Lesson - Numbers to 20 and counting

Year: Year 1

Hello, I am Otto the owl! In Year 1 you learn to count, to read numbers and to write them. Counting is the start of all maths. Look around you. How many windows can you see? How many fingers do you have? Today we find out how to answer questions like these.

Starter activity

Find 10 small things in your room, such as pencils, buttons or toy cars. Put them in a line. Touch each one and say a number. Say "one, two, three" and so on. Now mix them up and count again. Do you get the same answer?

Counting objects

Definition: counting

Counting means finding out how many things there are. You say one number for each thing.



There are **7** red dots. The last number you say tells you how many.

Rule: how to count

1. Say the numbers in order: 1, 2, 3, 4 ...
2. Touch each thing once. Do not miss one. Do not touch one twice.
3. The last number you say is the answer.

Example 1

Count the stars.



Touch each star. Say: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12. The last number is 12.

There are **12** stars.

Watch out

If things are in a muddle, you can lose count. Put a small mark on each thing after you count it, or move it to one side. Then you will not count it twice.

Reading and writing numbers to 20

Definition: digit and number word

A **digit** is a number symbol such as 4 or 9. A **number word** is the name of the number, such as four or nine. The numbers 10 to 20 use two digits.

Digit	Word	Digit	Word
0	zero	11	eleven
1	one	12	twelve
2	two	13	thirteen
3	three	14	fourteen
4	four	15	fifteen
5	five	16	sixteen
6	six	17	seventeen
7	seven	18	eighteen
8	eight	19	nineteen
9	nine	20	twenty

Look at the numbers 13 to 19. Most of them end in *teen*. Thirteen means three and ten. Fourteen means four and ten.

Example 2

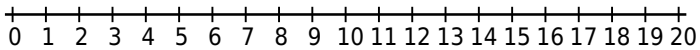
Write 16 in words. Write "eleven" with digits.

16 is **sixteen**. "Eleven" is **11**.

The number line

Definition: number line

A **number line** shows numbers in order. The numbers go up as you move to the right. Each step is one more.

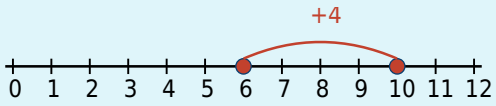


Method: counting on a number line

1. Find the number you start at.
2. Hop one step for each count.
3. Say the number you land on.

Example 3

Start at 6. Count on 4 steps. Where do you land?



From 6 count: 7, 8, 9, 10. You land on **10**.

One more and one less

Definition: one more, one less

One more than a number is the next number up. Add 1. **One less** is the number just before it. Take away 1.

Key fact

- One more than 9 is 10.
- One less than 9 is 8.
- One more than 19 is 20.
- One less than 1 is 0.

Example 4

Mia has 14 stickers. She finds one more. How many stickers does Mia have now?

One more than 14 is 15. Mia has **15** stickers.

Putting numbers in order

Numbers go in order when we say them: 11, 12, 13, 14. We can also put a mixed set in order. Start with the smallest number. End with the biggest number.

Method: ordering numbers

1. Look at all the numbers.
2. Find the smallest one first and write it down.
3. Find the next smallest. Keep going until you reach the biggest.

Example 5

Put these in order, smallest first: 12, 5, 19, 8.

The smallest is 5. Next is 8. Then 12. The biggest is 19. The order is **5, 8, 12, 19**.

Example 6: in real life

A bus has 17 seats. 9 children sit down. Are there more seats or more children?

17 is bigger than 9. There are **more seats** than children.

Counting forwards and backwards

We can count forwards: 3, 4, 5, 6. We can also count backwards: 6, 5, 4, 3. When we count backwards, the numbers get smaller. A rocket countdown goes backwards: 5, 4, 3, 2, 1, blast off!

Example 7

Fill the gap: 15, 14, __, 12.

We count backwards. After 14 comes 13. The missing number is **13**.

Watch out

- Do not mix up 12 and 21. In 12 the 1 is on the left, so it is one ten and two ones.
- Do not forget zero. Zero means none. If there are no apples, we say zero apples.
- Do not say the numbers too fast. Slow counting is correct counting.

Did you know?

People first counted using fingers, stones and marks on bones. The shape of our digits today came from India many hundreds of years ago. The number zero was one of the greatest ideas in maths!

Otto's tip

Count with your finger and say each number out loud. Touch once, say once. Slow and steady wins, just like a wise owl!