# MATHS

Lesson 28

## Prep

### Topic: Number and place value

## Sharing collections

**Lesson concepts**

- **Number** — Quantity
- **Multiplication and division** — Sharing
- **Multiplication and division** — Part–part–whole (partitioning)
- **Fractional understanding** — Equal parts
- **Equivalence** — Language

Today students will:

- share a collection equally.

## Resources

**Digital**

Learning object — Sharing

**Find and prepare**

Sheet — 'Sharing' card games

Sheet — Cookies

Sheet — Cookie story

20 biscuits (or use counters, buttons or pictures cut from the Sheet — Cookies)

10 paper plates

## Key terms

share, give out, equal, parts, shares, collection, total, same, more, less, fairness, each, groups, whole

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

# Lesson

## Introduce the lesson

**Note**

It is important to highlight and develop the following vocabulary throughout this lesson.

share, give out, equal, parts, shares, collection, total, same, more, less, fairness, each, groups, whole

## Sharing collections

- Explain to students that they will play another card game.
  - Choose a different game to play from the **Sheet — 'Sharing' card games**.
  - Follow directions to play the game with students.
  - As you are playing, help students to see when sharing is required in the game and discuss whether the sharing is equal and fair.

## Explore different ways of sharing a quantity

- Explain to students that in this lesson, they will show how they can share in different ways.
  - Help students to count out 10 cookies (or counters or pictures cut from the **Sheet —** Cookies) and collect 10 paper plates.
  - Explain to students that you will read a story and they will show what is happening in the story, using the 10 cookies/counters/pictures and paper plates.
  - Explain that in the story, the cookies have to be shared fairly, so that each person gets the same number.
  - Tell students to use the paper plates to help them to share.
- Read the story on the **Sheet —** Cookie story.
- As students share the cookies, ask questions to help them to explain how they are sharing the 10 cookies between two, five or 10 people.

### Focus questions

Q: *How can you tell if the cookies have been shared?*
A: There will be the same number on each plate.

Q: *What happened when you shared out the cookies?*
A: For example: I put one on each plate until they were all gone.

Q: *Did you still have 10 cookies altogether? How do you know that?*
A: Yes, because we didn't add any more cookies or take any away.

Q: *What did you notice when there were more plates?*
A: There were fewer cookies on each plate.

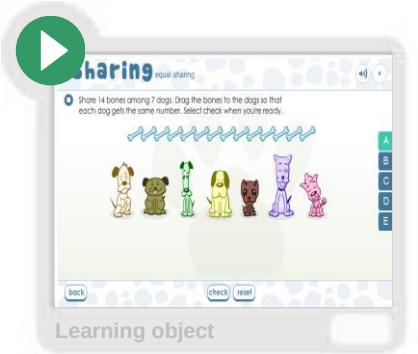
Q: *Why do you think that happened?*
A: Because they had to be shared between more plates.

## Represent sharing, using words, pictures and numbers

- Have students draw a picture to illustrate the last part of the story (10 cookies shared among 10 people).
- Students can draw 10 paper plates and show how the cookies are shared. (They do not need to draw 10 people.)
- Have students write numbers to show how many cookies are on each plate and how many are altogether.

## Equal sharing

- Have students review the **Learning object — Sharing** (select 'Equal sharing') and discuss sharing into equal parts.
- Ask students to describe the sharing in each activity.




## Use sharing in simple, everyday situations

- In real life situations, help students by:
  - identifying and discussing sharing situations (for example: sharing treats, dealing cards, sharing food onto plates, dividing into teams for a game or sport, sharing equipment)
  - using everyday objects to share (for example: put two biscuits on each person's plate).

**Note**

It is important to use materials in sharing activities so that students can move them around and share them according to the type of problem.

It is also important that they use the associated language: each, share, between, among, (for example: I need to share six cakes among three people. How many will each person receive?)