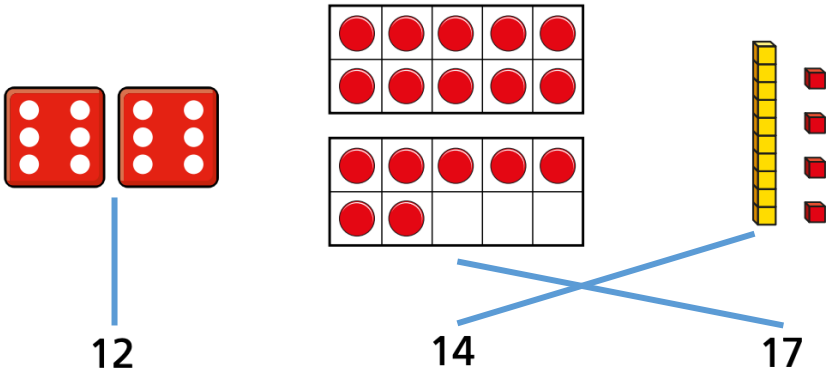
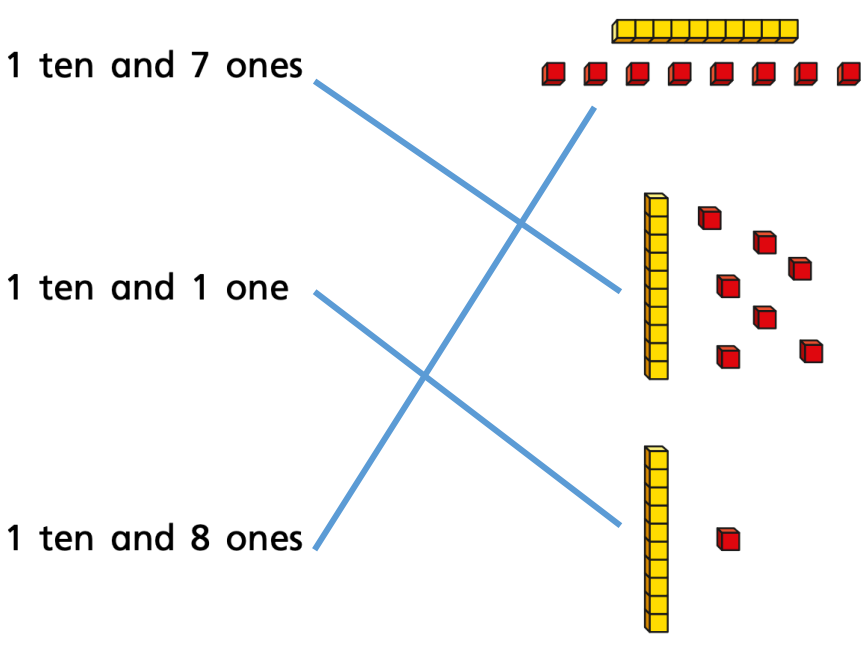


Question	Answer																														
1	 <p>The image shows three different ways to represent numbers. On the left, two dice are shown with 6 dots each, with a blue line pointing to the number 12 below them. In the middle, there are two ten-frames: the top one is completely filled with 10 red dots, and the bottom one has 4 red dots in the first two columns, with a blue line pointing to the number 14 below them. On the right, there is a vertical ten-rod filled with 10 yellow cubes and seven red unit cubes next to it, with a blue line pointing to the number 17 below them.</p>																														
2	<p>a) 15 b) 15 counters arranged in any way on the ten frames.</p>																														
3	<p>a) twelve b) thirteen c) fifteen d) eighteen e) twenty</p>																														
4	<table border="1" data-bbox="248 1110 1232 1218"> <tr> <td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td><td>19</td> </tr> </table> <table border="1" data-bbox="248 1292 1232 1400"> <tr> <td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td> </tr> </table> <table border="1" data-bbox="248 1475 1232 1583"> <tr> <td>18</td><td>17</td><td>16</td><td>15</td><td>14</td><td>13</td><td>12</td><td>11</td><td>10</td><td>9</td> </tr> </table>	10	11	12	13	14	15	16	17	18	19	9	10	11	12	13	14	15	16	17	18	18	17	16	15	14	13	12	11	10	9
10	11	12	13	14	15	16	17	18	19																						
9	10	11	12	13	14	15	16	17	18																						
18	17	16	15	14	13	12	11	10	9																						

Question	Answer
1	a) There is <b>1</b> ten and <b>5</b> ones. There are <b>15</b> apples. b) There is <b>1</b> ten and <b>9</b> ones. There are <b>19</b> bees.
2	Counters showing 1 full ten frame and 3 counters on the other. 1 ten and 3 ones is equal to <b>13</b>
3	 <p>1 ten and 7 ones</p> <p>1 ten and 1 one</p> <p>1 ten and 8 ones</p>
4	a) 1 ten and 6 ones = <b>16</b> b) <b>13</b> = 1 ten and 3 ones c) 15 = <b>1</b> ten and <b>5</b> ones d) 2 tens = <b>20</b> e) 1 ten and 10 ones = <b>20</b>
5	False. There is only 1 counter in the first ten frame and 6 counters in the second. The ten frames show the number 7

Y1 – Spring – Block 2 – Counting forwards and backwards within 50 Answers

Question	Answer
1	a) There are 23 sweets. b) There are 23 sweets. c) The sweets in part b) are easier to count because you can clearly see the 2 tens and 3 ones.
2	a) 18 counters drawn on the ten frames. b) There are 18 pencils. c) Children could cross out the pencils as they draw the counters to make sure they include them all.
3	Yes, Rosie will say the number 29 If she counts from 21 to 36 she will say the numbers 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36

Y1 – Spring – Block 2 – Tens and ones within 50 Answers

Question	Answer
1	There are 3 tens and 4 ones. There are 34 apples.
2	There are 4 tens and 8 ones. There number shown is 48
3	a) 2 sticks and 3 dots to show 23 b) 3 sticks and 2 dots to show 32
4	a) 1 ten and 8 ones = 18 b) 25 = 2 tens and 5 ones c) 41 = 4 tens and 1 one d) 37 ones = 3 tens and 7 ones e) 2 tens and 10 ones = 30
5	29

Y1 – Spring – Block 2 – Compare numbers within 50 Answers

Question	Answer
1	<p>a) 12 is more than 13</p> <p>b) 33 is less than 41 ✓</p> <p>c) 2 tens and 8 ones is equal to twenty-eight ✓</p> <p>d) <math>40 + 8</math> is more than <math>30 + 9</math> ✓</p> <p>e) Thirty-one is less than 3 tens</p>
2	<p>a) 22 is <b>less than</b> 29</p> <p>b) 41 is <b>greater than</b> 4 tens</p> <p>c) Forty-six is <b>greater than</b> <math>40 + 3</math></p> <p>d) <math>40 + 8</math> is <b>equal to</b> one more than 47</p>
3	<p>&gt;</p> <p>=</p>
4	<p>Various answers</p>

Y2 – Autumn – Block 1 – Count objects to 100 Answers

Question	Answer
1	There are 17 pencils.
2	There are 33 bread rolls. Children may have counted 3 tens and 3 rolls.
3	28 twenty-eight
4	62 sixty-two
5	4 tens and 5 ones
6	a) seventeen b) twenty-one c) thirty-five d) eighty-two
7	a) 12 b) 80 c) 100 d) 9 e) 27 f) 14
8	79, 80, 81, 82, 83, 85 70, 69, 66, 64, 63
9	Eva has 45 sweets. Eva's friend gives her 7 sweets.

Y2 – Autumn – Block 1 – Represent numbers to 100 Answers

Question	Answer
1	a) There is 1 ten and 8 ones. The number is 18 b) There are 4 tens and 3 ones. The number is 43
2	a) There are 3 tens and 5 ones. The number is 35 b) There are 4 tens and 0 ones. The number 40 c) There are 2 tens and 9 ones. The number is 29 d) There are 2 tens and 11 ones. The number is 31
3	a) pictorial representation to represent 15 There is 1 ten and 5 ones. The number is 15 b) pictorial representation to represent 30 There are 3 tens and 0 ones. The number is 30
4	two base 10 representations to total 51, for example 5 tens and 1 one, or 4 tens and 11 ones. This can be done in multiple ways.
5	representation with 5 tens and 4 ones circled Rosie has made the mistake of getting the tens and the ones the wrong way around.
6	Amir is thinking of the number 74 Using base 10, 74 can be represented in eight different ways: 7 tens and 4 ones, 6 tens and 14 ones, 5 tens and 24 ones, 4 tens and 34 ones, 3 tens and 44 ones, 2 tens and 54 ones, 1 ten and 64 ones, 74 ones.

Y2 – Autumn – Block 1 – Tens and ones with a part-whole model Answers

Question	Answer
1	a) 46 b) 28
2	a) 9 b) 30
3	<p>2, 12, 22</p> <p>The whole is the same in all of the part-whole models. The parts that make up the whole are different.</p> <p>72 is made up of 7 tens and 2 ones.</p> <p>72 is made up of 6 tens and 12 ones.</p> <p>72 is made up of 5 tens and 22 ones.</p> <p>Children could partition 72 in five other ways: 4 tens and 32 ones, 3 tens and 42 ones, 2 tens and 52 ones, 1 tens and 62 ones, 72 ones.</p>
4	<p>a) any two numbers that add up to 9, e.g. 5 and 4, 7 and 2</p> <p>b) any two numbers that add up to 80, e.g. 40 and 40, 35 and 45</p> <p>c) any two numbers that add up to 53, e.g. 50 and 3, 30 and 23</p>
5	<p>Annie's number has 5 tens and 1 one.</p> <p>It is 51</p> <p>Teddy's number has 3 tens and 21 ones.</p> <p>It is 51</p>
6	<div style="text-align: center;"> <pre> graph TD     100((100)) --- 40((40))     100 --- 60((60))     40 --- 30((30))     40 --- 10((10))     10 --- 7((7))     10 --- 3((3))             </pre> </div> <p>Start with the 7 + 3 as you are given both of the parts that make up the whole.</p>



Y2 – Autumn – Block 1 – Tens and ones using addition Answers

Question	Answer
1	5 ten and 9 ones There are 5 tens and 9 ones. The whole is 59 $50 + 9 = 59$
2	a) 39 has 3 tens and 9 ones. b) 70 has 7 tens and 0 ones. c) 12 has 1 ten and 2 ones. d) 56 has 5 tens and 6 ones.
3	a) $39 = 30 + 9$ b) $70 = 70 + 0$ c) $12 = 10 + 2$ d) $56 = 50 + 6$
4	Children represent the numbers 30 and 28 and show the total amount they represent using the three different representations, to show that $30 + 28 = 58$
5	a) 20 written in part-whole $20 + 7 = 27$ $7 + 20 = 27$ $27 = 20 + 7$ $27 = 7 + 20$ b) 30 written in part-whole $16 + 30 = 46$ $30 + 16 = 46$ $46 = 30 + 16$ $46 = 16 + 30$
6	a) $35 = 30 + 5$ b) $20 + 9 = 29$ c) $42 = 2 + 40$ d) $50 + 7 = 57$ e) $19 + 20 = 39$ f) $67 = 50 + 17$ g) $99 = 60 + 39$ h) $40 + 30 + 11 = 81$
7	Annie is incorrect because 0 ones add 9 ones is equal to 9 ones. This would give 59 not 509. Children use concrete manipulatives or pictorial representations in a place value chart to show their understanding.
8	There are multiple answer, e.g. $30 + 10 = 20 + 20$ and $30 + 5 = 20 + 15$ Children should discuss what they notice about the 30 and 20 and how they can use this to help them choose the two numbers to complete the equivalent calculations.

## Y2 – Autumn – Block 1 – Use a place value chart Answers

Question	Answer
1	a) There are 5 tens and 3 ones. The number represented is 53 b) There are 3 tens and 5 ones. The number represented is 35 c) The place value charts have the same numbers, but they are in different columns.
2	3 more tens and 4 more ones 4 in the tens column 2 more tens counters and 6 more one counters 3 tens and 5 more ones
3	a) $20 + 6 = 26$ b) $30 + 0 = 30$ c) $0 + 9 = 9$
4	a) There are 9 tens and 4 ones. The number is 94 b) There are 7 tens and 5 ones. The number is 75
5	Children should agree with Dexter, because 1 ten and 11 ones is equal to 2 tens and 1 one.

## Y2 – Autumn – Block 1 – Compare objects Answers

Question	Answer
1	a) 4 teddies b) 10 cakes c) 5 fingers d) 8 counters e) 6 on the dice f) 1 ten
2	a) 16 and 12 represented pictorially to show 16 is greater b) 11 and 21 represented pictorially to show 11 is smaller c) 18 represented pictorially and 1 ten and 9 ones to show 18 is smaller
3	a) = b) > c) < d) <
4	<b>Amir</b> has fewer cookies than <b>Alex</b> . Amir has one tin of 10 cookies and 8 ones. Alex has two tens and 3 ones, which is greater.
5	The children should discuss that they disagree with Mo, because 9 ones is smaller than 1 ten. So 3 tens and 9 ones is smaller than 4 tens.

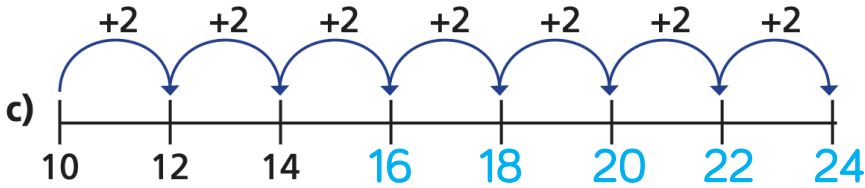
Y2 – Autumn – Block 1 – Compare numbers Answers

Question	Answer
1	a) 15 counters and 14 counters to show 15 is one more than 14 b) 21 counters to show 21 is 9 less than 30 or 3 tens
2	a) 31 is <b>less than</b> 34 b) 18 is <b>greater than</b> 8 c) seventy is <b>greater than</b> seventeen d) $40 + 5$ is <b>equal to</b> 45 e) 9 tens is <b>greater than</b> 9 ones f) 23 ones is <b>less than</b> $30 + 7$
3	a) < b) < c) < d) > e) > f) =
4	a) any number less than 48, e.g. 35 b) any number less than 15, e.g. 12 c) 60 d) any number greater than 39, e.g. 45 e) any number greater than 11, e.g. 20 There are multiple possibilities for the missing numbers, with the exception of 6 tens is equal to 60, as both numbers must be equivalent when using the = sign.
5	a) < b) > c) < d) >
6	Rosie could be thinking of 33 or 34
7	The missing value could be 22, 23, 24, 25, 26, 27, 28 or 29 The missing value cannot be 21 or 30 as this would make it equal to one of the numbers.
8	false Children should use base ten to prove that 2 tens and 13 is greater than 3 tens.

Y2 – Autumn – Block 1 – Order objects and numbers Answers

Question	Answer
1	22, 19, 26 19, 22, 26 Children may discuss that they looked at the number of counters, or looked at how many tens each number had and then the number of ones.
2	23, 45, 55, 19 a) 19 is the smallest number. b) 55 is the greatest number. c) The children may say they looked at the number of tens in each number. d) Possible answers: $23 > 19$ , $45 > 19$ , $55 > 19$ , $45 > 23$ , $55 > 23$ , $55 > 45$ Possible answers: $19 < 23$ , $19 < 45$ , $19 < 55$ , $23 < 45$ , $23 < 55$ , $45 < 55$
3	a) 50, 35, 15 b) 15, 35, 50 One list is in the reverse order of the other.
4	22, 27 and 30 circled on the number line. 22, 27, 30
5	61, 64, 68 labelled on the number line. 68, 64, 61
6	9, 29, 31, 36, 42 Compare the numbers by first looking at the number of tens then the number of ones.
7	Sometimes true The number with the most tens will be the greatest number, for example 41 is greater than 37. The number with the most tens may also have the most ones, e.g. 48 is greater than 37

Y1 – Spring – Block 2 – Count in 2s Answers

Question	Answer																
1	a) 2, 4, 6, 8, 10 b) 12, 14, 16, 18, 20																
2	There are 12 flowers.																
3	Any 7 pairs of socks circled.																
4	<p><b>a)</b></p> <table border="1" data-bbox="251 551 1178 646"> <tr> <td>0</td> <td>2</td> <td>4</td> <td>6</td> <td>8</td> <td>10</td> <td>12</td> <td>14</td> </tr> </table> <p><b>b)</b></p> <table border="1" data-bbox="251 818 1173 913"> <tr> <td>18</td> <td>16</td> <td>14</td> <td>12</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> </tr> </table> <p><b>c)</b></p> 	0	2	4	6	8	10	12	14	18	16	14	12	10	8	6	4
0	2	4	6	8	10	12	14										
18	16	14	12	10	8	6	4										
5	Children should work together to count forwards and backwards in 2s.																

Question	Answer																
1	5, 10, 15, 20																
2	There are 25 spots in total.																
3	The petals of any 7 flowers should be coloured.																
4	<p>a)</p> <table border="1"><tr><td>0</td><td>5</td><td>10</td><td>15</td><td>20</td><td>25</td><td>30</td><td>35</td></tr></table> <p>b)</p> <table border="1"><tr><td>50</td><td>45</td><td>40</td><td>35</td><td>30</td><td>25</td><td>20</td><td>15</td></tr></table> <p>c)</p> <p>20 25 30 35 40 45 50</p>	0	5	10	15	20	25	30	35	50	45	40	35	30	25	20	15
0	5	10	15	20	25	30	35										
50	45	40	35	30	25	20	15										
5	They will both say 10, 20, 30, 40 and 50																

Y1 – Summer – Block 1 – Count in 10s Answers

Question	Answer															
1	There are 10 muffins on each tray. There are 3 trays. There are 30 muffins altogether.															
2	There are 10 apples on each ten frame. There are 2 ten frames. There are 20 apples altogether.															
3	There are 40 counters altogether.															
4	<table border="1" data-bbox="255 607 1053 723"> <tr> <td>10</td> <td>20</td> <td>30</td> <td>40</td> <td>50</td> <td>60</td> <td>70</td> </tr> </table> <table border="1" data-bbox="255 768 1168 884"> <tr> <td>70</td> <td>60</td> <td>50</td> <td>40</td> <td>30</td> <td>20</td> <td>10</td> <td>0</td> </tr> </table>	10	20	30	40	50	60	70	70	60	50	40	30	20	10	0
10	20	30	40	50	60	70										
70	60	50	40	30	20	10	0									
5	Yes There are 10 balloons in each pack. Tom has 6 packs. Tom has 60 balloons altogether.															



## Y2 – Autumn – Block 1 – Count in 3s Answers

Question	Answer
1	3, 6, 9, 12
2	The numbers that are circled are counting up in steps of 3 12 and 15 circled
3	6, 9, 15, 18, 24, 27 21, 18, 15, 12, 9, 6, 3 3, 6, 9, 12, 15, 24, 27, 30
4	12, 15, 18, 21, 24, 27, 30, 33, 36 Rosie will have 36 stickers in 8 days.
5	a) true b) false You don't say the number 11 when counting in 3s from zero.
6	multiples of 3 up to 50 coloured: 3, 6, 9, ..., 45, 48
7	Ron: 0, 2, 4, 6, 8, 10 Kim: 0, 3, 6, 9, 12, 15 Whitney: 0, 5, 10, 15, 20, 25 When you add the numbers together from counting in 2s and 3s, you will be counting in 5s, because 2 add 3 is equal to 5