I can compare numbers to at least 1 000 000.

4757 >
< 9432
< 1398 < 1439
45 626 <
8450 > > 8167
12 573 >
2400 + 532 < < 3500
> 35 000 - 400
5300 + 120 < 350
1900 > 1200 + 150





Great Number Hunt

I can compare numbers to at least 1 000 000.

67 822 >
< 12 863
< 135 463 < 143 635
12 967 <
645 476 > > 465 429
12 573 <
99 225 + 750 < < 101 783
> 685 200 - 500 000
45 284 + 32 100 < 15 900
195 600 < 90 990 + 15 500





Great Number Hunt

I can compare numbers to at least 1 000 000.

462 721 >
< 143 232
< 5 844 113 < 5 845 131
123 244 <
645 476 > > 465 429
1 394 734 >
3 986 124 < < 3 991 458
> 5 685 200 - 3 500 000
3 100 450 < 350 100
2 195 600 > 990 990 + 15 500



4757 > 2004
5192 < 9432
1274 < 1398 < 1439
45 626 < 58 239
8450 > 8245 > 8167
12 573 > 11 564
2400 + 532 < 3000 < 3500
34 700 > 35 000 - 400
5300 + 120 < 6000 - 350
1900 - 450 > 1200 + 150





Great Number Hunt **Answers**

67 822 > 63 189
12 386 < 12 863
134 536 < 135 463 < 143 635
12 967 < 15 823
645 476 > 546 123 > 465 429
12 573 < 13 564
99 225 + 750 < 100 300 < 101 783
583 500 > 685 200 - 500 000
45 284 + 32 100 < 95 600 - 15 900
195 600 - 100 050 < 90 990 + 15 500





Great Number Hunt **Answers**

Use the numbers you find on your number hunt to complete these number sentences.

462 721 > **264 172**

132 424 < 143 232

5 485 331 < 5 844 113 < 5 845 131

123 244 < **231 424**

645 476 > **546 123** > 465 429

1 394 734 > **1 349 375**

3 986 124 < **3 989 825** < 3 991 458

2 583 500 > 5 685 200 - 3 500 000

3 100 450 < **3 510 800** - 350 100

2 195 600 - **1 000 050** > 990 990 + 15 500



Digit Detectives

To determine the value of each digit in numbers to 1 000 000.

Solve these challenges using your knowledge of the value of each digit in a number.

Here is a 5-digit number:

45 602

Write down the number that is:

1. One thousand more _____

- 2. Ten less _____
- 3. One hundred more _____
 - 4. Ten thousand less _____
 - 5. One more _____





Digit Detectives

To determine the value of each digit in numbers to 1 000 000.

Solve these challenges using your knowledge of the value of each digit in a number.

Here is a 6-digit number:

504 692

Write down the number that is:

- 1. Ten thousand more _____
- 2. One less
- 3. One hundred more _____
- 4. One hundred thousand less _____

We can change the digits in a number by adding or subtracting from certain digits.

What can we subtract from 504 692 to swap the last 2 digits?

The last 2 digits are the 9 and the 2: 504 692. If we swap these digits, we will make 504 629.

We need to find the difference between these numbers to work out what to subtract.

Can you find the answer?

Try this one:

What can we add to 504 692 to swap the digits in the thousands and the hundreds places?

Think about which these digits are, and how you can find the difference to work out what you need to add.



Digit Detectives

To determine the value of each digit in numbers to 1 000 000.

Solve these challenges using your knowledge of the value of each digit in a number.

1. What could you add to 8 234 051 to reverse the last three digits?

2.	W	hat	cou	ıld y	Jou	subt	rac	t fro	om 5	5 734	4 20	01 to	o rev	erse	e the	e las	st fo	ur d	ligit	s?			

3.	W	hat	cou	ld y	jou	add	to 3	3 46	5 29	97 to	o rev	verse	e all	of t	:he d	digi	ts?				

4.	W	hat	cou	ld y	Jou	subt	trac	t fro	om 4	+ 53	2 98	81 to	rev	erse	e all	the	dig	its?				



Digit Detectives Answers

Solve these challenges using your knowledge of the value of each digit in a number.

Here is a 5-digit number:

45 602

Write down the number that is:

- 1. One thousand more **46 602**
- 2. Ten less **45 592**
- 3. One hundred more 45 702
- 4. Ten thousand less **35 602**
- 5. One more **45 603**



Digit Detectives Answers

Solve these challenges using your knowledge of the value of each digit in a number.

Here is a 6-digit number:

504 692

Write down the number that is:

- 1. Ten thousand more 514 692
- 2. One less 504 691
- 3. One hundred more 504 792
- 4. One hundred thousand less **404 692**

We can change the digits in a number by adding or subtracting from certain digits.

What can we subtract from 504 692 to swap the last 2 digits?

The last 2 digits are the 9 and the 2: 504 692. If we swap these digits, we will make 504 629.

We need to find the difference between these numbers to work out what to subtract.

Can you find the answer?

We need to subtract 63.

Try this one:

What can we add to 504 692 to swap the digits in the thousands and the hundreds places?

Think about which these digits are, and how you can find the difference to work out what you need to add.

We need to add 1800.



Digit Detectives Answers

Solve these challenges using your knowledge of the value of each digit in a number.

1	. W	hat	cou	.ld y	jou	add	to 8	3 23	4 0	51 to	o rev	verse	e th	e las	st th	iree	digi	its?				
																				99		

2	. W	hat	cou	ld y	jou	subt	trac	t fro	om 5	5 734	4 20)1 to	rev	erse	e the	e las	st fo	ur d	ligit	s?				
																					1	R 177	7	

3	. W	hat	cou	ld y	Jou	add	to 3	3 46	5 29	97 to	o rev	verse	e all	oft	:he d	digi	ts?					
																			44	60 3	346	
																			•••			

4.	. W	hat	cou	ld y	jou	subt	trac	t fro	om 4	÷ 53	2 98	81 to	rev	erse	e all	the	dig	its?					
																				2 6	40 <i>(</i>	527	



Number Sense

To determine the value of each digit in numbers to 1 000 000. My 5-digit number: Ω \bigcap My 5-digit number in words: 1. My number is made up of ______ thousand and ______ thousand. 2. There are ______ thousands in my number. 3. There are ______ hundreds in my number. 4. One more than my number is _____. 5. _____ is one less than my number. 6. My number is _____ less than 100 000.

7. 10 000 more than my number is _____.



Number Sense

To determine the value of each digit in numbers to 1 000 000. My 6-digit number: Ω Ω My 6-digit number in words: 1. My number is made up of ______ thousand and ______ thousand. 2. There are ______ thousands in my number. 3. There are ______ hundreds in my number. 4. There are _____ tens in my number. 5. One more than my number is _____. 6. _____ is one less than my number. 7. My number is _____ less than 1 000 000.

8. 100 000 more than my number is _____.



Number Sense

To determine the value of each digit in numbers to 1 000 000.

My 7-digit number:

	0	0	0	0	0
--	---	---	---	---	---

My 7-digit number in words:

1. My number is made up of ______ million and ______ thousand.

- 2. There are ______ ten thousands in my number.
- 3. There are ______ thousands in my number.
- 4. There are ______ hundreds in my number.
- 5. There are _____ tens in my number.
- 6. One more than my number is _____.
- 7. _____ is one less than my number.
- 8. My number is _____ less than 10 000 000.
- 9. 1 000 000 more than my number is _____.





39 024

*

Ten Thousands	Thousands	Hundreds	Tens	Ones

Ten Thousands	Thousands	Hundreds	Tens	Ones



REGENT STUDIES



Ten Thousands	Thousands	Hundreds	Tens	Ones



3412

*

Ten Thousands	Thousands	Hundreds	Tens	Ones

Ten Thousands	Thousands	Hundreds	Tens	Ones



	Ten Thousands	Thousands	Hundreds	Tens	Ones
	REGENT STUDIE	ا S m			



Ten Thousands	Thousands	Hundreds	Tens	Ones





*

Ten Thousands	Thousands	Hundreds	Tens	Ones

Ten Thousands	Thousands	Hundreds	Tens	Ones





Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones





Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

**

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

**



Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
REGENT STU	IDIES fa's walk!				



Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones





Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

**

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones



Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
REGENT STU	DIES				



Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

**





Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

**

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

**



		Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
T D D	RECENT STUDIES	REGENT ST	UDIES				



Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

























1)					2)					
Number i	n Digits	Nu	mber in Wor	ds		Number i	n Digits	Nu	imber in Wor	ds
97 2	06	ninety-s hı	even thousai indred and si	nd, two ix		80 ()59	eighty-th	ousand and j	fifty-nine
	Place Vo	ılue Represen	tation				Place Va	llue Represen	tation	
Ten Thousands	Thousands	Hundreds	Tens	Ones	Tł	Ten 10usands	Thousands	Hundreds	Tens	Ones
		00		888					880	
3)	· · ·						• •	·	•	
Number i	n Digits	Nu	mber in Wor	ds						
30 5	30	thirty the	ousand, five and thirty	hundred						
	Place Va	ılue Represen	tation							
Ten Thousands	Thousands	Hundreds	Tens	Ones						
000		880	000							
4) 62 403	sixty-two tł	ıousand, fo	ur hundred	and three]					

- 1) Mrs Davies is incorrect. The number should have been written as £30 200. She placed the two hundreds in the tens column.
- 2) a) Correct
 - b) Incorrect. 10 has been written, rather than 20.
 - c) Incorrect. 3 000 has been written rather than 30 000.
- 3) Mr Lamb twenty-five thousand, five hundred and ninety-four pounds Mrs Denton - thirty-six thousand, six hundred and forty-six pounds Miss Clark - twenty-three thousand, seven hundred and twenty pounds
- 4) Various possible answers.
- 1) Michael is incorrect. Adding the place value counters together totals 75 012.
- 2) fifty-eight thousand, one hundred and eighteen
- 3) Various answers. Examples include: 50 210 = 50 000 + 210 and 50 210 = 50 200 + 10
- 4) a) The largest 5-digit number that could be made with ten place value counters is 91 000.
 - b) The smallest 5 digit whole number that could be made with ten place value counters is 10 009.
 - c) Is it possible to make a 5 digit number with no repeated digits using the digits 4,3,2,1 and 0. For example, 10 234 and 43 210.



Com	plete the tables.								
¹⁾	Number in Dig	jits		Number in Words					
				ninety-seven the	ousand, two hundred c	ind six			
		Place Value Representation							
	Ten Thousands	Thou	sands	Hundreds	Tens	Ones			
۔ م									
-)	Number in Dig	jits		Nu	mber in Words				
	80 059								
	Place Value Representation								
	Ten Thousands	Thou	sands	Hundreds	Tens	Ones			
2) -									
	Number in Dig	jits		Nu	mber in Words				
			Plo	ace Value Representat	ion	1			
	Ten Thousands	Thou	sands	Hundreds	Tens	Ones			
	$\bigcirc \bigcirc \bigcirc \bigcirc$								
4) Write the decomposed number in words and digits.									
	three ones, four hu thousands and two	ndreds, six thousands	ten						



A member of Twi	hkl Rock Band earns £30 327. Which partitioned representations are correct and which we available 2	h are
a) 30 327 = 30	200 + 320 + 7 Correct or incorrect?	
b) 30 327 = 30	300 + 10 + 7 Correct or incorrect?	
c) 30 327 = 3 0	00 + 300 + 20 + 7 Correct or incorrect?	
The table shows	eacher earnings at Twinkl Primary School. Write each of the teacher's earnings in wo	rds.
Mr Lamb	£25 594	
Mrs Denton	<u>±36 646</u>	
Miss Clark	£23 720	
Miss Clark Use part-whole n diagrams and se	£23 720 odels to partition a 5-digit number in 4 different ways. Make a mistake in one of your if your partner can spot it.	r
Miss Clark Use part-whole n diagrams and se	£23 720 .odels to partition a 5-digit number in 4 different ways. Make a mistake in one of your if your partner can spot it.	r
Miss Clark Use part-whole n diagrams and se	£23 720 .odels to partition a 5-digit number in 4 different ways. Make a mistake in one of your if your partner can spot it.	r
Miss Clark Use part-whole r diagrams and se	£23 720 .odels to partition a 5-digit number in 4 different ways. Make a mistake in one of your if your partner can spot it.	r



1) Michael has represented a five-digit number using a part-whole model.



Do you agree with Michael representation? Explain fully.

2) Janey had some place value counters.

She drops 4 ones counters on the floor. She finds 2 hundreds counters in her pencil case and adds them onto her total.. She gives 2 tens counters to her partner and then she counts up.

Now, the number made by her place value counters is fifty-eight thousand, two hundred and ninety-four.

What was her original number? Give your answer in words.

3) Karen is trying to partition a five-digit number into two parts but she thinks it is impossible. Give two examples that show Karen that it is possible.

4) Marco has ten place value counters and he's going to use them to make a five-digit whole number.

- a) What is the largest 5-digit number he could make? _____
- b) What is the smallest 5-digit number that Marco could make? _____
- c) Is it possible to make a 5-digit number with no repeated digits?



Number i	n Digits	Number in Words				
		ninety-seven thousand, two hundred and six				
	Place Val	ue Represent	ation			
Ten Thousands	Thousands	Hundreds	Tens	Ones		

2)

Number i	n Digits	Nun	ıber in Word	s
80 0)59			
	Place Val	ue Represent	ation	
Ten Thousands	Thousands	Hundreds	Tens	Ones

3)

Number i	n Digits	Number in Words				
Place Value Representation						
Ten Thousands	Thousands	Hundreds	Tens	Ones		
() Mrito the						

three ones, four hundreds, six ten thousands and two thousands

1)

`					
Number in Digits		Number in Words			
		ninety-seven thousand, two hundred and six			
	Place Val	ue Represent	ation		
Ten Thousands	Thousands	Hundreds	Tens	Ones	

2)

Number i	n Digits	Nun	ıber in Word	S
80 C)59			
	Place Val	ue Represent	ation	
Ten Thousands	Thousands	Hundreds	Tens	Ones

3)

Number in Digits		Number in Words			
	Place Val	ue Represent	ation		
Ten Thousands	Thousands	Hundreds	Tens	Ones	
			$\bigcirc \bigcirc \bigcirc \bigcirc$		
L	I	<u> </u>	1	1	

4) Write the decomposed number in words and digits.

three ones, four hundreds, six ten thousands and two thousands



 Mrs Davies bought a new apartment for thirty thousand, two hundred pounds. She writes this in numerals as £30 020. Is she correct? Explain your thinking.



- 2) A member of Twinkl Rock Band earns £30 327.Which partitioned representations are correct and which are incorrect? Can you explain any mistakes?
 - a) 30 327 = 30 000 + 320 + 7 Correct or incorrect?
 - **b)** 30 327 = 30 300 + 10 + 7 Correct or incorrect?
 - c) 30 327 = 3 000 + 300 + 20 + 7 Correct or incorrect?
- 3) The table shows teacher earnings at Twinkl Primary School. Write each of the teacher's earnings in words.

Mr Lamb	Mrs Denton	Miss Clark
£25 594	£36 646	£23 720

4) Use part-whole models to partition a 5-digit number in 4 different ways. Make a mistake in one of your diagrams and see if your partner can spot it.

- Mrs Davies bought a new apartment for thirty thousand, two hundred pounds. She writes this in numerals as £30 020. Is she correct? Explain your thinking.
- 2) A member of Twinkl Rock Band earns £30 327.Which partitioned representations are correct and which are incorrect? Can you explain any mistakes?
 - a) 30 327 = 30 000 + 320 + 7 Correct or incorrect?
 - **b)** 30 327 = 30 300 + 10 + 7 Correct or incorrect?
 - c) 30 327 = 3 000 + 300 + 20 + 7 Correct or incorrect?
- 3) The table shows teacher earnings at Twinkl Primary School. Write each of the teacher's earnings in words.

Mr Lamb	Mrs Denton	Miss Clark
£25 594	£36 646	£23 720

4) Use part-whole models to partition a 5-digit number in 4 different ways. Make a mistake in one of your diagrams and see if your partner can spot it.





c) Is it possible to make a 5-digit number with no repeated digits?



Do you agree with Michael's representation? Explain fully.

2) Janey had some place value counters.

She drops 4 ones counters on the floor. She finds 2 hundreds counters in her pencil case and adds them onto her total. She gives 2 tens counters to her partner and then she counts up.

Now, the number made by her place value counters is fifty-eight thousand, two hundred and ninety-four.



What was her original number? Give your answer in words.

- 3) Karen is trying to partition a five-digit number into two parts but she thinks it is impossible. Give two examples that show Karen that it is possible.
- **4)** Marco has ten place value counters and he's going to use them to make a five-digit whole number.
 - **a)** What is the largest 5-digit number he could make?
 - **b)** What is the smallest 5-digit number that Marco could make?
 - c) Is it possible to make a 5-digit number with no repeated digits?



Lucky Dip

To read and write numbers to at least 100 000.

• With a partner, choose 10 place value counters at random.

- Use the place value grid to help sort the counters into the correct sections, representing a number up to 100 000.
- Read the number out loud and write it onto the place value grid.
- Once each player has had a turn, the highest number created wins.

Ten Thousands	Thousands	Hundreds	Tens	Ones

Ten Thousands	Thousands	Hundreds	Tens	Ones

Ten Thousands	Thousands	Hundreds	Tens	Ones



2004	11 564	450
63 189	95 600	100 050
3 989 825	264 172	5 485 331
<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>	1274 15 823 132 424	6000 13 564 546 123





Place Value Grid

To read and write numbers to at least 100 000.

Ten Thousands	Thousands	Hundreds	Tens	Ones

nousands	Hundreds	Tens	Ones

Ten Thousands	Thousands	Hundreds	Tens	Ones

Ten Thousands	Thousands	Hundreds	Tens	Ones



Popcorn Number Cards

I can order and compare numbers to 1 000 000.

Print these cards on white paper and cut out.

Screw up each card to make it look like popcorn and put it in the Popcorn Box.

3645	68 723	585 732	576 134
6 756 294	9821	23 768	10 842
7 758 112	289 103	43 671	562 891
186 375	2 987 105	350 621	500 000
20 000	4000	7 000 000	100 000



Popcorn Symbol Cards

I can order and compare numbers to 1 000 000.

Print these cards on yellow paper and cut out.

Screw up each card to make it look like popcorn and put it in the Popcorn Box.

>	>	>	>
>	>	>	>
>	>	<	<
<	<	<	<
<	<	<	<



Read and Write Numbers to 100 000

To read and write numbers to at least 100 000.



21 101

12 207

21 112



twelve thousand, two hundred and seven twenty-one thousand, one hundred and one

2. Draw counters to represent the correct place value of each number shown.

a. 1582				
Ten Thousands	Thousands	Hundreds	Tens	Ones
b. 5 009		1	1	1
Ten Thousands	Thousands	Hundreds	Tens	Ones
c. 28 082				
Ten Thousands	Thousands	Hundreds	Tens	Ones

3. Write the numbers in words.

56 939	
91 007	

4. Complete the partition diagram to help describe the place value of each digit in the number.





Read and Write Numbers to 100 000 **Answers**



2.

a. 1582				
Ten Thousands	Thousands	Hundreds	Tens	Ones
	0	00000	00000	00
b. 5009				
Ten Thousands	Thousands	Hundreds	Tens	Ones
	00000			00000
c. 28 082				
Ten Thousands	Thousands	Hundreds	Tens	Ones
00	00000		00000	00

3.

56 939	fifty-six thousand, nine hundred and thirty-nine
91 007	ninety-one thousand and seven

4.

		11 475		
one ten thousand	one thousand	four hundreds	seven tens	five ones



Read and Write Numbers to 100 000

To read and write numbers to at least 100 000.



92 764

32 123

91 042



ninety-two thousand, seven hundred and sixty-four nine ten thousands, two ones, four tens, one thousand

2. Draw counters to represent the correct place value of each number shown.

Number as Digits	Number in Words	Partitioned Number
		six ones, two hundreds and four ten thousands
12 453		
	forty-eight thousand, five hundred and sixty-nine	
		four ten thousands and two tens

3. James starts at the number shown and counts forwards in steps of one hundred. What number will he say second?





Read and Write Numbers to 100 000

4. James counted forwards in steps of ten thousand three times and landed on this number:



a. What number has James landed on? _____

b. What number did James start on? _____



Read and Write Numbers to 100 000 **Answers**

1.	92 764	32 123	91 042
		*	
10 000		 ninety-two thous seven hundred sixty-four 	and nine ten thousands, and two ones, four tens, one thousand

2.	Number as Digits	Number in Words	Partitioned Number
	40 206	forty thousand, two hundred and six	six ones, two hundreds and four ten thousands
	12 453	twelve thousand, four hundred and fifty-three	one ten thousand, two thousands, four hundreds, five tens and three ones
	48 569	forty-eight thousand, five hundred and sixty-nine	four ten thousands, eight thousands, five hundreds, six tens and nine ones
	40 020	forty thousand and twenty	four ten thousands and two tens

- 3. The number is 52 130. The second number he will say is 52 330.
- 4. a. **41 110**
 - b. **11 110**



Read and Write Numbers to 100 000



2. Complete the table to correctly show the different representations of numbers.

Number as Digits	Number in Words	Partitioned Number
		nine ten thousands and three hundreds
	seventy-two thousand, four hundred and sixty-eight	
		seven ones and sixteen hundreds
90 009		

3. Write the partitioned numbers in words.

seven ones, two ten thousands, nine tens and one thousand	
fourteen hundreds	



4. James has counted forwards in steps of one thousand 13 times and has landed on this number:



a. What number has James landed on? _____

b. What number did James start on? _____



Read and Write Numbers to 100 000 **Answers**

1.	43 250	44 304	4	43 114	
1	one hundred, one ten, three thousands, four ten thousands and four ones	43 000	43 500	three hun four ten tho four ones four thou	dreds, usands, and sands

2.	Number as Digits	Number in Words	Partitioned Number
	90 300	ninety thousand and three hundred	nine ten thousands and three hundreds
	72 468	seventy-two thousand, four hundred and sixty-eight	seven ten thousands, two thousands, four hundreds, six tens and eight ones
	1 607	one thousand, six hundred and seven	seven ones and sixteen hundreds
	90 009	ninety-thousand and nine	nine ten thousands and nine ones

3.	seven ones, two ten thousands, nine tens and one thousand	twenty-one thousand and ninety-seven
	fourteen hundreds	one thousand four hundred

4. a. James landed on the number 21 110.

b. James started on 8 110.

