

Counting in steps

Prior learning

- Can recognise any number up to 100.
- Can count forwards and backwards in 1s from any number.

Learn

- Display large number lines (starting at 10 and up to at least 100). Ideally, choose positions where the number lines can be kept on show permanently. Over

several different sessions, work with the children to count in steps of 2, 5 and 10 from zero on the number lines.

- Over time, look at the differences and similarities between counting in steps of 2, 5 and 10, moving on to counting in steps of 3. If appropriate, introduce counting on in 10s from any number.
- Display a large 100-square and consider the patterns created by counting in different steps on it.

Where appropriate, this can be related to children's knowledge of times tables and can be used to introduce the concept of multiplication as repeated addition.

- The links to *100 Maths Lessons Year 2* contain lessons on counting in steps.

Talk maths

- Use the textbook to practise counting aloud in steps, encouraging steady rhythms. When children are confident in counting forwards, use the diagrams on page 6 of the textbook, to introduce children to counting backwards to zero in these steps.

Activities

- The textbook questions cover counting backwards and counting on from numbers other than zero. The links to *100 Maths Lessons Year 2* and the *Year 2 Practice Book* provide ample reinforcement and extension activities.

Problems

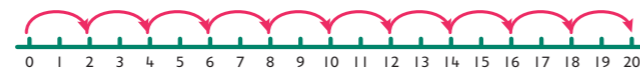
- Work with the children to model how problems like those in the textbook can be solved by counting on in the appropriate steps. Further problems can easily be generated by adjusting the quantities or steps in the problems.

Counting in steps

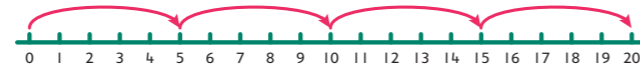
Learn

We can count in steps on a number line. Follow these counts with your finger.

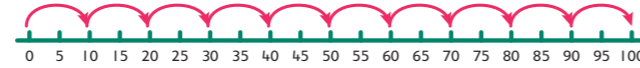
Count in 2s.



Count in 5s.



Count in 10s.



When you count in steps, all the steps must be the same. Continue to count in 3s on this number line.



Look at this number line.



Copy the last number line and mark counting in 2s from 0 using arrows. Which numbers are visited by both 2s and 5s? Why do you think that is?

Tip

Learn counting in 2s to 10 by heart: 2, 4, 6, 8, 10. This will make counting in steps over 20 easier for you.

Talk maths

Say these counts aloud.

0	2	4	6	8	10	12	14	16	18	20
0	3	6	9	12	15	18	21	24	27	30
0	5	10	15	20	25	30	35	40	45	50
0	10	20	30	40	50	60	70	80	90	100
6	16	26	36	46	56	66	76	86	96	106

What do you notice about the last count?



Activities

1. These counts go backwards. Copy and complete the sequences and write the missing numbers.
 - a. 20, 18, 16, _____, _____, _____, 8
 - b. 18, 15, _____, _____, _____, 3, 0
2. Copy and complete the sequences and write the missing numbers.
 - a. 20, 30, 40, _____, _____, _____
 - b. 35, 30, 25, _____, _____, _____
3. Start at 4. Count forward in steps of 10. Write down all the numbers below 100. The first two numbers have been done for you.

4, 14

Problems

Brain-teaser

There are nine pairs of shoes in the cupboard. How many shoes are there altogether?



Brain-buster

Tom puts 10p in his money box every week. How many weeks will it take for him to save £1?

Curriculum objectives

- To count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward.

Success criteria

- I can count forwards and backwards in steps of 2, 3, 5 and 10.

100 Maths Lessons Year 2 links:

- Spring 1, Week 1 (pages 90–95): count in steps of 2, 3, 5 and 10 from 0; and forwards and backwards in 10s from any number
- Spring 2, Week 1 (pages 131–136): count in steps of 2, 3, 5 and 10 from 0; and forwards and backwards in 10s from any number

Year 2 Practice Book links:

- (page 6): Hopscotch counting
- (page 7): Counting on and back
- (pages 8–9): Snakes and ladders counting
- (page 10): Hopscotch 10s
- (page 13): Patterns on a 100 square