MATHS

Lesson 8

Prep

Topic: Number and place value

Representing addition (1)

Lesson concepts

- **Number** — Quantity
- **Equivalence** — Language
- **Addition and subtraction** — Process/operation
- **Addition and subtraction** — Relationships

Today students will:

- represent addition situations.

Resources

Digital

eBook — *My friend … a Rosie and Wallace story*

Find and prepare

Sheet — Counting rhymes

An animated story (for example: *ABC for kids: Just for fun* or *Hairy Maclary: 10 favourite stories*)

Materials (for example: egg cartons, ten frames, blocks)

Key terms

addition, sum

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.

add, makes, equals, and, more, total, altogether, sum, addition, combine, plus, join

Representing real life experiences

- Have students view a short animated story (for example: *ABC for kids: Just for fun* or *Hairy Maclary: 10 favourite stories*).
- After viewing, ask questions to help students to talk about how real life can be represented in different ways.

Focus questions

Q: *Were the characters in the story you just watched real?*
A: No

Q: *Why do you think the creators of that story used models or drawings instead of real people or animals?*
A: For example: Real animals can't talk.

Say to students

"Sometimes when we talk about maths situations, we use models instead of the real thing."

- Choose a rhyme from the **Sheet —** Counting rhymes (or another counting rhyme that students know) and explain that when they sing or say the rhyme, fingers are used to represent the real characters or objects.

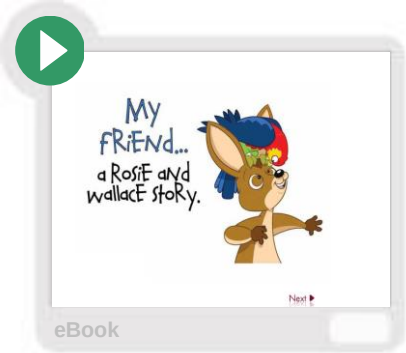
Focus questions

Q: *What was the rhyme about?*
A: For example: fish

Q: *Why didn't you use real [fish] when you told the rhyme?*
A: For example: We didn't have five real fish.

Q: *What did you use to model the characters?*
A: For example: my fingers

Describe addition experiences



- Have students view and listen to the **eBook — *My friend … a Rosie and Wallace story***.
- After viewing, talk about what makes a good friend.
- Ask students to think of some activities that they have played with a friend (for example: skipping, playing in the sandpit, building with blocks).
- Explain to students that in these games, there could be addition situations.
- Help students to think of three activities and the corresponding addition situation.

Say to students

In your skipping game, you jumped the rope five times and Sally jumped the rope four times. How could we make that into an addition story?

When you played in the sandpit, you had three trucks and Tim had two trucks. How could we make that into an addition story?

When you built a tower with the blocks, you put on six blocks and Sarah put on four blocks. What is the addition story?

- Explain how the addition stories can be represented using other objects, just like the animation.

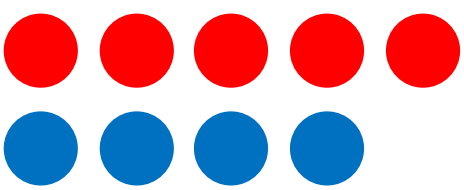
Say to students

When you watched the animation earlier, you saw that the creators of the story used drawings or models to represent people and animals in the story.

We can do the same with our addition situations. We don't need to use the real blocks, jumps or trucks to show the addition story. We can use everyday materials and even pictures.

I'll show you how we can represent your first addition story: you jumped five times and Sally jumped four times.

- Use counters to represent the jumps in the skipping game. For example:



Say to students

Each counter represents one jump. The red counters show your jumps and the blue counters show Sally's jumps. How many jumps did you and Sally do together?

What can we say about the jumps? For example: Five jumps and four jumps make nine jumps.

Let's represent the next story together: You had three trucks and Tim had two trucks.

- Represent the second story with students, using a different model: use blocks to represent the trucks.
- Tell students to move three blocks to the middle and explain that each block represents one truck.

Focus questions

Q: *How many blocks will you add to the first three to represent Tim's trucks?*
A: I will move two more blocks to the middle.

Q: *How many blocks are there in the middle?*
A: Five

Q: *So, what is the addition story about the trucks?*
A: Three trucks and two trucks make five trucks altogether.

- Ask students to represent the last story, using a different model.

Focus questions

Q: *What materials have you chosen to model your addition story?*

Q: *How are you going to use these models?*

Q: *When in your story will you combine the models?*

Q: *What happened to the total when they were combined?*