# Counting in steps

# National Curriculum attainment target

• Count in steps of 2 and 5 from 0, and in tens from any number, forward and backward

#### Previous related lessons

Unit 3, Week 1, Lesson 2; Unit 3, Week 2, Lesson 1; Unit 4, Week 1, Lesson 1; Unit 5, Week 1, Lesson 1

#### Prerequisites for learning

Pupils need to:

- count in twos and fives from zero to at least 50, and in tens to 100
- be familiar with counting in twos, fives and tens, and understand the term 'multiples'

#### Vocabulary

zero, nought, two, four, six, eight ... thirty, five, ten, fifteen, twenty ... fifty, ten, twenty, thirty, forty ... one hundred, count, count on, count up to, count back, count in ones/twos/ fives/tens, before, after, forwards, backwards, multiples of

## Lesson objectives

- Count in steps of 2 and 5 from 0, forward and backward
- Count in tens from any number, forward and backward

#### Future related lessons

Unit 8, Week 1, Lesson 1; Unit 9, Week 1, Lesson 1; Unit 10, Week 1, Lessons 1 & 3; Unit 10, Week 2, Lesson 1; Unit 12, Week 1, Lesson 1

## Success criteria

Pupils can:

- accurately count in multiples of two and five, forwards and backwards
- count in tens from any number, forwards and backwards



Collins

Connect

Year 2, Unit 6,

Week 1

# Getting Started

- Choose an activity from Number Multiplication and division.
- Choose an activity from Fluency in Number Facts: Y1/Y2 Multiplication and division.

The word 'ones' has been used throughout this lesson when referring to the least significant digit. However, children also need to be familiar with the word 'units'.

## Teach

ball.

### Resources

mini whiteboard, pen and eraser (per pair); 0-9 number fan (per child)

- Display: the Number Square tool.
- Say: We know how to count in steps of two from zero. When we count on in twos starting from zero, we know that each number we land on is called a multiple of two.
- Count on with the class in steps of two from 0 to 30, pointing to each number as you count.
- Say: Tell me a multiple of two between zero and 30.
- Children suggest multiples of two. Highlight the multiples of two on the number square in blue, and confirm with the class that any number that has 0, 2, 4, 6 or 8 as its ones digit is a multiple of two.
- Say: Count back in twos from 30.
- Count back in twos with the class, starting from 30.
- Ask: If I count back in twos from 24, what will the next two numbers be? From 18? From 12?
- Repeat in the same way, to count forwards and back in fives, from zero to 50, identifying multiples of five and highlighting them in red.
- Again, repeat the activity to count forwards and back in tens, from zero to 100, identifying the multiples of ten and highlighting them in yellow.
- Reset the number square to remove the highlighted colours. Say: We have counted on in steps of two, five and ten starting from zero each time.



- Highlight 1 and say: We are going to count in steps of ten again, forwards and back, but this time we will start from one.
- Say: Use your number fan with your partner to show the next number if we count on ten from one.
- In pairs, children show 11 using their number fans. Highlight 11 on the number square.
- Ask: If we count on ten from here (point to 11), what is the next number we will land on?
- Children show 21 using their number fans. Discuss how they decided on their answer.
- Continue to ask children to identify the steps of ten up to 91, highlighting each number.
- Together with the class, count forwards and backwards in tens from one.
- Divide the children, as they are seated, into five groups and explain that you are going to give each group a number, e.g. 3, 5, 6, 8 and 9.
- Say: Now count in tens from your number up to 100 and write down all the numbers that you land on.
- Allow children, working in pairs, to record all their numbers on their whiteboards.
- Discuss the results for each of the five numbers. Say: If you counted in tens from three, which numbers did you land on?
- As children say their numbers, 13, 23, 33, 43 etc., highlight each one in a colour.
- Repeat in the same way for the remaining four numbers.
- Discuss the emerging patterns what do the children notice about the tens and ones digits?

## Individualised Learning

Refer to Activity 1 from the Learning activities on page 260.

Activity Book 2B: - Page 14: Egg steps

- Progress Guide 2: Extension, Year 2, Unit 6, Week 1 Lesson 1: 10 steps
  - Resources: coloured pencils (per child)

## Plenary

- Display: the Number Square tool and point to a number, e.g. 40.
- Ask: Which three numbers will come next if I count on in twos from here? (42, 44 and 46) Which numbers will come next if I count back in twos from 28? (26, 24, 22 etc.)
- Repeat, asking children to identify the numbers that will come next if they count on and back in steps of 5 or 10.
- Say: Listen to my pattern: 12, 22, 32, 42. Ask: What is my pattern? (counting forwards in steps of 10) What will be the next number? (52) Say: Listen to my pattern: 45, 40, 35, 30. Ask: What is the pattern? What comes next?
- Repeat several times, asking children to identify the pattern each time.

Homework Guide 2

Year 2, Unit 6, Week 1, Lesson 1: Counting kangaroos