

MATHS





Lesson 1

Prep

Topic: Number and place value

Counting to determine how many

Lesson concepts

-  **Number** — Names and symbols
-  **Number** — Quantity
-  **Number** — Counting
-  **Number** — Subitising

Today students will:

- ▶ recall forwards and backwards counting sequences
- ▶ subitise collections to five
- ▶ count to identify how many.

Resources

Digital

Learning object — Counting (1)

Find and prepare

Strips of paper

Objects for counting

Key terms

counting sequence,
subitising

For definitions and explanations of terms, please see the [Glossary](#).

Lesson

Introduce the lesson

Note

The following language is important to highlight and develop throughout this lesson:
before, after, next, order, numbers, quantity, forwards, backwards, starting point, ones counting sequence, more, less, how many, total, collection, more than, less than

Explain to students that two-dimensional shapes are found all around (such as on the faces of many objects and in lots of images and drawings).

Revise forwards and backwards counting sequences

Display a small collection (up to 20) of objects.

Count the group of objects aloud twice to students, but get a deliberately different total each time (for example: count each object more than once or omit one object as you count).

Discuss the counting with the students.



Focus questions

Q: *What went wrong with the counting?*

A: For example: You have two different answers.

Q: *What did I do?*

A: For example: You counted the blue one twice.

Q: *How should I have counted?*

A: Personal response required.

Q: *What is a counting rule that would help me?*

A: For example: Count each object only once.

Emphasise that when you count you must count each object only once.

Record the rule: 'Count every object once only'.

Repeat the activity to emphasise the rules:

- where you start counting will not change the total
- the arrangement of objects will not change the total
- the last number counted is the total.

Count to determine how many

Count partners

Give students the following instructions:

- Grab a handful of objects (blocks, large buttons, counters) and place them on the floor/table/desk.
- Count the objects. Did you count each object only once?
- Rearrange the objects and count again. Did you get the same total?
- Count them from a different starting point. Did you get the same total?

Focus questions

Q: *What is another way you could count to get the same answer?*

A: Personal response required.

Q: *What do you need to remember when you count?*

A: For example: Count an object only once.

Place up to five objects on the table:

- ask students to say how many objects there are without counting (subitise)
- place a second small collection on the table beside the first desk and ask students to count on to find out how many altogether.

Focus questions

Q: *How did you know how many were in the first group?*

A: Personal response required.

Q: *Do you always have to count to know how many there are?*

A: For example: No, I can see how many there are.

Q: *Could you have counted differently and got the same answer? Explain.*

A: For example: I could see how many are in a group and keep counting on from there.

Practise counting sequences

Sing and say

Discuss familiar counting rhymes and songs.

Focus questions

Q: *How far do you count in this rhyme?*

A: Personal response required.

Q: *How many objects/characters are in this rhyme?*

A: Personal response required.

Q: *How could you show that many?*

A: For example: I could clap the number.

Q: *Did you count forwards or backwards in this rhyme? How do you know?*

A: For example: Backwards because I started with a big number and finished with a small number.

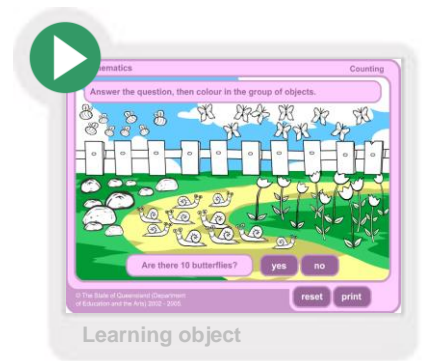
Q: *How many times should you count each object if you are trying to find out how many?*

A: For example: count each object only once.

Explore contexts for counting

Counting challenges

View the **Learning object** — **Counting (1)** and encourage students to guess the totals before they count.



Discuss their success in guessing the totals and counting.

Assist students to plan what they could count in the room. List the ideas for counts on strips of paper. For example:

How many windows are in the room?

How many books are on the shelf?

How many pencils are in the container?

How many chairs are in the room?

How many pages are in the book?

Ask students to:

- predict the quantities
- count the objects
- record the number on the strip of paper (students may record or have an adult record for them)
- display the strips.

Focus questions

Q: *How many did you count?*

A: Personal response required.

Q: *Was it close to what you guessed it would be?*

A: Personal response required.

Q: *How could you check to make sure that you have the correct total?*

A: For example: Count it twice.

Q: *Were there more pages or chairs? How do you know?*

A: Personal response required.

Q: *When might you have to count something?*

A: For example: when I compare the number of lollies I have with my brother.