











Year 5 — Western Australian Curriculum v8.1: Mathematics – Eden Hill Primary School

Year:	Year Level:	Teacher:
Western Australian Curriculum	Year level description	<p>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. The achievement standards reflect the content and encompass the proficiencies.</p> <p>At this year level:</p> <ul style="list-style-type: none"> understanding includes making connections between representations of numbers, using fractions to represent probabilities, comparing and ordering fractions and decimals and representing them in various ways, describing transformations and identifying line and rotational symmetry fluency includes choosing appropriate units of measurement for calculation of perimeter and area, using estimation to check the reasonableness of answers to calculations and using instruments to measure angles problem-solving includes formulating and solving authentic problems using whole numbers and measurements and creating financial plans reasoning includes investigating strategies to perform calculations efficiently, continuing patterns involving fractions and decimals, interpreting results of chance experiments, posing appropriate questions for data investigations and interpreting data sets.
	Achievement standard	<p>By the end of Year 5, students solve simple problems involving the four operations using a range of strategies. They check the reasonableness of answers using estimation and rounding. Students identify and describe factors and multiples. They identify and explain strategies for finding unknown quantities in number sentences involving the four operations. They explain plans for simple budgets. Students connect three-dimensional objects with their two-dimensional representations. They describe transformations of two-dimensional shapes and identify line and rotational symmetry. Students interpret different data sets.</p> <p>Students order decimals and unit fractions and locate them on number lines. They add and subtract fractions with the same denominator. Students continue patterns by adding and subtracting fractions and decimals. They use appropriate units of measurement for length, area, volume, capacity and mass, and calculate perimeter and area of rectangles. They convert between 12- and 24-hour time. Students use a grid reference system to locate landmarks. They measure and construct different angles. Students list outcomes of chance experiments with equally likely outcomes and assign probabilities between 0 and 1. Students pose questions to gather data, and construct data displays appropriate for the data.</p> <p>Source: SCSA, Western Australian Curriculum Mathematics featuring v8.1 of the Australian Curriculum Mathematics</p>
Cross Curriculum Priorities	Aboriginal and Torres Strait Islander perspectives	<p>Mathematics provides opportunities for children to strengthen their appreciation and understanding of Aboriginal peoples and Torres Strait Islander peoples and their living cultures. Specific content and skills within relevant sections of the curriculum can be drawn upon to encourage engagement with:</p> <ul style="list-style-type: none"> Aboriginal and Torres Strait Islander frameworks of knowing and ways of learning Social, historical and cultural contexts associated with different uses of mathematical concepts in Australian Indigenous societies Aboriginal peoples' and Torres Strait Islander peoples' contributions to Australian society and cultures. <p>Mathematics provides opportunities to explore aspects of Australian Indigenous knowing in connection to, and with guidance from, the communities who own them. Using a respectful inquiry approach, children have the opportunity to explore mathematical concepts in Aboriginal and Torres Strait Islander lifestyles including knowledge of number, space, measurement and time. Through these experiences, children have opportunities to learn that Aboriginal peoples and Torres Strait Islander peoples have sophisticated applications of mathematical concepts which may be applied in other peoples' ways of knowing.</p>
	Key to general capabilities and cross-curriculum priorities	<p>Provide opportunities to engage with:</p> <p>  Literacy  Numeracy  ICT capability  Critical and creative thinking  Ethical behaviour  Personal and social capability  Intercultural </p> <p> understanding  Aboriginal and Torres Strait Islander histories and cultures  Asia and Australia's engagement with Asia  Sustainability </p>

Specific EHPS Teaching Strategies	Basic Facts/Mental Maths The following basic facts should be recalled by students at the end of the year.	Number and Algebra <ul style="list-style-type: none"> Recall 2 digit addition to 6 + 6 Add single digits to any multiple of 10 Recall subtraction facts from 10 Recall 2, 5 and 10 times tables Double numbers to 10 Recognise and identify $\frac{1}{2}$, $\frac{1}{4}$ and $\frac{1}{8}$ of a collection or object 		Measurement and Geometry <ul style="list-style-type: none"> Tell time to the quarter hour Name and order months of the year Recognise and name common 2-D shapes ie; square, circle, triangle, rectangle, hexagon octagon and oval Identify faces, edges and corners of 3-D shapes 								
	Problem Solving	<p>Problem Solving Focus At Eden Hill Primary School we have recognised problem solving as an area of concern across the Mathematics learning area. To address this area of concern explicit teaching of problem solving strategies and skills across the Mathematics curriculum is to be undertaken across all year levels. The primary strategy for the teaching of Problem Solving strategies at Eden Hill is to be Mathletics and the Problem Solving resources available through this program. Other problem solving resources may be used by class teachers to supplement this program. The workbook for years 5 and 6 can be found at; http://west.cdn.mathletics.com/IWB/Book/7%5C107760961.Problem_Solving_Level_3_student.pdf</p> <p>The Year 5/6 Strategies to be focused upon in years 5 and 6 are;</p> <table style="width: 100%; text-align: center;"> <tr> <td>Draw a diagram</td> <td>Look for Patterns</td> <td>Make a List</td> <td>Work Backwards</td> </tr> <tr> <td>Trial and Error</td> <td>Logical Reasoning</td> <td>Open-ended Problem Solving</td> <td></td> </tr> </table>			Draw a diagram	Look for Patterns	Make a List	Work Backwards	Trial and Error	Logical Reasoning	Open-ended Problem Solving	
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Maths Journals	<p>Research has shown that the use of Maths Journals can have a positive effect on a child's learning of mathematical concepts and on test scores. Maths journals are expected to be used from PP through to Year 6 following the scope and sequence outlined below:</p> <p>Year 5/6; 1 -3 Independent journal entries per week. Each Journal entry should take 5 to 10 lines written at the bottom of the page within the student's maths book.</p> <p>Focus of journal entries should be: an entry at the beginning of a new concept being taught an entry or entries during the teaching of the concept and an entry on conclusion of the concept being taught</p> <p>Maths journals allow students to reflect on their own learning and understanding and permit the teacher to gain a valuable insight into the students' level of understanding. Journal entries should receive teacher feedback through a comment, tick or other method. It is acceptable that when giving feedback on a student's journal entry, not all other work carried out on that page may be marked. Teachers are responsible for ensuring that an adequate level of feedback is being provided to the students.</p>											
Assessment	Year 5 Assessment	<p>The assessment tasks underlined below are those that are to be collected and placed into the students Evidence For Reporting Files (EFRF). The EFR tasks will vary from year to year. These tasks are to be decided and agreed upon within the cells.</p> <p>The tasks listed under moderation are to be moderated within cells before being placed into EFRF. During moderation teachers should form a consensus on the grades allocated to the samples used.</p>										
		Term 1	Term 2	Term 3	Term 4							
		Assessment instrument	Assessment instrument	Assessment instrument	Assessment instrument							
		<ul style="list-style-type: none"> <u>Mental Maths Tests – New Wave Mental Maths sample of Friday Tests</u> <u>Number Task 1 - First Steps Tasks</u> 	<ul style="list-style-type: none"> <u>School Mental Maths Test</u> <u>Measurement Task</u> Formal Reports Grades <ul style="list-style-type: none"> ➤ Number and Algebra ➤ Measurement and Geometry 	<ul style="list-style-type: none"> <u>Number Task 2 - First Steps Tasks</u> <u>Space Task</u> ACER PAT – Maths Test online Testing 	<ul style="list-style-type: none"> Formal Report Grades <ul style="list-style-type: none"> ➤ Number and Algebra ➤ Measurement and Geometry ➤ Statistics and Probability 							
Moderation	Number Task 1	Measurement Task Formal Report Grades		Formal Report Grades								
SAER	<p>All students identified through Student Profiling as SAER must have an IEP/GEP Week 6 of each Term - IEP's / GEP's to be reviewed and updated and submitted to School Services Coordinator All Aboriginal Students and student under the care of DCP must have a documented education plan.</p>											
First Steps Links to Western Australian Curriculum	<p><u>First Steps links are given for each content descriptor.</u></p> <ul style="list-style-type: none"> Num = First Steps in Mathematics: Number. <p>Text 1 = Whole Decimal /Fractional Numbers Text 1 = Whole Decimal r/Fractional Numbers</p> <ul style="list-style-type: none"> Spa = First Steps in Mathematics: Space 		<ul style="list-style-type: none"> Mea = First Steps in Mathematics: Measurement. <p>Text 1 = Understand Units/Direct Measure Text 2 = Indirect Measure/Estimate</p> <ul style="list-style-type: none"> C&D = First Steps in Mathematics: Chance and Data 									

Year 5 Mathematics: review for balance and coverage of content descriptions

Number and Algebra	1	2	3	4
Number and place value				
Identify and describe factors and multiples of whole numbers and use them to solve problems (ACMNA098) - Num Text 2 Ch5: KU 6				
Use estimation and rounding to check the reasonableness of answers to calculations (ACMNA099) - Num Text 2 Ch4: KU 8,10				
Solve problems involving multiplication of large numbers by one- or two-digit numbers using efficient mental, written strategies and appropriate digital technologies (ACMNA100) - NumText 2 Ch 4:KU 1,3,4,5,6 & Ch 5:KU 4,5				
Solve problems involving division by a one digit number, including those that result in a remainder (ACMNA101) - Num Text 2 Ch 4: KU 1,3,4,5 & Ch 5: KU 4,5				
Use efficient mental and written strategies and apply appropriate digital technologies to solve problems (ACMNA291) - Num Text 2 Ch 4: KU 1,3,4,5 & Ch 5: KU 4,5				
Fractions and decimals				
Compare and order common unit fractions and locate and represent them on a number line (ACMNA102) - Num Text 1 Ch4: KU 5				
Investigate strategies to solve problems involving addition and subtraction of fractions with the same denominator (ACMNA103) - Num Text 1 Ch4: KU 5 - Num Text 2 Ch4: KU 7				
Recognise that the place value system can be extended beyond hundredths (ACMNA104) - Num Text 1 Ch3: KU 3,7,8 & Ch4: KU 6				
Compare, order and represent decimals (ACMNA105) - Num Text 1 Ch3: KU 3,7,8 & Ch4: KU 6				
Money and financial mathematics				
Create simple financial plans (ACMNA106)				
Patterns and algebra				
Describe, continue and create patterns with fractions, decimals and whole numbers resulting from addition and subtraction (ACMNA107) - Num Text 2 Ch5: KU 1,3,4,5,6				
Find unknown quantities in number sentences involving multiplication and division and identify equivalent number sentences involving multiplication and division (ACMNA121) - Num Text 2 Ch3: KU 7,8 & Ch4: KU1,3,4,5,6 & Ch5: KU 3,4				

Measurement and Geometry	1	2	3	4
Using units of measurement				
Choose appropriate units of measurement for length, area, volume, capacity and mass (ACMMG108) - Mea Text 1 Ch3: KU 2,5,6,7,8 - Mea Text 1 Ch4: KU 4,5				
Calculate the perimeter and area of rectangles using familiar metric units (ACMMG109) - Mea Text 1 Ch3: KU 2,5,6,7,8 - Mea Text 1 Ch4: KU 4,5				
Compare 12- and 24-hour time systems and convert between them (ACMMG110) - Mea Text 1 Ch4: KU 6				
Shape				
Connect three-dimensional objects with their nets and other two-dimensional representations (ACMMG111) - Spa Ch4: KU 1,2,3				
Location and transformation				
Use a grid reference system to describe locations. Describe routes using landmarks and directional language (ACMMG113) - Spa Ch3: KU 1,2,3				
Describe translations, reflections and rotations of two-dimensional shapes. Identify line and rotational symmetries (ACMMG114) - Spa Ch5: KU 1,2,3,4 - Spa Ch6: KU 1				
Apply the enlargement transformation to familiar two dimensional shapes and explore the properties of the resulting image compared with the original (ACMMG115) - Spa Ch5: KU 1,2,3,4 - Spa Ch6: KU 1				
Geometric reasoning				
Estimate, measure and compare angles using degrees. Construct angles using a protractor (ACMMG112) - Mea Text 1 Ch3: KU 3,5 - Mea Text 1 Ch4: KU 3,4				

Statistics and Probability	1	2	3	4
Chance				
List outcomes of chance experiments involving equally likely outcomes and represent probabilities of those outcomes using fractions (ACMSP116) - C&D CH3: KU 4,5				
Recognise that probabilities range from 0 to 1 (ACMSP117) - C&D CH3: KU 4,5				
Data representation and interpretation				
Pose questions and collect categorical or numerical data by observation or survey (ACMSP118) - C&D CH4: KU 1,2				
Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies (ACMSP119) - C&D CH5: KU 1,2,3,4,5				
Describe and interpret different data sets in context (ACMSP120) - C&D CH6: KU 1,2,3				