- 1) α) 2 000 000
 - b) 9 000 000
 - c) 3 000 000
 - d) 4 000 000
 - e) 6 000 000

2) a)	Numbers between 5.5 million and 6.5 million	Numbers between 550 000 and 650 000	Numbers between and
	6 489 564	559 600	
	6 299 956 5 044 544	599 600 580 564	
	5 642 956	649 560	

- b) Rhys is incorrect because, if he uses this statement, the numbers between 5.5 million and 6.5 million would also need to be included in this column but each number can only be written once.
- 3) Accept any correct statement, such as numbers greater than 6 500 000.
- 4) Kayla, Noel Bright, Rock On, Famous Dudes, Musical Stars
- Emily is incorrect. The largest possible answer is 1 262 412, which would require one less counter.
 a) Multiple answers possible. The digits must total 9 with no zeros. Example answers:

 3 111 111
 1 211 112
 1 311 111
 2 121 111

 b) True

 Petra's number has 5 million, this is greater than Harjot's number which has only 3 million. Charlie's number has to be less than 5 million as the digits need to total 9 without zeros.

 False

 Charlie's number must be the smallest. As all the digits total 9, without a zero, the only digits in his number are 3, 2 or 1. If the 3 was the millions, then the hundred thousands would need to be a 1 or a 2, so it is smaller than Harjot's number.
- 3) The digit is a 3. If it was a 4 it would make this number greater than the previous number. If it was a 2 it would be smaller than the next number.



1) a)

L)		
Smallest Possible Number		Greatest Possible Number
564 573	564 572 < < 565 572	565 571
1 344 125	1 346 125 > > 1 344 124	1 346 124
9 968 247	9 968 246 < < 9 978 246	9 978 245

b) There are many possible answers. The numbers on either side of the empty box must have a difference of two.

2) There are various possible answers, for example,

a)	7 835 192	b)	4 5 37 622
	6 6 81 084		3 944 126
	5 2 99 237		3 81 4 544
	5 1 1 9 237		3 7 16 544
	3 761 105		1 834 199



	2 000 000	3 000 000	9 000 000	4 000 000	6 000 000
	α) 2 843 275 >		_	d) 6 743 101 >	> 2 093
	b) 6 129 043 <		_	e) 5 012 222 <	> 4 129 8
	c) 2 509 232 <		_ < 4 137 432		
α)	Rhys must sort these as many of the num	e numbers into th bers as possible i	e table below. Each n nto the first two colu	umber can only be us mns of this table?	ed once. Can you help him
	Numbers betv 5.5 million and 6.	veen 5 million	Numbers bet 550 000 and 6	ween 50 000	Numbers between and
		-			
	559 600	58	39 564	5 946 564	6 299 956
	6 489 564	6 5	49 000	5 642 956	599 600
b) Wh	Rhys groups the rem 000 000 and 8 000 at statement could b	aining numbers i 000. Explain wh e used as a head	nto the final box wit y Rhy's statement is i ing for the final box?	h the following stater incorrect.	nent: Numbers between 1
The	se bands and singers	s recorded their e	arnings for the first	half of the year.	Dudes Kaula
					Rugiu



1) Emily says that, in order to complete the empty place value chart with the greatest possible answer, she must use the same number of counters as the completed chart. Is she correct? Explain why.





1) a) What are the greatest and smallest possible numbers that can be used in these comparisons?



Smallest Possible Number		Greatest Possible Number
	564 572 < < 565 572	
	1 346 125 > > 1 344 124	
	9 968 246 < < 9 978 246	

b) Write a calculation where the smallest possible answer and the greatest possible answer are the same.

2) A set of numbers have been ordered vertically from greatest to smallest. Write a digit in each box so that the numbers are written in order.





1) Put the following numbers into the calculations below to make them correct. You can only use each number once.

2 00	000 000	9 000	000	6 000 000
3 00	000 000	4 000	000	
α)	2 843 27	75 >		
b)	6 129 04	+3 <		
c)	2 509 23	32 <		< 4 137 432
d)	6 743 10	01 >		> 2 093 111
e)	5 012 22	22 <		> 4 129 832
α) Rł be Co po	nys must s elow. Each an you hel ossible into	ort these nu number ca p him sort c o the first tw	ımbers ir n only be ıs many vo colum	nto the table e used once. of the numbers as ans of this table?
Numbers 5.5 mil 6.5 n	between lion and nillion	Numbers b 550 000	etween and 00	Numbers betweer

2)

Ν

	000 000	
559 600	589 564	5 946 564
6 489 564	6 549 000	5 642 956
6 299 956	599 600	5 449 000
6 501 956	649 560	7 199 000

- b) Rhys groups the remaining numbers into the final box with the following statement: Numbers between 1 000 000 and 8 000 000. Explain why Rhy's statement is incorrect.
- 3) What statement could be used as a heading for the final box?
- 4) These bands and singers recorded their earnings for the first half of the year.

Noel Bright		Rock On		Musical Stars	
£4 543 000		Four an million	d a half pounds	£43	5 000
	Famoi	ıs Dudes	Και	ıla	
	£53	4 999	£4 750	000	

Put the earnings in descending order.



1) Put the following numbers into the calculations below to make them correct. You can only use each number once.

2 00	000 000	9 000 000	6 000 000
3 00	000 000	4 000 000	
α)	2 843 275	>	
b)	6 129 043	<	
c)	2 509 232	<	< 4 137 432
d)	6 743 101	>	> 2 093 111
e)	5 012 222	<	> 4 129 832

2) a) Rhys must sort these numbers into the table below. Each number can only be used once. Can you help him sort as many of the numbers as possible into the first two columns of this table?

Numbers between 5.5 million and 6.5 million	Numbers between 550 000 and 650 000	Numbers between
	1	
559 600	589 564	5 946 564
6 489 564	6 549 000	5 642 956
6 299 956	599 600	5 449 000
6 501 956	649 560	7 199 000

- b) Rhys groups the remaining numbers into the final box with the following statement: Numbers between 1 000 000 and 8 000 000. Explain why Rhy's statement is **incorrect**.
- 3) What statement could be used as a heading for the final box?
- 4) These bands and singers recorded their earnings for the first half of the year.

Noel Bright		Rock On		Musical Stars	
£4 543 000		Four an million	d a half pounds	£43	5 000
	Famous Dudes		Και	ıla	
	6524,000		C/. 750		

Put the earnings in descending order.

1) Emily says that, in order to complete the empty place value chart with the greatest possible answer, she must use the same number of counters as the



completed chart. Is she correct? Explain why.

м	HTh	TTh	Th	Н	Т	0
0	00	00 00 00	00	000	0	00

HTh TTh Th т 0 Μ Н

2) Harjot, Petra and Charlie are each thinking of a 7-digit number.



on on life's walk

1) Emily says that, in order to complete the empty place value chart with the greatest possible answer, she must use the same number of counters as the



completed chart. Is she correct? Explain why.



М	HTh	TTh	Th	н	Т	0

2) Harjot, Petra and Charlie are each thinking of a 7-digit number.



- thinking of.
- **b)** For each statement, circle whether you think it is true, false or cannot tell. Explain your reasoning.

Petra has the greatest number.

	True	False	Cannot tell	\rangle
	Harjot has	the smallest	number.	
	True	False	Cannot tell	\rangle
3)	These numbers smallest. One What is the di	s have been o digit has bee git? How do	ordered from great on covered with a s you know?	est to star.
	6 524 132		4 215 844	
	* 361 294		2 831 462	

1) a) What are the greatest and smallest possible numbers that can be used in these comparisons?



Smallest Possible Number		Greatest Possible Number
	564 572 < < 565 572	
	1 346 125 > > 1 344 124	
	9 968 246 < < 9 978 246	

- **b)** Write a calculation where the smallest possible answer and the greatest possible answer are the same.
- 2) A set of numbers have been ordered vertically from greatest to smallest. Write a digit in each box so that the numbers are written in order.



1) a) What are the greatest and smallest possible numbers that can be used in these comparisons?



Smallest		Greatest
Possible		Possible
Number		Number
	564 572 < < 565 572	
	1 346 125 > > 1 344 124	
	9 968 246 < < 9 978 246	

- **b)** Write a calculation where the smallest possible answer and the greatest possible answer are the same.
- 2) A set of numbers have been ordered vertically from greatest to smallest. Write a digit in each box so that the numbers are written in order.







Ten millions	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones

To compare and order numbers up to 10 000 000.

Place Value Grid

Place Value Grid

To compare and order numbers up to 10 000 000.

səuO	suəT	spəıpunH	spuɒsnoy_	spupsnoy_ uə_	Thousands barbands	snoilliM	enoillim noT

Song Stars

To compare and order numbers up to 10 000 000.

This table shows the earnings of six bands and singers.



1. Use either < or > to compare the earnings of these artists.

Noel Bright	Rock On
Musical Stars	Ceilidh
Famous Dudes	Bethany
Musical Stars	Noel Bright
Famous Dudes	Rock On

2. Write the names of all the bands which would make these statements true:

a	< £1 300 000
b	> £1 500 000

Can you list the bands and singers in order from lowest earnings to highest earnings?



Song Stars Answers

1.	Noel Bright	>	Rock On
	Musical Stars	>	Ceilidh
	Famous Dudes	<	Bethany
	Musical Stars	<	Noel Bright
	Famous Dudes	>	Rock On

2.

a	Ceilidh, Musical Stars.	< £1 300 000
b	Noel Bright, Bethany	> £1 500 000

3. Ceilidh, Musical Stars, Rock On, Famous Dudes, Bethany, Noel Bright



Song Stars

To compare and order numbers up to 10 000 000.

This table shows the earnings of six bands and singers.



- 1. Tick the statements which are correct about the artists' earnings:
 - O Noel Bright > £9 000 000
 - O Rock On > Bethany
 - £ 1 000 000 > Ceilidh
 - O Musical Stars > Famous Dudes > Ceilidh
 - Noel Bright > Famous Dudes < Rock On
- 2. Write the names of all the bands which would make this statement true:

3. Can you list the bands and singers in order from lowest earnings to highest earnings?



Song Stars Answers

1.

- ⊘ Noel Bright > £9 000 000
- O Rock On > Bethany
- O Musical Stars > Famous Dudes > Ceilidh
- ⊘ Noel Bright > Famous Dudes < Rock On

Ceilidh, Musical Stars, < £1 000 000 > Noel Bright, Rock On, Bethanu

3. Musical Stars, Famous Dudes, Ceilidh, Rock On, Bethany, Noel Bright



Song Stars

To compare and order numbers up to 10 000 000.

This table shows the earnings of six bands and singers.

Noel Bright	Rock On	Ceilidh			
£9 873 591	£3 572 508	£9 875 201			
Bethany	Musical Stars	Famous Dudes			
Bethany	Musical Stars	Famous Dudes			

1. Add a band name in each empty box to make the statement true.

< £1 000 000 < £4 800 000

> £6 000 000 <	<	£4 000 000
----------------	---	------------

< £3 700 000	<		>	£7 550 000
--------------	---	--	---	------------



2. For each comparison statement, use all the digit cards to make the statement true.



- 3. Create your own band or a singer whose earnings would fit in this number sentence. Write their earnings in digits and words.
 £9 873 591 >

 £9 875 201

 Earnings:
- 4. Including your new band, list the bands in order from lowest earning to highest earnings.



Song Stars Answers

1.	Famous Dudes	<	£1 000 000	<	Rock On		£4 800 000
	Noel Bright or Ceilidh	>	£6 000 000	<	Bethany or Musical Stars	<	£4 000 000
	Rock On or Famous Dudes	<	£3 700 000	<	Ceilidh or Noel Bright	>	£7 550 000

2. Multiple answers possible. Examples include:

	Bethany	>	£ 1 54 3	2 15	0		Mus Sta	ical ırs	<	£5 45(0 112
		Roc	k On < £		£5 542	2 01	1	>	Mu S ⁱ	ısical tars	
3.	£9 873 591	> _ 5	5 568 52	22	< £9 8	375 2	201				

4. Famous Dudes, Rock On, Musical Stars, Bethany, Noel Bright, own band's name, Ceilidh

