# Year 3 Syllabus

#### **Year Level Description**

The proficiency strands **understanding**, **fluency**, **problem-solving** and **reasoning** are an integral part of mathematics content across the three content strands: number and algebra, measurement and geometry, and statistics and probability. The proficiencies reinforce the significance of working mathematically within the content and describe how the content is explored or developed. They provide the language to build in the developmental aspects of the learning of mathematics. The achievement standards reflect the content and encompass the proficiencies.

#### At this year level:

- understanding includes connecting number representations with number sequences, partitioning and combining numbers flexibly, representing unit fractions, using appropriate language to communicate times, and identifying environmental symmetry
- fluency includes recalling multiplication facts, using familiar metric units
  to order and compare objects, identifying and describing outcomes of
  chance experiments, interpreting maps and communicating positions
- problem-solving includes formulating and modelling authentic situations involving planning methods of data collection and representation, making models of three-dimensional objects and using number properties to continue number patterns
- reasoning includes using generalising from number properties and results of calculations, comparing angles and creating and interpreting variations in the results of data collections and data displays.

# Number and Algebra

# NUMBER AND PLACE VALUE

Investigate the conditions required for a number to be odd or even and identify odd and even numbers

(ACMNA051)

- Numeracy
- © Critical and creative thinking

Recognise, model, represent and order numbers to at least 10 000 (ACMNA052)

- Literacy
- Numeracy

Apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems

# Measurement and Geometry

# USING UNITS OF MEASUREMENT

Measure, order and compare objects using familiar metric units of length, mass and capacity
(ACMMG061)

- Literacy
- Numeracy

Tell time to the minute and investigate the relationship between units of time

### (ACMMG062)

- Literacy
- Numeracy

#### **SHAPE**

Make models of threedimensional objects and describe key features (ACMMG063)

# Statistics and Probability

#### **CHANCE**

Conduct chance experiments, identify and describe possible outcomes and recognise variation in results (ACMSP067)

- Literacy
- Numeracy
- Critical and creative thinking

# DATA REPRESENTATION AND INTERPRETATION

Identify questions or issues for categorical variables. Identify data sources and plan methods of data collection and recording (ACMSP068)

- Literacy
- **₽** Numeracy

### (ACMNA053)

- Literacy
- Numeracy
- © Critical and creative thinking

Recognise and explain the connection between addition and subtraction (ACMNA054)

- Literacy
- Numeracy
- Critical and creative thinking

Recall addition facts for single-digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation (ACMNA055)

Numeracy

Recall multiplication facts of two, three, five

- Literacy
- Numeracy

# LOCATION AND TRANSFORMATION

Create and interpret simple grid maps to show position and pathways
(ACMMG065)

- Literacy
- Numeracy
- Critical and creative thinking

Identify symmetry in the environment (ACMMG066)

Numeracy

#### GEOMETRIC REASONING

Identify angles as measures of turn and compare angle sizes in everyday situations (ACMMG064)

Numeracy

Critical and creative thinking

Collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies (ACMSP069)

- Literacy
- Numeracy
- Communication
  Technology (ICT)
  capability
- Critical and creative thinking

Interpret and compare data displays
(ACMSP070)

- Literacy
- Numeracy
- © Critical and creative thinking

and ten and related division facts (ACMNA056)

Critical and creative thinking

**№** Numeracy

Represent and solve problems involving multiplication using efficient mental and written strategies and appropriate digital technologies (ACMNA057)

■ Literacy

**№** Numeracy

is Information and

Communication

Technology (ICT)

capability

Critical and creative thinking

# FRACTIONS AND DECIMALS

Model and represent unit fractions including 1/2, 1/4, 1/3, 1/5 and their multiples to a complete whole

## (ACMNA058)

Numeracy

# MONEY AND FINANCIAL MATHEMATICS

Represent money
values in multiple
ways and count the
change required for
simple transactions to
the nearest five cents
(ACMNA059)

- Numeracy
- © Critical and creative thinking

# PATTERNS AND ALGEBRA

Describe, continue, and create number patterns resulting from performing addition or subtraction (ACMNA060)

- Literacy
- Numeracy
- Critical and creative thinking

## Year 3 Achievement Standard

#### **Number and Algebra**

At Standard, students count to and from 10 000. They classify numbers as either odd or even. Students recall addition and multiplication facts for single-digit numbers. They recognise the connection between addition and subtraction and solve problems using efficient strategies for multiplication. Students model and represent unit fractions. They represent money values in various ways. Students correctly count out change from financial transactions. They continue number patterns involving addition and subtraction.

## **Measurement and Geometry**

Students use metric units for length, mass and capacity. They tell time to the nearest minute. Students make models of three-dimensional objects. They match positions on maps with given information. Students identify symmetry in the environment. They recognise angles in real situations.

#### **Statistics and Probability**

Students conduct chance experiments and list possible outcomes. They conduct simple data investigations for categorical variables. Students interpret and compare data displays.

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- problem-solving includes formulating and modelling authentic situations involving planning methods of data collection and representation, making models of three-dimensional objects and using number properties to continue number patterns
- reasoning includes using generalising from number properties and results of calculations, comparing angles and creating and interpreting variations in the results of data collections and data displays.