## **Australian Curriculum Mathematics V7.0**

Year 3

## **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.

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, creating and interpreting variations in the results of data collections and data displays

## **Achievement Standard**

By the end of Year 3, students recognise the connection between addition and subtraction and solve problems using efficient strategies for multiplication. They model and represent unit fractions. They represent money values in various ways. Students identify symmetry in the environment. They match positions on maps with given information. Students recognise angles in real situations. They interpret and compare data displays.

Students count to and from 10 000. They classify numbers as either odd or even. They recall addition and multiplication facts for single digit numbers. Students correctly count out change from financial transactions. They continue number patterns involving addition and subtraction. Students use metric units for length, mass and capacity. They tell time to the nearest minute. Students make models of three-dimensional objects. Students conduct chance experiments and list possible outcomes. They carry out simple data investigations for categorical variables.

## **Content Descriptors**

Number and Algebra	Measurement and Geometry	Statistics and Probability
<ul> <li>Investigate the conditions required for a number to be odd or even by identifying odd and even numbers</li> <li>Recognise, model, represent and order numbers to at least 10 000</li> <li>Apply place value to partition, rearrange and regroup (rename) numbers to at least 10 000 to assist calculations &amp; solve problems</li> <li>Recognise &amp; explain the connection between addition and subtraction</li> <li>Recall addition facts for single-digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation</li> <li>Recall multiplication facts of two, three, five and ten and related division facts</li> <li>Represent and solve problems involving multiplication using efficient mental strategies and appropriate digital technologies</li> <li>Model and represent unit fractions including 1/2, 1/4, 1/3 and 1/5 and their multiples to a complete whole</li> <li>Represent money values in multiple ways and count the change required for simple transactions to the nearest five cents</li> <li>Describe, continue and create number patterns resulting from performing addition and subtraction</li> </ul>	<ul> <li>Measure, order and compare objects using familiar metric units of length, mass and capacity</li> <li>Tell the time to the minute and investigate the relationship between units of time</li> <li>Make models of three-dimensional objects and describe key features</li> <li>Create and interpret simple grid maps to show position and pathways</li> <li>Identify symmetry in the environment</li> <li>Identify angles as measures of turn and compare angle sizes in everyday situations</li> </ul>	<ul> <li>Conduct chance experiments, identify and describe possible outcomes and recognise variation in results</li> <li>Identify questions or issues for categorical variables. Identifying data sources and plan methods of data collection and recording.</li> <li>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</li> <li>Interpret and compare data displays</li> </ul>