# **Year 2 Mathematics**

#### **Achievement Standard**

By the end of Year 2, students recognise increasing and decreasing number sequences involving 2s, 3s and 5s. They represent multiplication and division by grouping into sets. They associate collections of Australian coins with their value. Students identify the missing element in a number sequence. Students recognise the features of three-dimensional objects. They interpret simple maps of familiar locations. They explain the effects of one-step transformations. Students make sense of collected information.

Students count to and from 1000. They perform simple addition and subtraction calculations using a range of strategies. They divide collections and shapes into halves, quarters and eighths. Students order shapes and objects using informal units. They tell time to the quarter-hour and use a calendar to identify the date and the months included in seasons. They draw two-dimensional shapes. They describe outcomes for everyday events. Students collect, organise and represent data to make simple inferences.

#### **Assessable Elements**

An overall level of achievement in this subject is determined by the teacher's on-balance judgment of the evidence presented in students' summative assessment across the following strands:

## • Number and Algebra

Number and place value; Fractions and decimals; Money and financial mathematics; Patterns and algebra.

#### Measurement and Geography

Using units of measurement; Shape; Geometric reasoning; Location and transformation.

## Statistics and probability

Chance; Data representation and interpretation.

## **Delivery (mode, time requirements, lessons)**

Students have access to three 1 hour scheduled lessons each week. Lessons are delivered via our Learning Management System. Students are also expected to undertake independent study to complete tasks and assessment in accordance with the Work Rate Calendar.

#### **Student Requirements**

Computer, internet access, email, printer, scanner, headset with microphone, stationery, manipulative materials, whiteboard and whiteboard markers.

# Year 2 Mathematics (Semester 1)

### **Units, Learning Experiences and Summative Assessment**

#### Unit 1

#### Number and place value

Count collections in groups of ten, represent two-digit numbers, read and write two-digit numbers, connect two-digit number representations, partition two-digit numbers, use the twos, fives and tens counting sequence, investigate twos, fives and tens number sequences, represent addition and subtraction, use part- part-whole relationships to solve problems, connect part-part-whole understanding to number facts, recall addition number facts, add strings of single-digit numbers, add two-digit numbers, represent multiplication and division, solve simple multiplication and division problems.

#### Using units of measurement

Order days of the week and months of the year, use calendars to record and plan significant events, connect seasons to the months of the year, compare lengths using direct comparison, compare lengths using indirect comparison, measure and compare lengths using non-standard units.

#### Chance

Identify everyday events that involve chance, describe chance outcomes, describe events as likely, unlikely, certain, impossible.

### Data representation and interpretation

Collect simple data, record data in lists and tables, display data in a picture graph, describe outcomes of data investigations.

## **Summative Assessment:**

- Counting and calculating to and from 1000 Students count to and from 1000 and perform addition and subtraction problems using a range of strategies.
- Collecting and representing data Students collect, organise and represent data to make simple inferences.
- Investigating outcomes of daily events Students use simple strategies to reason and solve a chance inquiry question.

# Number and place value

Recall addition and subtraction number facts, represent two-digit numbers, partition two-digit numbers into place value parts, represent addition situations, describe part-part-whole relationships, add and subtract single- and two-digit numbers, solve addition and subtraction problems, represent multiplication, represent division, solve simple grouping and sharing problems.

## Fractions and decimals

Represent halves, quarters and eighths of shapes, describe the connection between halves, quarters and eighths, solve simple number problems involving halves, quarters and eighths.

# Money and financial mathematics

Describe the features of Australian coins, count coin collections, identify equivalent combinations, identify \$5 and \$10 notes, count small collections of coins and notes.

### Patterns and algebra

Identify the threes counting sequence, describe number patterns, identify missing elements in counting patterns, solve simple number pattern problems.

# Using units of measurement

Identify the number of days in each month, relate months to seasons, tell time to the quarter hour, compare and order area of shapes and surfaces, cover surfaces to represent area, measure area with informal units.

## Shape

Recognise and name familiar two-dimensional shapes, describe the features of two-dimensional shapes, draw twodimensional shapes and describe the features of familiar three-dimensional objects.

#### Location and transformation

Interpret simple maps of familiar locations, describe 'bird's-eye view', use appropriate language to describe locations, use simple maps to identify locations of interest.

#### **Summative Assessment:**

- Identifying number patterns and telling time to the quarter-hour Students describe number patterns, identify missing elements and tell time to the quarter-hour.
- Recognising the value of money and performing simple addition and subtraction calculations Students associate collections of Australian notes and coins with their values. Students solve simple addition and subtraction problems using a range of strategies.
- Investigating simple maps of familiar locations Students use simple strategies to reason and solve a location inquiry question.

**Units, Learning Experiences and Summative Assessment** 

# Number and place value

Count to and from 1 000, represent three-digit numbers, compare and order three-digit numbers, partition three- digit numbers, read and write three-digit numbers, recall addition number facts, identify related addition and subtraction number facts, add and subtract with two-digit numbers, represent multiplication and division, use multiplication to solve problems, count large collections.

#### **Fractions**

Divide shapes and collections into halves, quarters and eighths, solve simple fraction problems.

#### **Location and transformation**

Describe the effect of one-step transformations, including turns, flips and slides, identify turns, flips and slides in real-world situations.

## Money and financial mathematics

Count collections of coins and notes, make and compare money amounts, read and write money amounts.

#### Using units of measurement

Compare and order objects, measure length, area and capacity using informal units, identify purposes for calendars and explore seasons and calendars.

#### **Summative Assessment:**

- Ordering shapes and objects using informal units Students measure, compare and order several objects using uniform informal units.
- Counting, multiplying and dividing Students count, model and represent numbers to and from 1 000 and
  represent multiplication and division by grouping into sets. Students divide collections and shapes into halves,
  quarter and eighths and solve simple problems.
- Using a calendar to identify dates, months and seasons Students use a calendar to identify dates and the
  months included in seasons.
- Investigating numbers to 1000 Students use simple strategies to reason and solve number inquiry
  questions.

### Unit 4

# Number and place value

Recall addition and subtraction number facts, use the inverse relationship, identify compatible numbers, add single-digit and two-digit numbers, add three-digit numbers and subtract two-digit numbers, identify related addition and subtraction facts, use place value to solve addition and subtraction problems.

#### Fractions and decimals

Identify halves, quarter and eighths of shapes and collections.

# Patterns and algebra

Describe number patterns, investigate addition pattern sequences.

# Using units of measurement

Directly compare mass of objects, use informal units to measure mass, length, area and capacity of objects and shapes, compare and order objects and shapes based on a single attribute, tell time to the quarter-hour.

#### Shape

Draw and describe two-dimensional
 Location and transformation

Draw and describe two-dimensional shapes, describe the features of three-dimensional objects.

#### Location and transformation

Identify half- and quarter-turns, represent flips and slides, interpret simple maps.

#### Chance

Predict the likelihood of an event based on data.

# Data representation and interpretation

Use data to answer questions, represent data.

# **Summative Assessment:**

- Explaining transformations Students explain the effects of one-step transformations.
- Recognising two-dimensional shapes and three-dimensional objects Students draw two-dimensional shapes and recognise the features of three-dimensional objects.
- Representing data and chance Students describe outcomes for everyday events, collect, organise, represent and make sense of collected data and make simple inferences.
- Investigating shapes and location Students use simple strategies to reason and solve number and measurement inquiry questions.

**Disclaimer** All of the above information is accurate at the time of development.

Semester 2