



# 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:**

- read and write numbers up to 100 000;
- identify the value of each digit in a number up to 100 000 using place value grids and counters;
- recognise concrete and visual representations of numbers with one decimal place;
- order numbers up to 100 000;
- compare numbers up to 100 000 using the greater than and less than symbols;
- round numbers to the nearest 10, 100, 1 000, 10 000 or 100 000 using a number line; calculate intervals across zero using a number line;
- compare and order negative numbers using a number line;
- identify negative numbers in context;
- recognise some powers of 10 within sequences;
- read Roman numerals up to 500 (D) using a symbol chart;
- identify years written in Roman numerals using a symbol chart;

**children working at the expected level will be able to:**

- read and write most numbers up to 1 000 000;
- identify the value of most digits in a number up to 1 000 000;
- use concrete, visual and abstract representations to help identify numbers with two decimal places;
- order most numbers up to 1 000 000;
- compare most numbers up to 1 000 000 using the greater than and less than symbols;
- round numbers up to 1 000 000 to the nearest 1000, 10 000 or 100 000 using a number line;
- compare and order negative numbers;
- solve age appropriate problems involving negative numbers;
- count forwards and backwards in steps of 10;
- read Roman numerals up to 1000 (M);
- identify years written in Roman numerals;
- solve reasoning problems using all of the above.

**Introduction**

**Teacher Note:** The Y5 Place Value objectives read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit and round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 are closely linked to the Y5 fractions objectives read, write, order and compare numbers with up to three decimal places and round decimals with two decimal places to the nearest whole number and to one decimal place. Please head over to the Fractions Topic Area to find some more support lessons to support decimal place value.

In this unit, children will read, write, construct and deconstruct numbers up to 1 000 000. They will use concrete, visual and abstract methods to help identify the value of individual digits in numbers with up to six digits. As well as larger numbers, children are introduced to the concept of decimal numbers in preparation for the designated book in Spring term. They revisit comparisons of numbers using the greater than and less than symbols and then develop their skills by reasoning about numbers. Children will focus on rounding any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 or 100 000. They will work with negative numbers, counting forwards and backwards across zero. They will use negative numbers in context to solve problems. Children will count forwards and backwards in different powers of 10. They will have the opportunity to use all of their number and place value skills to solve a range of problems. Finally, children will extend their knowledge of Roman numerals to represent numbers up to 1000 and read years written in Roman numerals.

**Resources**  
In addition to your standard maths resources, you may need place value counters, scissors, glue or sticky tape, playing cards, D9 dice and 1-d die.

**Number and Place Value**  
Maths | Year 5 | Steps to Progression Overview

The aim of the 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
<b>Autumn</b>	Number: Place Value			Number: Addition and Subtraction		Statistics		Number: Multiplication and Division		Perimeter and Area		Consolidation
<b>Spring</b>	Number: Multiplication and Division			Number: Fractions					Number: Decimals and Percentages			Consolidation
<b>Summer</b>	Number: Decimals			Geometry: Properties of Shapes			Geometry: Position and Direction	Measurement: Converting Units		Measurement: Volume		Consolidation

See our [Number and Place Value Steps to Progression](#) document.

# Compare Numbers to 1 000 000



# Aim

- To compare numbers to at least 1 000 000.

# Success Criteria

- I can determine the value of each digit in numbers up to 1 000 000.
- I can use visual and abstract methods to compare numbers.
- I can choose a suitable method to compare numbers in a range of mathematical contexts.





# Remember It



Destroy the Digits

The number is:

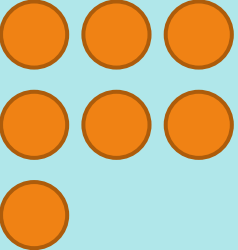

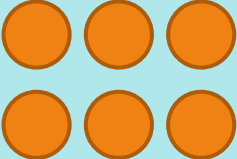


Destroy the following digits: **7, 5, 8**.  
What will the new number be?

# Remember It



Which number is ten more than seven thousand and six?

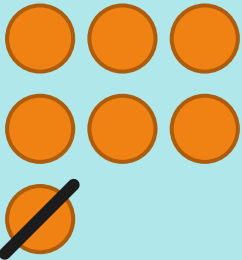
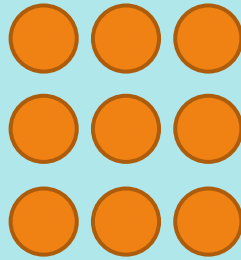
Ten Thousands	Thousands	Hundreds	Tens	Ones
				

7016

# Remember It



Which number is one hundred less than seven thousand?

Ten Thousands	Thousands	Hundreds	Tens	Ones
				

6900

# Numbers in Words



Which number is ten less than ten thousand?

Give your answer in words and digits.

Nine thousand, nine hundred and ninety or 9990.





# Numbers in Words



What is one hundred more than one hundred thousand?

Give your answer in words and digits.

One hundred thousand, one hundred or 100 100.



# Numbers in Words



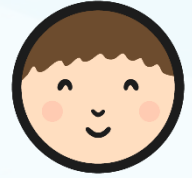
How much less than one million is nine hundred and ninety thousand and one hundred?

Give your answer in words and digits.

Nine hundred or 900.



# Numbers in Words



Which number is fifty thousand less than five hundred thousand?

Give your answer in words and digits.

Four hundred and fifty thousand or 450 000.



# Numbers in Words



What is twenty thousand more than one thousand?

Give your answer in words and digits.

Twenty-one thousand or 21 000.



# Greater Than and Less Than



When we compare numbers, we make decisions about which number in a set is bigger or smaller based on the value of their digits.

We can use the greater than and less than symbols to show how we have compared two or more numbers. We can also use the equals symbol to show when two numbers are the same.

Can you recall what the greater than and less than symbols look like?

>

Greater than

$$25 > 16$$

<

Less than

$$16 < 25$$

=

Equal to

$$25 = 25$$

$$16 = 16$$



# Symbol Selection



Select the correct symbol from the choices below for each statement.

34 921

>

34 129

<

=

>

# Symbol Selection



Select the correct symbol from the choices below for each statement.

99 999

<

111 111

<

=

>

# Symbol Selection



Select the correct symbol from the choices below for each statement.

410 081

<

500 010

<

500 081

<

=

>

<

=

>

# Symbol Selection



Select the correct symbol from the choices below for each statement.

$$74\ 000 + 3500$$

$$>$$

$$79\ 000 - 3500$$

$$<$$
$$=$$
$$>$$

# Symbol Selection



Select the correct symbol from the choices below for each statement.

828 500

=

830 000 - 1500

<

=

>



# Symbol Selection



Select the correct symbol from the choices below for each statement.

1 345 600 - 40 000

>

955 200 + 350 000

<

=

>

# Popcorn Comparisons



Work in groups of 3 to practise using the greater than and less than symbols.

In your popcorn box, you have different types of popcorn. The yellow popcorn pieces contain the symbols whereas the white popcorn pieces contain the numbers.

Each member of the group should take a piece of popcorn – there should be 1 yellow and 2 white pieces between you.



# Popcorn Comparisons



Organise your numbers and your symbol to make a true number sentence.

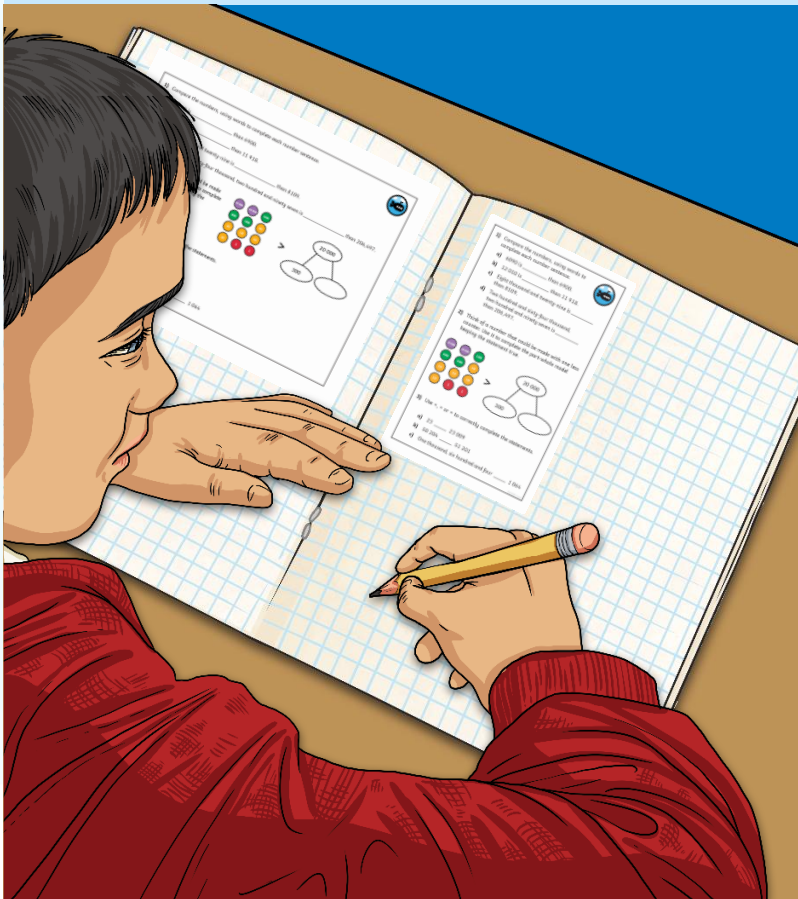
Then take 3 more pieces of popcorn and have another go!

How many true number sentences can you create using your popcorn?



# Diving into Mastery

Dive in by completing your own activity!



1) a) Use e

1

b) What Expl

2) a) Place

Seventy-on thousand, nine-hunder and five

b) How

1) Year 5 an

2) James an

3) a) Creat

1) Compare the numbers, using words to complete each number sentence.

a) 6090 is \_\_\_\_\_ than 6900.

b) 12 010 is \_\_\_\_\_ than 11 918.

c) Eight thousand and twenty-nine is \_\_\_\_\_ than 8109.

d) Two hundred and sixty-four thousand, two hundred and ninety seven is \_\_\_\_\_ than 206,497.

2) Think of a number that could be made with one less counter. Use it to complete the part-whole model keeping the statement true.

1000	1000	1000
100	100	100
10	10	10
1	1	1

>

20 000	
300	

3) Use <, > or = to correctly complete the statements.

a) 23 \_\_\_\_\_ 23 009

b) 50 204 \_\_\_\_\_ 51 201

c) One thousand, six hundred and four \_\_\_\_\_ 1 064





# Destroy the Digits



Which digits of the first number need to be destroyed to make the statement true?

$$637392 < 600302$$

How many possibilities can you find?



# Aim



- To compare numbers to at least 1 000 000.

# Success Criteria

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