

# MATHS




## Lessons 32–33

### Prep

#### Topic: Number and place value

#### Identifying and describing addition

##### Lesson concepts

-  Number — Quantity
-  Addition and subtraction — Part-part-whole (partitioning)
-  Addition and subtraction — Process/operation

Today students will:

- describe and model addition.

#### Resources

##### Find and prepare

Environmental materials such as leaves, sticks, pebbles  
Materials such as playdough, buttons, seeds, blocks, paper  
Bags (for example: paper bags or snap lock bags)  
Coins/marbles

#### Key terms

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

#### Note

This is a double lesson. It may be administered on one day if time permits, or alternatively, it can be split and continued the following day. Some activities are suitable for repeating across both days.

## Lesson

### Note

It is important to highlight and develop the following vocabulary throughout this lesson: part, whole, more, less, same, equal, before, after, partition, total, combine, join, add.

### Introduce the lesson: Describe how the total changes after addition

- Explain to students that they will be making collections and then joining them.

#### Focus questions

*Q: What might you observe when you join the collections?*

*Q: How might they change? Why do you think that?*

- Ask students to:
  - make a collection of environmental objects such as leaves or seeds (fewer than 10)
  - get another person to make a collection at the same time (or have another collection already prepared).

#### Say to students

“ Collect as many leaves as you can in one minute. Time starts now. ”

#### Focus questions

*Q: How many objects in your collection? How do you know?*

*Q: What do you think will happen when you join your collections?*

*Q: How many do you think you will have? Why do you think that?*

*Q: How can you check the total?*

*Q: How would you describe what happened?*



### Model addition experiences

- Discuss and organise 'Joining games' for students to play.

#### Note

These could include:

- a playdough cookie and add sultanas
- draw a branch and add leaf prints to it
- sandpit castle and add shell windows
- draw a fish picture and add scales
- build a tower and add blocks.

#### Note

Strategies could include:

- roll a dice
- draw a number from a bag
- see how many you could add in a set time limit
- add a handful.

- Ask students to predict what the final object/picture may look like and how the size of the collection will change.
- Have students play their joining game and:
  - describe what they observe as they play
  - display/photograph the final object.

### Focus questions

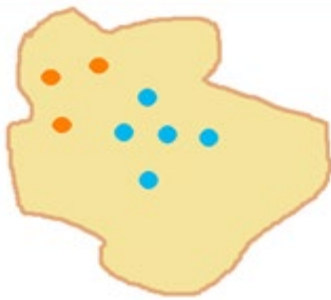
*Q: What did you notice about the size of the collection as you joined your new group?*

*Q: What words could you use instead of join?*

*A: plus, add, and, combine*

*Q: What might happen if you joined two more to this?*

*Q: How do you know that this was addition or adding?*



When we played the playdough cookie game, we rolled a dice each time.

We added that many beads to the cookie.

When we finished, we had 8 'sultanas' on the cookie.

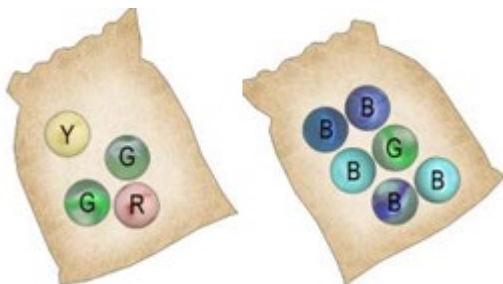
### Record addition experiences

- Explain to students that they are going to:
  - add or join collections
  - use bags containing different numbers of coins/marbles.
- Ask pairs of students to:
  - combine their marbles into one bag
  - describe what they did and the new totals.

### Focus questions

*Q: What do you think will happen if you combine the marbles from two bags into one bag?*

*Q: What did you observe when this happened?*



When we combined the marbles, the bag was very full. We had 10 marbles. I could see 5 blue, 3 green, 1 red and 1 yellow marbles.

- Discuss and model ways of recording and remembering the addition experience.

### Note

These could include:

- photographs
- drawings — paper and electronic
- stamps/prints
- words
- numbers
- dots/circles.

- Assist students to explore ways of recording their experience.



- Encourage students to read back the recordings.

### Focus questions

Q: *What do you think this says?*

Q: *What makes you think that?*

Q: *How is it similar/different to what you wrote?*