Chapel Hill State School

Maths Curriculum and Assessment Overview 2024

YEAR 3

Curriculum Intent

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 Standards

Spiral Progression and Alignment

Developing the same concepts from one grade level to the next in increasing complexity and application.

YEAR 2	YEAR 3	YEAR 4
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.	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 conduct simple data investigations for categorical variables.	By the end of Year 4, students choose appropriate strategies for calculations involving multiplication and division. They recognise common equivalent fractions in familiar contexts and make connections between fraction and decimal notations up to two decimal places. Students solve simple purchasing problems. They identify and explain strategies for finding unknown quantities in number sentences. They describe number patterns resulting from multiplication. Students compare areas of regular and irregular shapes using informal units. They solve problems involving time duration. They interpret information contained in maps. Students identify dependent and independent events. They describe different methods for data collection and representation, and evaluate their effectiveness. Students use the properties of odd and even numbers. They recall multiplication facts to 10 x 10 and related division facts. Students locate familiar fractions on a number line. They continue number sequences involving multiples of single digit numbers. Students use scaled instruments to measure temperatures, lengths, shapes and objects. They convert between units of time. Students create symmetrical shapes and patterns. They classify angles in relation to a right angle. Students list the probabilities of everyday events. They construct data displays from given or collected data.

Year 3	Maths Curriculum and Assessment Overview		Chapel Hill State School
Term 1	**Term 2**	**Term 3**	**Term 4**
Unit 1	**Unit 2 (and Unit 3)**	**Unit 3**	**Unit 4**
Number and Algebra *Number and Place Value* • Count to 1 000 • Identify odd and even numbers • Represent 3-digit numbers • Compare and order 3-digit numbers • Partition numbers (standard and non-standard place value partitioning) • Recall addition facts and related subtraction facts • Represent and solve addition problems • Add 2-digit, single-digit and 3-digit numbers • Subtract 2-digit and 3-digit numbers • Represent multiplication • Solve simple problems involving multiplication • Recall multiplication number facts **Measurement and Geometry** *Using Units of Measurement* • Tell time to 5-minute intervals • Identify 1 metre as a standard metric unit • Represent a metre and measure with metres **Statistics and Probability** *Chance* • Conduct chance experiments • Describe the outcomes of chance experiments • Identify variations in the results of chance experiments *Data Representation and Interpretation* • Collect simple data • Record data in lists and tables • Display data in a column graph • Interpret and describe outcomes of data investigations	**Number and Algebra** *Number and Place Value* • Compare and order 3-digit numbers • Partition 3-digit numbers into place value parts • Investigate 1 000 and count to and beyond 1 000 • Use place value to add and subtract numbers • Recall addition number facts • Add and subtract 3-digit numbers • Add and subtract numbers 8 and 9 • Solve addition and subtraction word problems • Double and halve multiples of ten *Fractions and Decimals* • Describe fractions as equal portions or shares • Represent halves, quarters and eighths of shapes and collections • Represent thirds of shapes and collections *Money and Financial Mathematics* • Represent money amounts in different ways AND compare values • Count collections of coins and notes accurately and efficiently • Make and match equivalent combinations • Choose appropriate coins and notes for shopping situations • Calculate change and totals from simple transactions • Solve a range of simple problems involving money • Count the change required for simple transactions to the nearest five cents *Patterns and Algebra* • Infer pattern rules from familiar number patterns • Identify and continue additive number patterns • Identify missing elements in number patterns	**Number and Algebra** *Number and Place Value* • Count and sequences beyond 1 000 • Represent, combine and partition 3-digit and 4-digit numbers flexibly • Use place value to add (written strategy) • Represent multiplication as arrays and repeated addition • Identify part-part-whole relationships in multiplication and division situations • Add and subtract 2-digit numbers and 3-digit numbers • Make models and use number sentences that represent problem situations • Recall multiplication facts AND addition and subtraction facts • Identify and describe the relationship between addition and subtraction • Identify related division number facts • Choose appropriate mental strategies to add and subtract *Fractions and Decimals* • Represent familiar unit fractions symbolically and compare unit fractions • Represent and compare unit fractions of shapes and collections • Solve simple problems involving, halves, thirds, quarters and eighths *Patterns and Algebra* • Identify number patterns to 10 000 • Connect number representations with number patterns • Use number properties to continue number patterns • Identify pattern rules to find missing elements in patterns **Measurement and Geometry** *Units of Measurement* • Use familiar metric units to order and compare objects • Measure, order and compare objects using familiar metric units of length, mass and capacity • Explain measurement choices • Represent time to the minute on digital and analogue clocks • Transfer knowledge of time to real-life contexts	**Number and Algebra** *Number and Place Value* • Recall addition and related subtraction number facts • Use 'part-part-whole' thinking to interpret and solve addition and subtraction word problems • Add and subtract using a written place value strategy • Recall multiplication and related division facts • Multiply 2-digit numbers by single-digit multipliers • Interpret and solve multiplication and division word problems *Fractions and Decimals* • Identify, represent and compare familiar unit fractions and their multiples (shapes, objects and collections) • Record fractions symbolically • Recognise key equivalent fractions • Solve simple problems involving fractions **Measurement and Geometry** *Shape* • Make models of 3D objects *Location and Transformation* • Represent symmetry • Describe and identify examples of symmetry in the environment • Classify shapes as symmetrical and non- symmetrical • Interpret simple maps and plans • Show full, half and quarter turn on a grid map • Describe positions in relation to key features • Represent position, movement and pathways on a simple grid map *Geometric Reasoning* • Identify angles as measures of turn • Compare angle sizes in everyday situations

Assessment			
U1 Representing, Adding and Subtracting Numbers *Short answer questions* Recognise, represent and order numbers. Recognise the connection between addition and subtraction, and add and subtract numbers. * Includes Diagnostic Pre-Test **U1 Conducting a Simple Chance Experiment** *Short answer questions* Collect and interpret data from a simple chance experiment.	**U2 Adding, Subtracting and Partitioning Numbers** *Short answer questions* Recall addition and subtraction facts and apply place value understanding to partition, rearrange and regroup numbers. * Includes Diagnostic Pre-Test **U3 Money (eAssessment)** *Short answer online questions* Represent money values in various ways and correctly count change from financial transactions. * Includes Diagnostic Pre-Test	**U3 Measuring Length, Mass and Capacity** *Short answer questions* Use metric units for length, mass and capacity. **U3 Patterning and Connecting Addition and Subtraction** *Short answer questions* Classify numbers as odd or even, continue number patterns, recall addition facts for single-digit numbers and recognise the connection between addition and subtraction. * Includes Diagnostic Pre-Test **U3 Representing Multiplication** Represent multiplication and solve multiplication problems using a range of strategies. **U3 Investigating the Relationship between Units of Time** *Short answer inquiry questions* Students use simple strategies to reason and solve a measurement inquiry question.	**U4 Using Unit Fractions and Multiplication** *Short answer questions* Recall multiplication facts for single-digit numbers, solve problems using efficient strategies for multiplication, and model and represent unit fractions. * Includes Diagnostic Pre-Test **U4 Interpreting Grid Maps, identifying 3D Objects, Identifying Symmetry and Angles** *Short answer questions* Match positions on maps with given information, and identify symmetry in the environment. Make a model of a 3D object and recognise angles in real world situations.
Achievement Standard – Elements Assessed			
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