Chapel Hill State School
Maths Curriculum and Assessment Overview 2024
YEAR 2

Australian CURRICULUM

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 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 Standards

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

YEAR 1	YEAR 2	YEAR 3
By the end of Year 1, students describe number sequences resulting from skip counting by 2s, 5s and 10s. They identify representations of one half. They recognise Australian coins according to their value. Students explain time durations. They describe two-dimensional shapes and three-dimensional objects. Students describe data displays. Students count to and from 100 and locate numbers on a number line. They carry out simple additions and subtractions using counting strategies. They partition numbers using place value. They continue simple patterns involving numbers and objects. Students order objects based on lengths and capacities using informal units. They tell time to the half hour. They use the language of direction to move from place to place. Students classify outcomes of simple familiar events. They collect data by asking questions, draw simple data displays and make simple inferences.	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 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.

Year 2	Maths Curriculum and Assessment Overview		Chapel Hill State School
Term 1	**Term 2**	**Term 3**	**Term 4**
Unit 1 & Unit 3	Unit 2	Unit 3	Unit 2 & Unit 4

Number and Algebra

- *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 2-digit numbers, represent multiplication and division, solve simple multiplication and division problems.

Measurement and Geometry

- *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

Statistics and Probability

- *Chance* — identify every day 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.

Number and Algebra

- *Number and place value* — recall addition subtraction number facts, represent two-digit numbers, partition two-digit numbers into place value parts, represent addition situations, describe part-part-whole relationships, add & 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 and quarters and eighths of shapes, represent halves and quarters of collections, represent eighths of shapes and collections, describe the connection between halves, quarters and eighths, and solve simple number problems involving halves, quarters and eighths.
- *Money and financial mathematics* — count collections of coins and notes, make and compare money amounts, read and write money amounts, compare money amounts.
- *Patterns and algebra* — identify the 3s counting sequence, describe number patterns, identify missing elements in counting patterns, and solve simple number pattern problems.

Measurement and Geometry

- *Using units of measurement* — tell time to the quarter hour, compare and order area of shapes and surfaces, cover surfaces to represent area, measure area with informal units
- *Location and transformation* — interpret simple maps

Number and Algebra

- *Number and place value* — count to and from 1000, 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, and count large collections.
- *Fractions and decimals* — divide shapes and collections into halves, quarters and eighths, solve simple fraction problems

Measurement and Geometry

- *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
- *Location and transformation* — describe the effect of one-step transformations including turns, flips and slides, and identify turns, flips and slides in real world situations, 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

Number and Algebra

- *Number and place value* - recall addition and subtraction number facts, use 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.
- *Patterns and algebra* — describe number patterns, investigate addition pattern sequences

Measurement and Geometry

- *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
- *Shape* — recognise and name familiar 2D shapes, describe the features of and draw 2D shapes, describe the features of familiar 3D objects, describe the features of 3D objects
- *Location and transformation* — identify half and quarter turns, represent flips and slides

Statistics and Probability

- *Chance* — predict the likelihood of an event based on data
- *Data representation and interpretation* - Use data to answer questions, represent data

Assessment

U1 Counting and Calculating to and from 1000

Short answer questions

Count to and from 1000 and perform simple addition and subtraction problems using a range of strategies.

* Includes Diagnostic Pre-Test

U1 Collecting and Representing Data

Short answer questions

Collect, organise and represent data to make simple inferences.

U3 Using a Calendar to Identify Dates, Months and Seasons

Short answer questions

Use a calendar to identify dates and the months included in seasons.

U2 Identifying Number Patterns

Test

Describe number patterns and identify missing elements.

* Includes Diagnostic Pre-Test

U2 Telling time to the Quarter Hour

Test

Tell time to the quarter hour.

U2 Recognising the Value of Money

Test

Associate collections of Australian notes and coins with their values.

U2 Investigating Simple Maps of Familiar Locations

Investigation

Use simple strategies to reason and solve a location inquiry question
(Linked to U1 HASS)

U3 Counting, Multiplying and Dividing Whole Numbers

Short answer questions

Count, model and represent numbers to and from 1000 and represent multiplication by grouping into sets.

* Includes Diagnostic Pre-Test

U3 Dividing Collections into Halves, Quarters, Eighths

Short answer questions

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

* Includes Diagnostic Pre-Test

U3 Ordering Shapes and Objects using Informal Units

Short answer questions

Measure, compare and order several objects using uniform informal units.

U4 Recognising 2D Shapes and 3D Objects

Short answer questions

Draw 2D shapes and recognise the features of 3D objects.

U4 Representing Data and Chance

Short answer questions

Describe outcomes for everyday events, collect, organise, represent and make sense of collected data and make simple inferences.

U4 Explaining Transformations

Short answer questions

Explain the effects of one-step transformations.

U2 Performing Simple Addition and Subtraction Calculations

Test

Solve simple addition and subtraction problems using a range of strategies.

* Includes Diagnostic Pre-Test

Achievement Standard – Elements Assessed

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.
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