## West Torrens Partnership (Draft 15/09/14)

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

Year 2

## **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 calculations with counting sequences, partitioning and combining numbers flexibly, identifying and describing the relationship between addition and subtraction and between multiplication and division
- Fluency includes counting numbers in sequences readily, using informal units iteratively to compare measurements, using the language of chance to describe outcomes of familiar chance events and describing and comparing time durations
- Problem Solving includes formulating problems from authentic situations, making models and using number sentences that represent problem situations, and matching transformations with their original shape
- Reasoning includes using known facts to derive strategies for unfamiliar calculations, comparing and contrasting related models of operations, and creating and interpreting simple representations of data

## **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 data from relevant questions to create lists, tables and picture graphs.

Content	Descriptors

Number and Algebra	Measurement and Geometry	Statistics and Probability
<ul> <li>Investigate number sequences, initially those increasing and decreasing by 2's, 3's, 5's and 10's from any starting point, then moving on to other sequences</li> <li>Recognise, model, represent and order numbers to at least 1000</li> <li>Group, partition and rearrange collections up to 1000 in hundreds, tens and ones to facilitate more efficient counting</li> <li>Explore the connection between addition and subtraction</li> <li>Solve simple addition and subtraction problems using a range of efficient mental and written strategies</li> <li>Recognise and represent multiplication as repeated addition, groups and arrays</li> <li>Recognise and represent division as grouping into equal sets and solve simple problems using these representations</li> <li>Recognise and interpret common uses of halves, quarters and eighths of shapes and collections</li> <li>Count and order small collections of Australian coins and notes according to their value</li> <li>Describe patterns with numbers and identify missing elements</li> <li>Solve problems by using number sentences for addition and subtraction</li> </ul>	<ul> <li>Compare and order several shapes and objects based on length, area, volume and capacity using appropriate uniform informal units</li> <li>Compare masses of objects using balance scales</li> <li>Tell the time to the quarter-hour, using the language of 'past' and 'to'</li> <li>Name and order months and seasons</li> <li>Use a calendar to identify the date and determine the number of days in each month</li> <li>Describe and draw two-dimensional shapes, with and without digital technologies</li> <li>Describe the features of three-dimensional objects</li> <li>Interpret simple maps of familiar locations and identify the relative positions of key features</li> <li>Investigate the effect of one-step slides and flips with and without digital technologies</li> <li>Identify and describe half and quarter turns</li> </ul>	<ul> <li>Identify practical activities and everyday events that involve chance. Describe outcomes as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible'</li> <li>Identify a question of interest based on one categorical variable. Gather data relevant to the question.</li> <li>Collect, check and classify data</li> <li>Create displays of data using lists, table and picture graphs and interpret them</li> </ul>