



Unit I: Numbers to 100

Counting objects to 100

→ pages 6–8

- There are 60 birds.
- a) There are 43 beads.
b) There are 77 straws.
- There are 40 dots.
- You need 60 cubes to make the tower.
- Children should have completed the numbering of the number line and tracks as follows:
0, 10, 20, 30, 40, 50, 60, 70, 80
0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100
100, 90, 80, 70, 60, 50, 40, 30, 20, 10, 0

Reflect

Children should have ticked the middle box to show there are 55 cubes.

Children could have explained their reasoning in different ways, e.g.

There are 5 tens, which is 50, and then 5 ones so that gives 55 cubes altogether.

The top count is wrong because it has missed out 40 when counting in tens and the bottom count is wrong because it has missed out 53 when counting in ones.

Representing numbers to 100

→ pages 9–11

- a) There are 35 cakes.
b) There are 53 cups.
c) There are 55 cubes.
- a) 29
b) 59
c) 79
d) 80
- Children should have drawn lines and dots as follows:
43 4 lines and 3 dots
72 7 lines and 2 dots
63 6 lines and 3 dots
81 8 lines and 1 dot
- a) 61
b) 40
c) 55

Reflect

Children could have represented 43 in various ways, e.g. using different objects such as tens frames, a bead string and cubes or by grouping in different ways such as 4 tens and 3 ones or 3 tens and 13 ones.

Tens and ones (I)

→ pages 12–14

- 29 is 2 (tens) and 9 (ones).
- Children should have matched:
35 to the third picture and to 3 tens and 5 ones.
53 to the fourth picture and to 5 tens and 3 ones.
33 to the second picture and to 3 tens and 3 ones.
30 to the first picture and to 3 tens.
- a) 4 tens and 5 ones, 2 tens and 3 ones, 0 tens and 7 ones, 6 tens and 4 ones, 9 tens and 0 ones, 0 tens and 4 ones.
b) 4, 33, 0, 42, 2
- Children should have chosen 'Yes'. For example, a child might have said 'Yes' because 2 tens and 20 ones are each worth 20 altogether.
- Answers left to right along the number line: 8 tens and 4 ones, 8 tens and 7 ones, 9 tens and 0 ones, 9 tens and 1 one(s)

Reflect

Children could have chosen any number with a 9 in the ones column, e.g. 9, 19, 29, 79, 109.

Tens and ones (2)

→ pages 15–17

- 20 and 4 (parts), $24 = 20 + 4$
- Children should have completed the part-whole diagrams and addition number sentences as follows:
a) 70 and 7 (parts), 77 (whole), $77 = 70 + 7$
b) 10 and 9 (parts), 19 (whole), $19 = 10 + 9$
c) 90 and 1 (parts), 91 (whole), $91 = 90 + 1$
- Answers from top to bottom: 1, 11, 21, 31
- Answers from left to right: X, ✓, X, ✓
- $64 = 60 + 4$
 $74 = 14 + 60$
 $46 = 26 + 20$ or $46 = 20 + 26$
 $46 = 40 + 6$

Reflect

There are many possible answers. Children could have partitioned 39 in different ways where one part is a multiple of 10, e.g. $39 = 9 + 30$ or $39 = 20 + 19$. Children could have partitioned 39 into other pairs of numbers with a total of 39, e.g. $39 = 38 + 1$, $39 = 35 + 4$ or $39 = 25 + 14$. Some children might have partitioned 39 into more than two parts, e.g. $39 = 10 + 10 + 10 + 9$ or $39 = 20 + 15 + 4$.



Representing numbers on a place value grid

→ pages 18–20

- 3 (Tens) 4 (Ones) There are 34 beads.
 - 4 (Tens) 3 (Ones) There are 43 cubes.
 - 1 (Tens) 0 (Ones) There are 10 straws.
- Children should have matched the pictures to the place value grids as follows:
 - first picture → 4 (Tens) 6 (Ones)
 - second picture → 6 (Tens) 0 (Ones)
 - third picture → 4 (Tens) 3 (Ones)
 - fourth picture → 5 (Tens) 9 (Ones)
- Answers from left to right along number line as follows: 7 (Tens) 1 (Ones), 8 (Tens) 0 (Ones), 8 (Tens) 5 (Ones), 9 (Tens) 3 (Ones)
- There are two possible answers: 54 and 65.
 - 90

Reflect

85: 8 tens or 80

80: 8 tens or 80

88: 80 and 8, or 8 tens and 8 ones

8: 8 ones

82: 8 tens or 80

Children might have explained their reasoning in different ways, e.g.

In a 2-digit number, the digit on the left stands for tens and the digit on the right stands for ones.

85 can be partitioned into 80 and 5 and the 80 is 8 tens.

Comparing numbers (I)

→ pages 21–23

- 50 is greater than 43. $50 > 43$
- $30 < 45$
 - $45 < 50$
 - $70 = 70$
 - $21 > 20$
- Answers from top to bottom as follows:
 - $62 > 40$
 - $55 > 40$
 - $38 < 40$
 - $33 < 40$
 - $51 > 40$
- 8 tens and 7 ones $<$ 9 tens and 5 ones.
4 tens and 6 ones $<$ 48.
2 tens and 8 ones $<$ 32.

Reflect

The number sentence is true. Children could have explained their reasoning in different ways, e.g.

47 can be partitioned into 40 and 7. This is less than 50 so it is also less than 54.

When you count up from 0 you get to 47 before you get to 54.

Comparing numbers (2)

→ pages 24–26

- Children should have circled the following answers:
 - 6 (Tens) 5 (Ones)
 - 5 (Tens) 4 (Ones)
 - 2 (Tens) 9 (Ones)
 - 93
 - 99
 - 44
 - 45
- Answers from top to bottom:
 - greater than, greater than, less than, is equal to
 - $<$, $<$, $>$, $>$
- Children should have written the following digits into the empty boxes:
 - 1, 2, 3 or 4. Alternatively, some children could have written 0 or left the box blank.
 - 6, 7, 8 or 9. Alternatively, some children could have written more than 1 digit into the box.
 - 9
- 53

Reflect

Children could have explained their reasoning in different ways, e.g.

...87 is greater than 80 but 78 is less than 80.

...87 lies to the right of 78 on a number line.

Ordering numbers

→ pages 27–29

- Children should have circled:
 - 51
 - 2 (Tens) 9 (Ones)
- Children should have circled:
 - the right-hand drawing (51)
 - the left-hand drawing (21)
- Abbie, Anna, Maya
- $65 < 67 < 76$



5. a) $45 < 55 < 75$
b) $54 < 55 < 57$
6. 89, 90, 91 (in any order)

Reflect

$28 < 58 < 98$ Any 2-digit number with 9 tens is greater than any 2-digit number with 5 tens which, in turn, is greater than any 2-digit number with 2 tens. It is, therefore, only **necessary** to look at the tens to order these numbers. Children could, therefore, have just ticked the Tens box but might well have ticked the Ones box too to say that they looked at the ones.

$41 < 47 < 48$ Children should have ticked both the Tens and the Ones boxes for this example. Children could have started by looking at the tens and noticing that all of the numbers have 4 tens before using the ones to order them. Children could have used other methods such as placing the numbers on a number line but this would also have involved looking at both tens and ones.

Counting in 2s, 5s and 10s

→ pages 30–32

1. a) 15, 20, 25, 30 Hanif has 30 marbles.
b) 8, 10, 12, 14, 16, 18 Cass has 18 cubes.
2. a) There are 38 cubes.
b) There are 80 straws.
3. Children should have filled in the gaps in the following counts:
a) 65, 70, 75, 80, 85, 90
b) 24, 26, 28, 30, 32, 34
c) 60, 62, 64, 66, 68, 70
d) 75, 70, 65, 60, 55, 50
4. Children should have crossed out: 15, 23, 52, 55, 65
5. a) <
b) =
c) <

Reflect

Leo will say the number 10.

Children could have explained their reasoning in different ways, e.g. 10 is an even number between 0 and 50 so when Leo counts down in 2s from 50 he will say 10. Eva will not say 10 because she is counting up from 20 but 10 is less than 20. Alternatively, children could have tried both counts.

Counting in 3s

→ pages 33–35

1. Children should have added the following numbers to the number track: 3, 6, 9, 12, 15.
2. a) 3
b) 6
c) 9
d) 12
e) 15
f) 18
3. 12, 15, 18, 21, 24, 27, 30
4. The word 'yesterday' has 9 letters. The word 'kindergarten' has 12 letters.
5. Children should have shaded the following numbers on the grids: 3, 6, 9, 12, 15, 18, 21, 24, 27, 30.
In the first grid this makes a diagonal pattern, which goes up to the right.
In the second grid this makes two vertical lines.
In the third grid this makes a diagonal pattern, which goes down to the right.
6. a) 9, 12, 15
b) 24, 27, 30
c) 27, 30, 33
d) 18, 21, 24

Reflect

Jodie will have said the numbers: 3, 9, 12, 15 and 30.

Children could have explained their reasoning in different ways, e.g.

I counted up in 3s using a number line.

I looked at my work on page 34.

End of unit check

→ pages 36–37

My journal

I can prove that c is a different number.

Children could have explained their reasoning in different ways, e.g. annotating the diagrams or explaining that diagram c shows 3 tens and 9 ones so represents the number 39. All the other diagrams represent 93.