



Day 1 - Question 2 for the below questions is open ended and each child's answer may vary.

1) Draw each number using Base 10.

12	
36	
68	
99	

2) Can you represent one of the number above in a different way using Base 10?


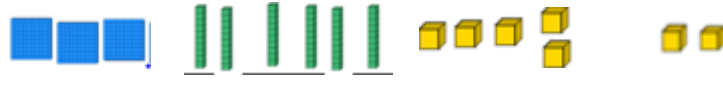


1) Draw each number using Base 10.

12	
36	
585	
499	

2) Can you represent one of the number above in a different way using Base 10?




For Question 2 this could be any other representation e.g. 12 is 1 ten and 2 one or they might draw 12 ones and no tens

1) Draw each number using Base 10.

312	
367	
585	
499	

2) Can you represent one of the number above in a different way using Base 10?

Write down the number represented with Base 10 in each case.

Representation	Number
	
	
	

1. 400
2. 230
3. 305
4. He is missing 6 ones
5. He is missing 6 tens
6. He is missing 5 hundreds and 3 ones

Sanjay is drawing numbers. Can you complete them for him?

246                      390                      706







David has 420 in Base 10 but some are covered.

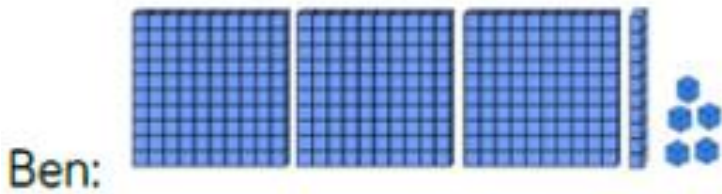


1. He is missing 1 hundred and 1 ten
2. This is an open ended question and should focus on the method as each child may get a variety of different ways (providing they have made 110)

Work out the missing amount.

How many different ways can you make 420 with Base 10?

Which child has made the number 315?



They have both made 315 but in different ways. Ben has 3 hundreds, 1 ten and 5 ones. Amir has 2 hundreds, 10 tens and 15 ones.

What is the value of the number represented in the place value chart?

Hundreds	Tens	Ones

Write your answer in numerals and in words.

- 233 - two hundred and thirty three
- 2 hundreds, 5 tens and 1 one is needed to complete the place value chart.

Complete this place value chart so that it shows the number 354

Hundreds	Tens	Ones

Use  $<$ ,  $>$  or  $=$  to make the statements correct.

	<input type="radio"/>		1. $>$
-----			
	<input type="radio"/>		2. $>$

Hundreds	Tens	Ones

Eva is not correct as the place value chart shows 647. Eva has mixed the hundreds and tens column up. 6 hundreds, 4 tens and 7 ones.

Eva

The place value grid shows the number 467

Is Eva correct? Explain your reasoning.

What do you notice about the number shown?

## Day 2

$$14 \rightarrow 10 \text{ less} = 4 \quad 10 \text{ more} = 24$$

$$26 \rightarrow 10 \text{ less} = 16 \quad 10 \text{ more} = 36$$

$$42 \rightarrow 10 \text{ less} = 32 \quad 10 \text{ more} = 52$$

$$75 \rightarrow 10 \text{ less} = 65 \quad 10 \text{ more} = 85$$

$$81 \rightarrow 10 \text{ less} = 71 \quad 10 \text{ more} = 91$$

$$200 \rightarrow 100 \text{ less} = 100 \quad 100 \text{ more} = 300$$

$$410 \rightarrow 100 \text{ less} = 310 \quad 100 \text{ more} = 510$$

$$550 \rightarrow 100 \text{ less} = 450 \quad 100 \text{ more} = 650$$

$$725 \rightarrow 100 \text{ less} = 625 \quad 100 \text{ more} = 825$$

$$892 \rightarrow 100 \text{ less} = 792 \quad 100 \text{ more} = 992$$

$$56 \rightarrow 10 \text{ less} = 46 \quad 10 \text{ more} = 66$$

$$96 \rightarrow 10 \text{ less} = 86 \quad 10 \text{ more} = 106$$

$$268 \rightarrow 10 \text{ less} = 258 \quad 10 \text{ more} = 278$$

$$573 \rightarrow 10 \text{ less} = 563 \quad 10 \text{ more} = 583$$

$$816 \rightarrow 10 \text{ less} = 806 \quad 10 \text{ more} = 826$$

$$160 \rightarrow 100 \text{ less} = 60 \quad 100 \text{ more} = 260$$

$$295 \rightarrow 100 \text{ less} = 195 \quad 100 \text{ more} = 395$$

$$681 \rightarrow 100 \text{ less} = 581 \quad 100 \text{ more} = 781$$

$$777 \rightarrow 100 \text{ less} = 677 \quad 100 \text{ more} = 877$$

$$805 \rightarrow 100 \text{ less} = 705 \quad 100 \text{ more} = 905$$

$$95 \rightarrow 10 \text{ less} = 85 \quad 10 \text{ more} = 105$$

$$204 \rightarrow 10 \text{ less} = 194 \quad 10 \text{ more} = 214$$

$$492 \rightarrow 10 \text{ less} = 482 \quad 10 \text{ more} = 502$$

$$807 \rightarrow 10 \text{ less} = 797 \quad 10 \text{ more} = 817$$

$998 \rightarrow 10 \text{ less} = 988 \quad 10 \text{ more} = 1008$

$125 \rightarrow 100 \text{ less} = 25 \quad 100 \text{ more} = 225$

$356 \rightarrow 100 \text{ less} = 256 \quad 100 \text{ more} = 456$

$584 \rightarrow 100 \text{ less} = 484 \quad 100 \text{ more} = 684$

$809 \rightarrow 100 \text{ less} = 709 \quad 100 \text{ more} = 909$

$923 \rightarrow 100 \text{ less} = 823 \quad 100 \text{ more} = 1023$

Complete the tables below

10 less		10 more
	96	
	293	
	108	
	507	
	901	

100 less		100 more
	152	
	927	

$1. 96 \rightarrow 10 \text{ less} = 86 \quad 10 \text{ more} = 106$

$2. 293 \rightarrow 10 \text{ less} = 283 \quad 10 \text{ more} = 303$

$3. 108 \rightarrow 10 \text{ less} = 98 \quad 10 \text{ more} = 118$




$4. 507 \rightarrow 10 \text{ less} = 497 \quad 10 \text{ more} = 517$

$5. 901 \rightarrow 10 \text{ less} = 891 \quad 10 \text{ more} = 911$

$6. 152 \rightarrow 100 \text{ less} = 52 \quad 100 \text{ more} = 252$

$7. 927 \rightarrow 100 \text{ less} = 827 \quad 100 \text{ more} = 1027$

Complete the table.

100 less	Number	100 more
		
	 	

$Line 1 \rightarrow 100 \text{ less} = 13 \quad \text{number} = 113$

$Line 2 \rightarrow 100 \text{ less} = 1 \quad 100 \text{ more} = 201$

1.

- Emily has made the number:



Write down the number that is 10 less than 305.

Now write down the number that is 10 less than this new number.

Explain what is happening to the number each time.

$1. 10 \text{ less than } 305 = 295$

$2. 10 \text{ less than the new number is } 285$

3. The digit in the tens column is decreasing by one each time (the number is decreasing by 10)

2.

- 10 more than my number is 100 less than 320. What is my number?

210 is my number.

10 more than my number is the same as 100 less than 320

What is my number?

Explain how you know.

Write your own similar problem to describe the original number.

I think of a number, add ten, subtract one hundred and then add one.

My answer is 256

What number did I start with?

Explain how you know.

What can you do to check?

1. *210 is my number - 10 more than this is 220 which 100 less than 320*

2. *Child to write their own similar problem*

3. *Working backwards (using the inverse operations) →*

$$256 - 1 = 255$$

$$255 + 100 = 355$$

$$355 - 10 = 345$$

*Therefore 345 is the number I started with, I used the inverse to calculate.*

Put the correct number in each box.




Number

Number



1. 110

2. 321

3.  $550 \rightarrow 10 \text{ more} = 560$   $10 \text{ less} = 540$

4.  $724 \rightarrow 10 \text{ more} = 734$   $10 \text{ less} = 714$

5.  $302 \rightarrow 10 \text{ more} = 312$   $10 \text{ less} = 292$

Show ten more and ten less than the following numbers using Base 10 and place value counters.

550

724

302

A counter is missing on the place value chart.

Hundreds	Tens	Ones

*Depending on where the missing counter is placed they could have made:*

*401 (extra counter in the hundreds column)*

*311 (extra counter in the tens column)*

*302 (extra counter in the ones column)*

What number could it have been?

# Day 3

There are 3 tens this is thirty.

There are \_\_\_\_\_ this is \_\_\_\_\_.

There are \_\_\_\_\_ tens in one hundred.

There are 100 sweets in each jar.



How many sweets are there altogether?

Write your answer in numerals and words.

1. Any answer similar to the example:  
e.g. There are 4 tens this is forty, there are 7 tens this is seventy, etc.

2. There are 10 tens in one hundred.

3.  $100 \text{ sweets} \times 4 \text{ jars} = 400$

400 sweets altogether

400 = four hundred

Complete the number tracks.

200	300		500			800	
-----	-----	--	-----	--	--	-----	--

	900	800			500		
--	-----	-----	--	--	-----	--	--

1. 200, 300, 400, 500, 600, 700, 800, 900

2. 1000, 900, 800, 700, 600, 500, 400, 300

What number is shown on the place value chart?

Hundreds	Tens	Ones
100, 100, 100	10, 10, 10, 10, 10	1, 1, 1, 1, 1, 1

If one more 10 is added, what number would be shown?

Use place value counters and a place value grid to represent the numbers:

615

208

37

Use  $<$ ,  $>$  or  $=$  to make the statement correct.

100s	10s	1s
6	1	5

○

100s	10s	1s
6	0	7

○

100s	10s	1s
6	7	0

Dora is correct as there are no tens in the tens column therefore this digit must be zero making it 607. 670 would mean there were 7 counters in the tens column and none in the ones column.

1. 356

2. 10 more would be 366

3. Children to draw the place value counters with the correct amount of hundreds, tens and ones. E.g. 615 would be 6 hundreds, 1 ten and 5 ones

1.  $<$

2.  $<$

100s	10s	1s
6		7

Dora



The place value chart shows 607

Jack

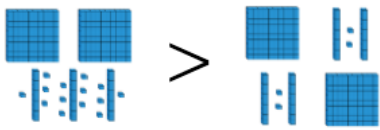
I think it shows 670



Who is correct? Explain your reasoning.



True or False?



False, both amounts represent 244. The first one has 2 hundreds, 3 tens and 14 ones whereas the second amount has 2 hundreds, 4 tens and 4 ones. Even though they are represented differently the both show the same amount so the sign in the middle should be the equals symbol =

Explain your answer.

Circle the greatest number in each pair.

Nine hundred and two

920

500 and 63

568

7 hundreds and 6 ones

76 tens

1. 920

2. 568

3. 76 tens (760)

4. <

5. =

6.  $600 + \underline{60} + 4$  (this could be any number less than 70)

7. Any number larger than two hundred and five.

Use <, > or = to make the statements correct.

399



501

800



80 tens

Complete the statements.

$$600 + 70 + 4 > 600 + \underline{\quad\quad} + 4$$

$$\text{Two hundred and five} < \underline{\quad\quad\quad}$$



I am thinking of a number.

It is between 300 and 500

The digits add up to 14

The difference between the greatest digit and the smallest digit is 2

What could my number be?

Is there only one option?

Explain each step of your working.

*Very tricky!*

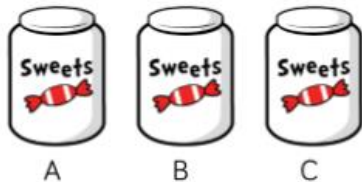
*Children could use a trial and error approach.*

*It cannot be an answer starting with 3 hundred as the biggest possible number would then be 355 (which when adding the digits together makes 13 not 14)*

*It must therefore be a number in the 4 hundreds.*

*Possible answers → 446 or 464*

Amir has 3 jars of sweets.



*If Jar A has the most with 235 and Jar C has the least with 175 then the amount of sweets in Jar B must be a number in between these. Any number of sweets between 175 and 235 could fit in Jar B.*

Jar A contains 235 sweets.

Jar C contains 175 sweets.



Jar A has the most sweets in.  
Jar C has the least sweets in.

How many sweets could be in jar B?

Explain how you know.

## Day 4

Here are three digit cards.



What is the greatest number you can make?

What is the smallest number you can make?

Use the symbols  $<$ ,  $>$  or  $=$  to make the statement correct.



Here is a list of numbers.

312, 321, 123, 132, 213, 231

Place the numbers in ascending order.

Now place them in descending order.

What do you notice?

1. 543

2. 345

3.  $>$

4.  $>$

5. 123, 132, 213, 231, 312, 321

6. 321, 312, 231, 213, 132, 123

7. Encourage them to look at the number

formation e.g. tens and ones, the way the digits are organized to make the number. E.g. a digit in the hundreds column has a higher value than a digit in the tens or ones.

## True or False?

When ordering numbers you only need to look at the place value column with the highest value.

*False - You may begin to look at the highest value but if two numbers have the same digit with the highest value, you would then need to check the next column. Encourage them to test a sequence of numbers to reinforce this learning.*

Whitney has six different numbers.

She put them in ascending order then accidentally spilt some ink onto her page. Two of her numbers are now covered in ink.

*Numbers are ordered smallest to largest. Children could use number of possibilities as long as it is bigger than the number before and less than the number after. Try different numbers do they work? Explain why.*

214,  243, 256,  289

What could the hidden numbers be?

Explain how you know.

Look at the number patterns.  
What do you notice?

5	10	15	20	25	30
50	100	150	200	250	300

Complete the number tracks.

50		150	200			350		450	
	750	700	650			500			350

Circle and explain the mistake in each sequence.

50, 100, 105, 200, 250, 300 ...

990, 950, 900, 850, 800 ...

105 - not a multiple of 50 it should be 150

990 - not a multiple of 50 it should be 1000

Day 5

This is a day of Maths investigations. These activities are more about the approaches your child uses rather than finding a quick answer.

Activity 1 - various different solutions

Activity 2 - lots of different combinations of 5 different coins!

The most you could have would be £3.80

The least you could have would be 38p

Activity 3 -

If he sends them all in boxes of 1 = 900 countries

If he sends them all in boxes of 10 = 90 countries

If he sends them all in boxes of 100 = 9 countries

Children may decide to send different combinations to different countries e.g.  
2 box of 100, 30 boxes of 10, 400 boxes of 1.

First rod is counting up in 5's

Second rod is counting up in 50's

The patterns are similar but 50 is 10 times bigger than 5.

50, 100, 150, 200, 250, 300, 350, 400, 450, 500

800, 750, 700, 650, 600, 550, 500, 450, 400, 350