

# How to read large numbers

If asked to read a large number, a good way to do this when first learning is to use what's known as a place-value chart. It is divided into 'families' of **ones**, **thousands** and **millions**.

Here are some examples:

If asked to read **53 462 748** we could write the numerals into a place-value chart. It is filled up from the right hand side first. (So in this example there is one space left at the very left hand position in the Millions family)

MILLIONS			THOUSANDS			ONES		
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
	5	3	4	6	2	7	4	8

To read this we say the number in each family box followed by the name of the family itself, starting with millions then continuing to thousands and lastly the ones family. In this example we see that the number 53 is in the millions family, 462 is in the thousands family and 748 is in the ones family.

The number is Fifty-three **million**, four hundred and sixty-two **thousand**, seven hundred and forty-eight. (Notice that we don't usually say 'ones' at the end of the number)

If asked to read **3 025 007** we can place the numerals into a 'place value' chart from right to left. (In this example there are two spaces on the left hand side of the millions family). We can then read each number in a family box and say the family name. There's a 3 in the millions family, 25 in the thousands family and 7 in the ones family. This number therefore is: Three **million**, twenty-five **thousand** and seven.

MILLIONS			THOUSANDS			ONES		
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
		3	0	2	5	0	0	7

The zeros in the above example are very important. If they were left out we would have 3 25 7. This number would be Three thousand, two hundred and fifty-seven! So the zeros are necessary as place value holders.

Eventually with enough practise using a chart for reading large numbers, children will become familiar with the 'family' names of **millions**, **thousands** and **ones** and begin to rely less and less on the chart. Interested children may like to learn the name of the next family (billions) and practise reading and writing some even bigger numbers. Once they know the name and order of families, there's nothing stopping children from being able to read huge numbers just by following the same rules. **Read the number in the family box then say the family name, continuing to the next family and so on.**

# How to write large numbers

If asked to write a large number, a good way to do this when first learning is to use what's known as a place-value chart. It is divided into 'families' of ones, thousands and millions.

Here are some examples:

To write **'ten million'**, we would start by writing 10 in the 'millions' family

MILLIONS			THOUSANDS			ONES		
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
	1	0						

and then we would fill the remaining spaces with zeros

MILLIONS			THOUSANDS			ONES		
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
	1	0	0	0	0	0	0	0

so **'ten million'** is written as 10 000 000 (Notice that we leave a small space between the families rather than placing a comma.)

To write the number **'five million and twelve thousand'** we could start by writing a 5 in the 'millions' family and '12' in the 'thousands' family.

MILLIONS			THOUSANDS			ONES		
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
		5		1	2			

and then we would fill in the remaining spaces with zeros

MILLIONS			THOUSANDS			ONES		
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
		5	0	1	2	0	0	0

so **'five-million and twelve thousand'** is written as 5 012 000 (Once again we leave a small space between the families rather than placing a comma.)

After using a place-value chart for a few examples, children will learn the importance that 'zeros' sometimes have as place value holders. In the last example above, if we didn't place zeros in the spaces on the chart, the number would be **512** (five hundred and twelve) rather than **five million and twelve thousand**! Eventually with enough practise using this chart, children will start to notice the pattern of how numerals are organised and the place-value chart will not be needed anymore.

# Reading large numbers

MILLIONS			THOUSANDS			ONES		
Hundreds	Tens	Ones	Hundreds	Tens	Ones	Hundreds	Tens	Ones
	5	3	4	6	2	7	4	8

Say the number in each family box followed by the name of the family itself, starting with millions then continuing to thousands and lastly the ones family.

The number is Fifty-three **million**, four hundred and sixty-two **thousand**, seven hundred and forty-eight. (Notice that we don't usually say 'ones' at the end of the number)

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Here are some numbers to read ( then write in words ):

MILLIONS			THOUSANDS			ONES		
H	T	O	H	T	O	H	T	O
	2		1	5	6	3	4	5

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 .....  
 .....

MILLIONS			THOUSANDS			ONES		
H	T	O	H	T	O	H	T	O
2	4		9	0	3	4	1	2

.....  
 .....  
 .....

MILLIONS			THOUSANDS			ONES		
H	T	O	H	T	O	H	T	O
7	3		0	2	1	0	0	9

.....  
 .....  
 .....

4 219 586

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 .....  
 .....

# Writing large numbers

To write the number '**five million and twelve thousand**' we could start by writing a 5 in the 'millions' family and '12' in the 'thousands' family.

MILLIONS			THOUSANDS			ONES		
H	T	O	H	T	O	H	T	O
		5	1	2				

MILLIONS			THOUSANDS			ONES		
H	T	O	H	T	O	H	T	O
		5	0	1	2	0	0	0

and then we would fill in the remaining spaces with zeros

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Here are some numbers to write as a numeral:

MILLIONS			THOUSANDS			ONES		
H	T	O	H	T	O	H	T	O

Twenty-three million, one hundred and seventeen thousand, two hundred and forty-six.

MILLIONS			THOUSANDS			ONES		
H	T	O	H	T	O	H	T	O

Thirty million.

MILLIONS			THOUSANDS			ONES		
H	T	O	H	T	O	H	T	O

Five million, thirty-two thousand and twelve.

MILLIONS			THOUSANDS			ONES		
H	T	O	H	T	O	H	T	O

Eight million, seven thousand and two.

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Fifty-one million and thirty thousand.

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