Chapel Hill State School

Maths Curriculum and Assessment Year Level Plan 2025

Prep

AC V9

Curriculum Intent

Year Level Description

In Foundation, learning in Mathematics builds on the Early Years Learning Framework and each student's prior learning and experiences. Students engage in a range of approaches to learning and doing mathematics that develop their understanding of and fluency with concepts, procedures and processes by making connections, reasoning, problem-solving and practice. Proficiency in mathematics enables students to respond to familiar and unfamiliar situations by employing mathematical strategies to make informed decisions and solve problems efficiently.

Students further develop proficiency and positive dispositions towards mathematics and its use as they:

- explore situations, sparked by curiosity, using physical and virtual materials to represent, sort, quantify, compare and solve everyday problems
- look for and make connections between number names, numerals and quantities, and compare quantities and shapes, using elementary mathematical reasoning in active learning experiences
- bring mathematical meaning to their use of familiar terms and language when they pose and respond to questions, and explain their thinking and reasoning
- build confidence and autonomy in being able to make and justify mathematical decisions based on quantification and direct comparisons
- learn to recognise repetition in pattern sequences and apply this to creatively build repeating patterns in a range of contexts
- develop a sense of sameness, difference and change when they engage in play-based activities.

Achievement Standard

Spiral Progression and Alignment

	PREP	YEAR 1
	Number, Algebra By the end of Foundation Year, students make connections between number names, numerals and position in the sequence of numbers from zero to at least 20. They use subitising and counting strategies to quantify collections. Students compare the size of collections to at least 20. They partition and combine collections up to 10 in different ways, representing these with numbers. Students represent practical situations that involve quantifying, equal sharing, adding to and taking away from collections to at least 10. They copy and continue repeating patterns. **Measurement, Space** Students identify the attributes of mass, capacity, length and duration, and use direct comparison strategies to compare objects and events. They sequence and connect familiar events to the time of day. Student's name, create and sort familiar shapes and give their reasoning. They describe the position and the location of themselves and objects in relation to other objects and people within a familiar space. **Statistics, Probability** Students collect, sort and compare data in response to questions in familiar contexts.	**Number, Algebra** By the end of Year 5, students use place value to write and order decimals including decimals greater than one. They express natural numbers as products of factors and identify multiples. Students order and represent, add and subtract fractions with the same or related denominators. They represent common percentages and connect them to their fraction and decimal equivalents. Students use their proficiency with multiplication facts and efficient calculation strategies to multiply large numbers by one- and two-digit numbers and divide by single-digit numbers. They check the reasonableness of their calculations using estimation. Students use mathematical modelling to solve financial and other practical problems, formulating and solving problems, choosing arithmetic operations and interpreting results in terms of the situation. They apply properties of numbers and operations to find unknown values in numerical equations involving multiplication and division. Students create and use algorithms to identify and explain patterns in the factors and multiples of numbers. **Measurement, Space** They choose and use appropriate metric units to measure the attributes of length, mass and capacity, and to solve problems involving perimeter and area. Students convert between 12- and 24-hour time. They estimate, construct and measure angles in degrees. Students use grid coordinates to locate and move positions. They connect objects to their two-dimensional nets. Students perform and describe the results of transformations and identify any symmetries. **Statistics, Probability** They plan and conduct statistical investigations that collect nominal and ordinal categorical and discrete numerical data using digital tools. Students identify the mode and interpret the shape of distributions of data in context. They interpret and compare data represented in line graphs. Students conduct repeated chance experiments, list the possible outcomes, estimate likelihoods and make comparisons between those with and without equally likely outcomes.

Sequence of units	Semester 1		Semester 2	
	Unit 1	**Unit 2**	**Unit 3**	**Unit 4**
Unit description	**Number and Algebra** • look for and make connections between number names, numerals and quantities • learn to recognise repetition in pattern sequences and apply this to creatively build repeating patterns in a range of contexts • develop a sense of sameness, difference and change when engaging in play-based activities about patterns **Space** • develop a sense of sameness, difference and change when engaging in play-based activities describing position and location • bring mathematical meaning to the use of familiar terms and language when explaining thinking about position and location **Statistics** • explore situations, sparked by curiosity, using physical and virtual materials to represent, sort, quantify and compare data • bring mathematical meaning to the use of familiar terms and language when posing and responding to questions about data, and explaining thinking and reasoning	**Number** • look for and make connections between number names, numerals and quantities, and compare quantities, using elementary mathematical reasoning in active learning experiences • explore situations, sparked by curiosity, using physical and virtual materials to represent and solve everyday problems that involve quantifying, adding to and taking away from collections to at least 10 **Measurement** • build confidence and autonomy in being able to make and justify mathematical decisions based on quantification and direct comparisons of duration and events	**Number** • look for and make connections between number names, numerals and quantities, and compare quantities, using elementary mathematical reasoning in active learning experiences • explore situations, sparked by curiosity, using physical and virtual materials to represent and solve everyday problems that involve quantifying, equal sharing, adding to and taking away from collections to at least 10 **Space** • name, create and compare shapes, using elementary mathematical reasoning in active learning experiences • develop a sense of sameness, difference and change when engaging in play-based activities about shapes **Measurement** • build confidence and autonomy in being able to make and justify mathematical decisions based on quantification and direct comparisons of mass, capacity and length of objects	**Number and Algebra** • look for and make connections between number names, numerals and quantities, and compare quantities, using elementary mathematical reasoning in active learning experiences • learn to recognise repetition in pattern sequences and apply this to creatively build repeating patterns in a range of contexts
Curriculum links				

Assessment		Semester 1		Semester 2	
		Monitoring strategy U1.1 *Connecting and sequencing numbers and exploring repeating patterns*	**Assessment task U2.1** *Partitioning and combining collections and representing practical situations*	**Assessment task U3.1** *Representing practical situations including mass, length and capacity*	**Assessment task U4.1** *Using numbers to at least 20 and repeating patterns*
Range and balance of assessment conventions	**Technique**		Short response Choose an item.	Observed demonstration Choose an item.	Observed demonstration Choose an item.
	Mode		Spoken/ Signed Practical	Spoken/ Signed Practical	Spoken/ Signed Practical
	Conditions		☒ Access to resources ☒ Individual task **or** ☐ Group task **Consideration of:** ☒ Time conditions ☒ Accessibility for all students	☒ Access to resources ☒ Individual task **or** ☐ Group task **Consideration of:** ☒ Time conditions ☒ Accessibility for all students	☒ Access to resources ☒ Individual task **or** ☐ Group task **Consideration of:** ☒ Time conditions ☒ Accessibility for all students
	Diagnostic	Includes Numeracy Diagnostic	Includes Unit Diagnostic Number		Includes Unit Diagnostic Number

Assessment		**Monitoring strategy 1.2 —** Describing position and location	**Monitoring strategy 2.2** *Subitising collections*	**Assessment task U3.2** *Identifying and sorting shapes*	**Monitoring strategy 4.2 —** Subitising and quantifying collections
Range and balance of assessment conventions	**Technique**			Observed demonstration Choose an item.	
	Mode			Written Spoken/ Signed Practical	
	Conditions			☒ Access to resources ☒ Individual task **or** ☐ Group task **Consideration of:** ☒ Time conditions ☒ Accessibility for all students	
	Diagnostic				

Assessment		**Assessment task U1.3** *Collecting, sorting and comparing data*	**Monitoring strategy 2.3 —** *Exploring attributes of duration and sequencing familiar events*		
Range and balance of assessment conventions	**Technique**	Investigation Choose an item.			
	Mode	Written Spoken/ Signed Practical			
	Conditions	☒ Access to resources ☒ Individual task **or** ☐ Group task **Consideration of:** ☒ Time conditions ☒ Accessibility for all students			
	Diagnostic				

Achievement Standard Elements Assessed / Elements Monitored				
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Disclaimer: Please use this Curriculum Map as a guide. Due to circumstances beyond our control, it may be necessary to make changes to the published timetabling, delivery or instrument of an assessment.