MATHS

Lessons 16–18

Year 2

Topic: Number and place value

Applying mathematical concepts 1

Lesson concepts

- Addition and subtraction — Mental computation
- Multiplication and division — Parts–whole
- Number — Place value
- Money — Value

Today students will:

► apply mathematical concepts in a variety of contexts.

Resources

Digital

Learning object — Number expander

Find and prepare

Sheet 22 — Maths journey activity cards 1 (cut out)
Sheet 23 — Number wheel mix-and-match cards (cut out, in a bag)
Sheet 24 — Grouping and sharing problems (cut out)
Sheet 25 — Partitioning game
Sheet 26 — Price tags (cut out)
Sheet 27 — Computation climb (cut out addition cards)
Sheet 28 — 5 × 5 grid
Sheet 29 — Numbering cards (cut out)
Sheet — Place value chart — HTO
Sheet — Australian money (cut out and made)
Two types of common objects (for example: counters, dried beans, buttons (25 of each)
Dice
Items for students to 'buy' and 'sell' (for example: toys, food packets, stationery)
Calculator

Key terms

addition, array, corner, equivalent (equal), fraction, multiplication, partitioning, pattern, place value, side

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

Lesson

Note

It is important to highlight and develop the following vocabulary throughout this lesson: number facts, three-digit number, hundreds, tens, ones, part, whole, represent, bridge, half, quarter, eighth, date, day, month, calendar, money, buy, sell, groups of, share, computation, shape.

Introduce the Maths journey

Say to students

“Over this series of lessons, you will participate in a Maths journey by completing a number of games and activities that require you to use the mathematics skills and knowledge you have learned.”

Note

The Maths journey consists of 11 activities and games. Students may complete the activities in any order and should attempt to complete as many as possible.

Conduct part 1 of the Maths journey

Say to students

“Let’s look at the first group of Maths journey activities and games you can choose from so that we can decide the order in which you will complete them.”

- Provide students with **Sheet 22 —** Maths journey activity cards 1.
- Work with students to read through each activity card and decide on the order in which they will be completed.

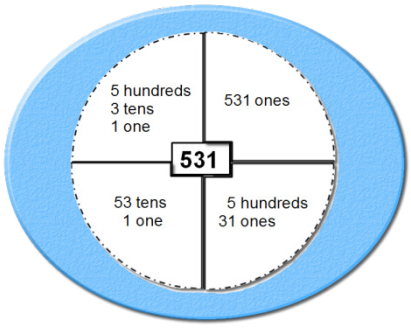
Journey activities

Note

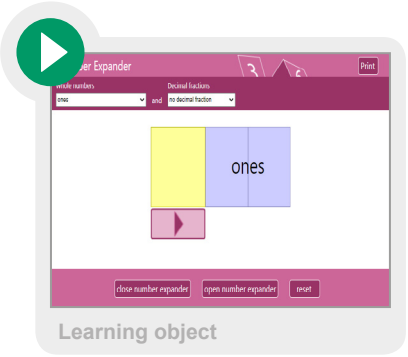
Read each activity and game card from **Sheet 22** with students as they prepare to complete each task. Some students may not connect mathematics with the activity they are completing. Ensure students understand what they are required to do for each task and the related mathematical concept (for example: place value, shape, patterns and algebra) by encouraging them to ask questions.

Activity 1: Number wheel

- Mathematics focus — Place value: Partitioning three-digit numbers
- Provide students with a bag containing number wheel pieces cut out from **Sheet 23 —** Number wheel mix-and-match cards.

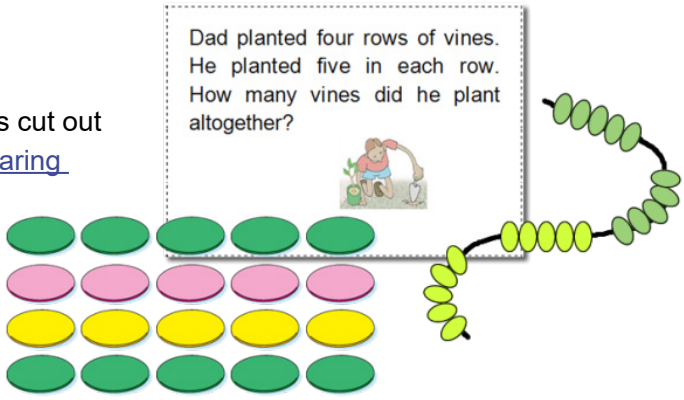


- Have students look at the **Learning object — Number expander** (or print **Sheet —** Place value chart — HTO).



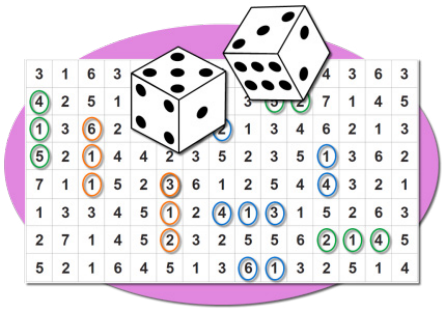
Activity 2: Groups of

- Mathematics focus — Multiplication
- Provide students with:
  - multiplication and division problems cut out from **Sheet 24 —** Grouping and sharing problems
  - dried beans
  - buttons.

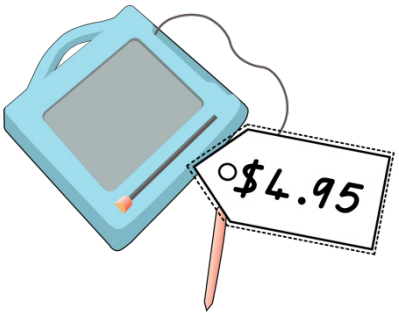


Activity 3: Partitioning game

- Mathematics focus — Parts–whole
- Provide students with:
  - **Sheet 25 —** Partitioning game
  - 15 objects (for example: buttons, dried beans, counters) per player (one type of object each)
  - two dice.

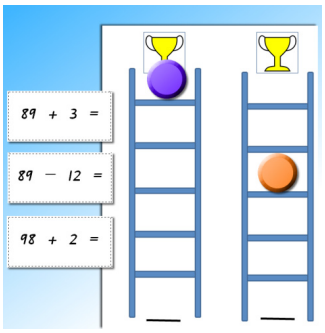


Activity 4: Let's shop!



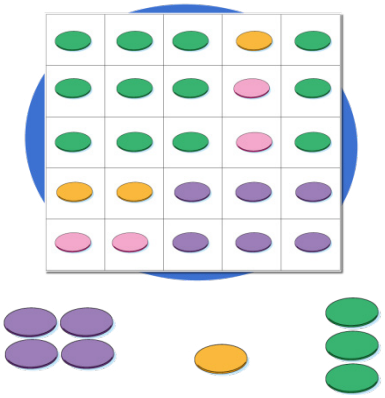
- Mathematics focus — Money: Counting small collections of coins and notes
- Provide students with:
  - money (notes and coins) cut out and made from **Sheet —** Australian money
  - items to buy and sell in their shop (for example: toys, food packets, stationery)
  - price tags cut out from **Sheet 26 —** Price tags and attached to shop items.

Activity 5: Computation climb



- Mathematics focus — Addition and subtraction: One-digit and two-digit numbers
- Provide students with:
  - gameboard and addition cards cut out from **Sheet 27 —** Computation climb
  - a playing piece (for example: button, counter)
  - calculator.

Activity 6: Arrays game



- Mathematics focus — Multiplication
- Provide students with:
  - grid playing boards from **Sheet 28 —** 5 × 5 grid
  - two sets of three cards numbered 1, 2 and 3 cut out from **Sheet 29 —** Numbering cards
  - a container or bag
  - 25 playing pieces (buttons, dried beans, counters) for each player.

Reflect on the Maths journey

- Ask students to reflect on the Maths journey by:
  - sharing their experiences of each activity, including work samples
  - identifying and reflecting on the mathematics used to complete each activity.
- On completion of each Maths journey activity, ask students:

Focus question

Q. *What did you do in the activity or game?*

A. Personal response required.