



# Lesson 16

# Prep

**Topic: Number and place value** 

### **Making quantities**

#### **Lesson concepts**



**Number** — Counting



**Number** — Quantity

### Today students will:

- recall the ones counting sequence accurately
- represent quantities in different arrangements and with a variety of materials.

### Resources

### **Digital**

Learning object — Waltzing to 10 (0:24)

Slideshow — Count to 20!

#### **Sheets**

Sheet — Counting rhyme: Forward and backward counting 1 to 10

Sheet — Simple finger and counting rhymes

### Find and prepare

balls

skipping rope

hand puppet

materials to make finger puppets (optional)

pegs

string

images (to cross out for counting)

range of materials for counting (for example, ice-cream sticks, paper squares, buttons, beads, shells)

containers (for example, bags, egg cartons)

digital camera (optional)

# Key terms

count, how many, quantity, total, missing number, same, more, less, before, after, next, order, sequence

For definitions and explanations of terms, please see the Glossary.



### Lesson

### Introduce the lesson

# Say to students

ullet In today's lesson, we are going to practise counting to find out 'how many'.  $\, ullet$ 

### **Recall counting sequences**

Provide frequent and explicit opportunities to show and practise the forward counting sequence.



Play the **Learning object** — **Waltzing to 10** (0:24).





Perform rhymes containing the counting sequence using the **Sheet** — <u>Counting rhyme: Forward and backward counting 1–10</u> and **Sheet** — <u>Simple finger and counting rhymes</u>.

### Note

Show the counting forwards sequence in a variety of contexts including giving out materials, collecting play equipment, toys and objects.

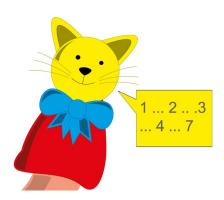
Provide students with opportunities to practise the forward counting sequence such as:

- counting skips, hops, bounces, sounds and movements
- · alternate counting with another person.

Introduce a puppet or character that is having trouble counting.

#### Ask students to:

- check oral counting sequences
- identify missing numbers or errors.





## Focus questions

- Q: What did you notice about the counting?
- Q: How could you fix that?
- Q: Why do you think it is important to count saying the words in the correct order?

### Count to identify how many

### Say to students

When we count, we find out how many there are altogether. There are rules you need to remember when you count. It is important to count each object only once. To make sure you do this, you could touch every object as you count it, you could move the objects as you count them, or you could cross them out. Remember that the total is still the same even when you use different starting points.

Use some of the activities below to provide students with opportunities to practise counting using the above rules:

allow students to work through the Slideshow —
Count to 20!



- make finger puppets and count them by touching or wiggling each finger, starting from different points
- attach pegs to a clothes line as they are counted
- · cross out images or dots as they are counted
- place objects into a bag or containers such as egg cartons as they are counted.

### Represent the same quantity using different materials

Provide students with a small collection of materials to count (for example: six ice-cream sticks or pegs).

Ask students to:

- · arrange the materials as they choose
- count the collection
- take a photo of the collection
- rearrange the collection, count and photograph the new arrangement
- rearrange, count and photograph the collection a third time.



Display the photos for discussion.

# Focus questions

- Q: How would you describe this collection? What does it look like?
- Q: How can you tell if these are the same quantities?
- Q: Even though they are all the same number, how are they arranged differently?
- Q: How could you arrange these to look the same?













# Say to students

No matter how a collection is arranged, the total remains the same.

Repeat with other arrangements and with other collections.