** hundreds. However, **327** has just **2** tens, while **341** has **4** tens. **327** is less than **341**.



Comparing and Ordering Numbers



When ordering numbers, we use the same technique of comparing the place value of the digits in each number.

414

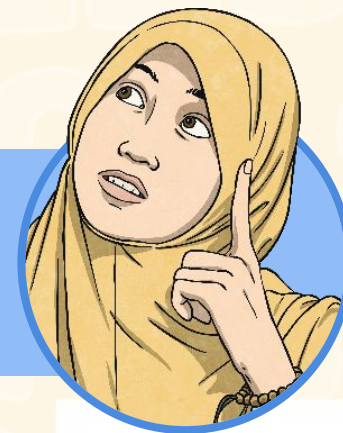
44

741

14

404

Razia puts these numbers in order from smallest to largest. Do you agree with how she has ordered them? Explain why or why not.



14

44

404

414

741



Comparing and Ordering Numbers



smallest

largest

Razia has ordered these numbers correctly.
She has compared the value of each digit in each number.

- **14** has **1** tens and **4** ones.
- **44** has **4** tens and **4** ones.
- **404** has **4** hundreds, **0** tens and **4** ones.
- **414** has **4** hundreds, **1** ten and **4** ones.
- **741** has **7** hundreds, **4** tens and **1** one.





Comparing Numbers

Razia puts these numbers in order from largest to smallest.
Do you agree with how she has ordered them?

916

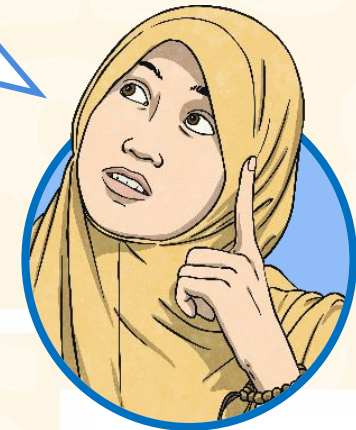
921

693

326

321

Explain why or why not.





Comparing Numbers



916

921

693

326

321

largest

smallest

Razia has not ordered these numbers correctly.

- **916** has **9** hundreds, **1** ten and **6** ones.
- **921** has **9** hundreds, **2** tens and **1** one.
- **693** has **6** hundreds, **9** ten and **3** ones.
- **326** has **3** hundreds, **2** tens and **6** ones.
- **321** has **3** hundreds, **2** tens and **1** one.



The first two numbers need to change places. They both have the same number of hundreds, but **916** has **1** ten and **921** has **2** tens.



Odd One



Here is a number sequence that goes from **smallest** to **largest**. Which numbers are in the wrong place? Where should they go?

284, 483, 482, 593, 893

284, 482, 483, 593, 893



Odd One



Here is a number sequence that goes from **smallest** to **largest**. Which numbers are in the wrong place? Where should they go?

584, 586, 702, 938, 902

584, 586, 702, 902, 938



Odd One



Here is a number sequence that goes from **smallest** to **largest**. Which number is in the wrong place? Where should it go?

563, 572, 777, 578, 589

563, 572, 578, 589, 777



Odd One



Here is a number sequence that goes from **largest** to **smallest**. Which number is in the wrong place? Where should it go?

813, 773, 938, 237, 173

938, 813, 773, 237, 173



Odd One



Here is a number sequence that goes from **largest** to **smallest**. Which number is in the wrong place? Where should it go?

573, 512, 277, 478, 289

573, 512, 478, 289, 277



Odd One

Here is a number sequence that goes from **largest** to **smallest**. Which numbers are in the wrong place? Where should they go?

430, 403, 393, 399, 292

430, 403, 399, 393, 292



Tell Me a



Ordering Numbers

To order numbers up to 1000.

Write the numbers in order to reveal the answer to the joke.

1) What gets wetter the more it dries? _____

Number					
Letter					

smallest

largest

456	792	901	234	583
O	E	L	T	W

2) What stays in the corner and travels all over the world? _____

Number					
Letter					

smallest

largest

583	893	129	485	993
A	M	S	T	P

3) What kind of key opens a banana? _____

Number						
Letter						

largest

smallest

93	584	264	701	283	834
M	K	O	E	N	Y

Ordering Numbers

smallest

11	275
U	O

largest

74	148
K	A

largest

587	823
T	A

smallest

43	713
P	O

Ordering Numbers

smallest

528
D

largest

largest

510
S

smallest

752	401
H	S

smallest

415	396
I	S

Ordering Numbers

smallest.

largest.

largest

374	471
A	D

smallest

752	401
H	S

smallest

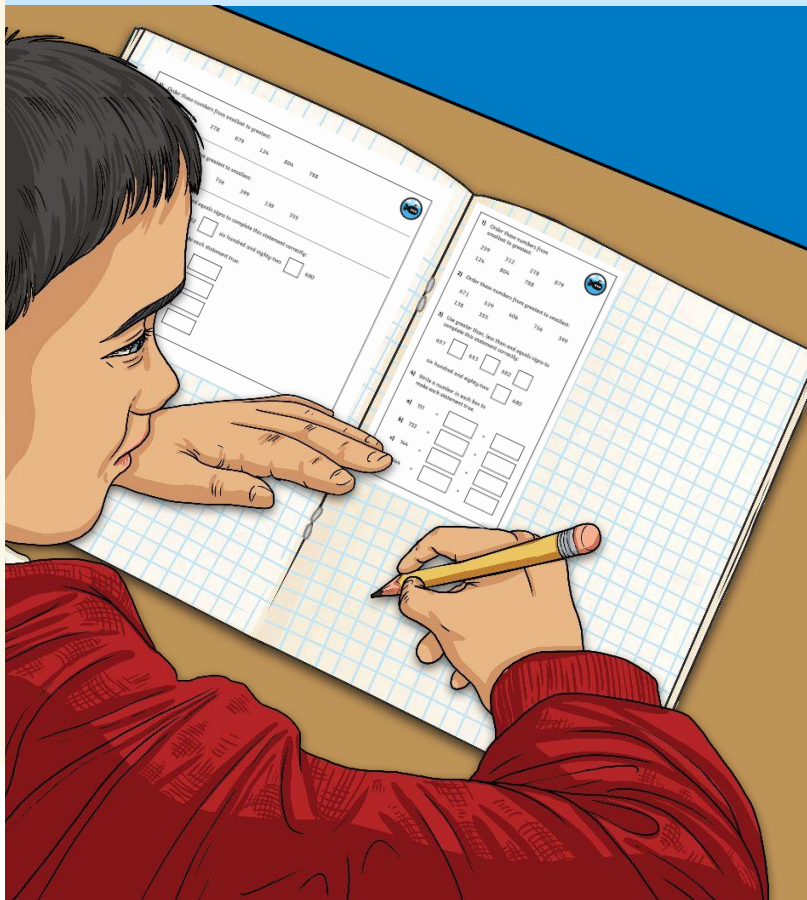
415	396
I	S



Diving into Mastery



Dive in by completing your own activity!



<p>1) Order these numbers from smallest to greatest:</p> <p>239 312 278 879 124 804 788</p> <p>2) Order these numbers from greatest to smallest:</p> <p>671 539 406 756 399 138 355</p> <p>3) Use greater than, less than and equals signs to complete this statement correctly:</p> <p>657 <input type="text"/> 653 <input type="text"/> 682 <input type="text"/> six hundred and eighty-two <input type="text"/> 680</p> <p>4) Write a number in each box to make each statement true.</p> <p>a) 151 < <input type="text"/> < <input type="text"/> b) 732 > <input type="text"/> > <input type="text"/> c) 144 > <input type="text"/> < <input type="text"/> d) 544 < <input type="text"/> < <input type="text"/></p>	<p>1) Order these numbers from smallest to greatest:</p> <p>239 312 278 879 124 804 788</p> <p>2) Order these numbers from greatest to smallest:</p> <p>671 539 406 756 399 138 355</p> <p>3) Use greater than, less than and equals signs to complete this statement correctly:</p> <p>657 <input type="text"/> 653 <input type="text"/> 682 <input type="text"/> six hundred and eighty-two <input type="text"/> 680</p> <p>4) Write a number in each box to make each statement true.</p> <p>a) 151 < <input type="text"/> < <input type="text"/> b) 732 > <input type="text"/> > <input type="text"/> c) 144 > <input type="text"/> < <input type="text"/> d) 544 < <input type="text"/> < <input type="text"/></p>	<p>680</p>
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LO



Who would like to read some of the jokes from their activity sheet?





LO

I

I am going to split the class into six groups and give each group a number. I will then roll a dice. Members from the rolled number group will give feedback on their activity.

What did I find difficult?

Were there any calculations I found easy and why?

What would be the next step in my learning?

How could I prove that I have met the learning objective?

Is there anything I need to practise further?

Could I explain how to order numbers to a different person?



Aim



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Success Criteria

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