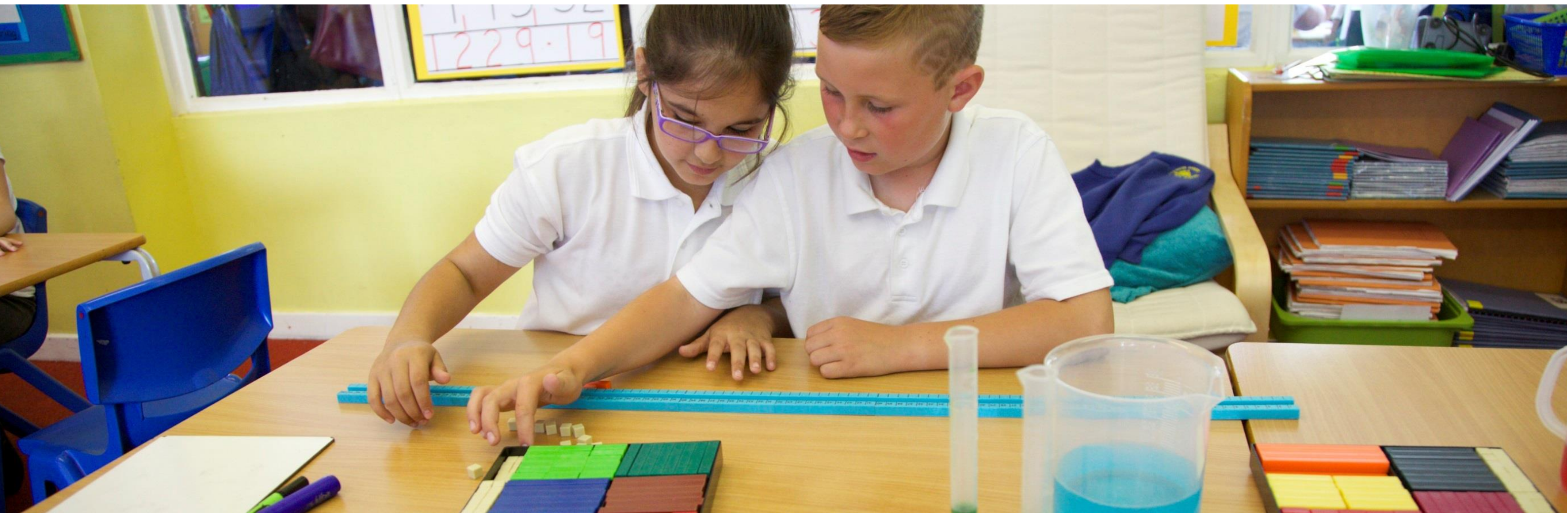


Australian Curriculum alignment

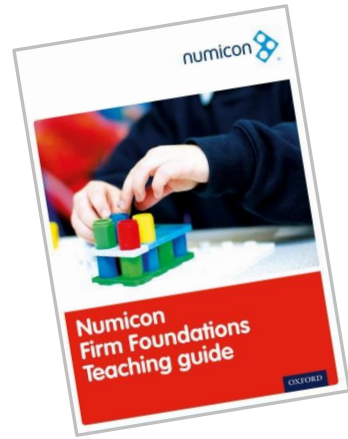
Supporting schools in aligning Numicon teaching activities with the Australian curriculum



Aligned resources

The following Teacher Resource Handbooks have been aligned with the Australian Curriculum.

Firm Foundations Teaching Guide



Number, Pattern and Calculating Teaching packs



Geometry, Measurement and Statistics Teaching packs



Guide to reading this document:

1. **Firm Foundations** (FF) – refers to content in the Firm Foundations Teaching guide
2. **Securing Foundations** (SF) – this content is provided in the Teaching Resource 1 Handbook and covers Foundation content descriptions across all strands.
3. **Getting started** content appears in all books and is designed for students who are starting their Numicon journey at a level other than Foundation. This section provides opportunities for student to become familiar with the Numicon materials and Approach.
4. **Content Strands** - each of the Handbooks presents content in 3 strands rather than sequences of learning.
 Number, Pattern and Calculating (NPC) Handbooks: Pattern and Algebra (red), Numbers and the Number System (yellow) and Calculating (blue).
 Geometry, Measurement and Statistics (GMS) Handbooks: Geometry (green) and Measurement (purple).
 (Unlike the other Handbooks, the Securing Foundations section in the NPC Teaching Resource 1 Handbook presents content across the three strands sequentially.)
5. Handbook content is divided into **Activity Groups** containing 2 or more activities related to the concept/s.
6. The **Milestones** in the planning section at the front of the book present proposed sequences of learning for the content presented in the strands.
7. Learning activities have been aligned with Australian Curriculum content descriptions. There are several content descriptions that have been aligned with activities within two Teaching Handbooks.
8. Here is a guide to interpreting the activity references.

Australian Curriculum content				Numicon Content strands					
Level	Content strands	Sub-strands and IDs	Australian Curriculum content descriptions	Number, Pattern and Calculating Teaching Resources			Geometry, Measurement & Statistics Resources		
				Getting Started	Pattern and Algebra	Numbers and the Number System	Calculating	Geometry	Measurement
F	Measurement and Geometry	Using units of measurement							
F		ACMMG006	Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language	SF-1.5	SF-8.4 SF-10.1 to 10.3	SF-4.3 to 4.6	SF-10.1& 10.2	1-5.1 & 5.2	1-1.1 1-1.3
F		ACMMG007	Compare and order the duration of events using the everyday language of time		SF-1.1 & 1.2 SF-3.1 & 3.2			1-6.1 to 6.3	1-3.1 to 3.3
F		ACMMG008	Connect days of the week to familiar events and actions		SF-1.5				1-3.2
F		Shape							
F		ACMMG009	Sort, describe and name familiar two-dimensional shapes and three-dimensional objects in the environment	SF-1.5	SF-12.1			1-1.1 to 1.5 1-2.5 1-3.1 to 3.5	
F		Location and transformation							
F		ACMMG010	Describe position and movement		SF-1.4	SF-4.3 & 4.4		1-5.1 & 5.2	

Each aligned activity reference has three parts:

1. Book level and colour
2. Activity group number
3. Activity number within the group

E.g. **1-3.1** refers to Handbook 1 Pattern and Algebra strand – Activity group 3 and Activity 1

Activities may be listed;

- Individually e.g. **1-2.5**
- Two adjoining activities e.g. **1-2.5 & 2.6**
- As a sequence of activities in the same Activity group e.g. **1-3.1 to 3.5**

Finding the activities in your Teaching Resource Handbooks

Colour coded content strands

Activity Group Number

Activity Number

Key mathematical ideas Counting, Pattern, Order, Place value, Equivalence, Mathematical thinking and reasoning

Numbers and the Number System

Comparing and ordering numbers to 100 **4**

Numbers and the Number System

Focus activities

Activity 1: Revising comparison and order of numbers in the range 0–30
Have ready: Numicon 0–100 Numeral Cards (0–30), Numicon Shapes, Numicon 0–100 cm Number Line, number rods, '<' and '>' symbols (cut from photocopy master 52a), 100 Square Using Number Words (photocopy master 3, enlarged), *Numicon Software for the Interactive Whiteboard* (optional)
Step 1
 Explain that, in a shop, people were waiting to be served. The shop assistant was not sure in which order the people had arrived, and even the people waiting were not sure. Discuss with children how we could find a way to make it easy for the assistant to know the order in which to serve people. Some children may suggest customers should form a queue, others may suggest giving each customer a number.
Step 2
 Follow children's suggestions. Give a random 0–30 numeral card to each child and ask children to arrange themselves into a line with the numerals in order.
Step 3
 Choose two children from the line and build their numbers using Shapes or rods. Discuss and agree which is the larger of their numbers, which is the smaller, and how to place the '<' or '>' symbol between them. Ask children which numbers come in between. Find the range on the 0–100 cm Number Line.
Step 4
 Give children other pairs of numbers to compare, checking they are secure within the number range 0–30, and secure with the inference, 'I know this number is larger than that one, so I know this one is smaller than that one.'
 Repeat from Step 2 using written number words, enlarged and cut from 100 Square Using Number Words (photocopy master 3).

Activity 2: Comparing and ordering numbers in the range 0–100
Have ready: Numicon Shapes or number rods, Numicon 0–100 cm Number Line, *Numicon Software for the Interactive Whiteboard* (optional)
Step 1
 Build a pair of 2-digit numbers with structured apparatus, e.g. 27 and 43 (see Fig. 1). Ask children what is the same and what is different about them, e.g. both have tens and units, both are 2-digit numbers, both are odd numbers, 43 is larger than 27, 27 is smaller than 43, 43 has more tens but fewer units than 27.
Step 2
 Ask children to describe what happens to the numbers as you move forwards or backwards along a number line. Ask them to find, e.g. 27 and 43 on the 0–100 cm Number Line.
Step 3
 Now ask children to mark and write, e.g. '27' and '43' on an empty number line (see Fig. 2) and to suggest some numbers that come between them. Estimate where these numbers should go on the number line. Look and listen for children who are beginning to space numbers appropriately on the empty number line.

Activity 3: Connecting number lines with number squares
Have ready: Numicon Shapes, Numicon 1–100 Card Number Track or a 100 Square (photocopy master 2) cut into decade strips, a Numicon Coloured Peg for each child, Numicon 1–100 cm Number Rod Track, number rods, small pieces of paper (approx. 4 cm square), *Numicon Software for the Interactive Whiteboard* (optional), Explore More Copymaster 12: Biggest Number
Step 1
 Ask children to build any 2-digit number using Shapes and to write the numerals on a piece of paper.
Step 2
 Now ask children to arrange the 1–100 Card Number Track as a number line and put their Peg on the number they have made (e.g. Fig. 3). Look and listen for children who are confident about the order of numbers when joining the decades of the 1–100 Card Number Track.

Assessment opportunities
 Look and listen for children who:
 • Use the words and terms for use in conversation effectively in discussion.
 • Enunciate the word 'than' clearly to say, e.g. 'larger than' and not 'largeran'.
 • Are well-organized and recognize order.
 • Describe comparisons and infer, e.g. 'I know this, so I know that.'
 • Use the '<' and '>' symbols to record comparisons.
 • Explain that numbers with more tens are larger than numbers with fewer tens.
 • Use the word 'between' effectively.
 • Make size comparisons between numbers in the range 0–100.
 • Can put a list of up to seven numbers from the range 0–100 in order.
 • Spell number words at a level consistent with their spelling knowledge.

Explorer Progress Book 2a, pp. 20–23
 After completing work on this activity group, give small focus groups of children their Explorer Progress Books and ask them to work through the challenges on the pages. As children complete the pages, assess what progress they are making with the central ideas from the activity group. Refer to the assessment opportunities for assistance. Children will also have the opportunity to complete their Learning Log (pp. 22–23) where they can reflect on the mathematics they have done so far.




Explore More Copymaster 12: Biggest Number
 After completing work on Activity 3, give children Explore More Copymaster 12: Biggest Number to take home.

Educational context
 This group of activities focuses on reasoning to make comparisons between number values which can then be used in the context of measures. Children have opportunities to continue to use the symbols for greater than (>) and less than (<) to record comparisons. As children compare and order higher numbers they will need to have a clear understanding of place value, i.e. that the place of a digit tells us its value. Comparing and ordering Numicon Shapes and number rods makes visible the important regularity in the order of numbers, which is a crucial step towards understanding the system of whole numbers. Listen for any children who do not speak clearly and run 'than' into the previous word, e.g. saying 'biggeran' instead of 'bigger than', as 'than' is a key word used in a comparison.

Learning opportunities

- To recognize when it is helpful to use the order of numbers to organize or find things.
- To use the '<' and '>' symbols when comparing Numicon Shapes, number rods and numerals.
- To compare and order numbers to 100.

Words and terms for use in conversation
 tens, units, more, less, between, nearly, next, before, after, forwards, backwards, larger than, greater than, bigger than, smaller than, more than, less than, fewer than, higher, lower, I know this, so I know that

Australian Curriculum Alignment

Level	Content strands	Sub-strands and IDs	Australian Curriculum content descriptions	Number, Pattern and Calculating Teaching Resources				Geometry, Measurement & Statistics Resources		
				Getting Started	Pattern and Algebra	Numbers and the Number System	Calculating	Geometry	Measurement	
F	Number and Algebra	Number and place value								
F		ACMNA001	Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point	FF-1b SF-1.2 SF-1.4	1-2.1	SF-1.1 & 1.2 SF-3.2 SF-6.1 SF-7.2 & 7.3 SF-11.1 1-1.1 & 1.2				
F		ACMNA002	Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond	FF-1a FF-1b FF-2a FF-6b FF-7a FF-7b FF-8a SF-1.2 SF-1.4 & 1.5 SF-2.1 to 2.5	SF-6.2	SF-1.2 SF-3.3 & 3.4 SF-5.1 SF-6.2 & 6.3 SF-7.2 & 7.3 SF-8.1 SF-12.1 1-1.4 to 1.6				
F		ACMNA003	Subitise small collections of objects	SF-3.4 SF-5.3		SF-1.3 SF-5.1				
F		ACMNA289	Compare, order and make correspondences between collections, initially to 20, and explain reasoning	FF-1a FF-1b FF-3b FF-4a FF-4b FF-5a FF-6a FF-8b FF-9a SF-2.4 SF-5.1 SF-5.2	SF-1.3 SF-1.4 SF-3.1 1-1.1 to 1.6 1-2.3 1-5.4	SF-1.3 SF-6.3	SF-5.1			
F	ACMNA004	Represent practical situations to model addition and sharing	FF-10a FF-10b FF-11a FF-11b FF-12a FF-12b FF-13a FF-13b FF-14b	1-1.7 & 1.8 1-2.1 1-5.5	SF-6.1 SF-7.3	SF-4.1 & 4.2 SF-5.1 to 5.3 SF-6.1& 6.2 SF-7.1 SF-8.1& 8.2 SF-9.1 to 9.3 SF-10.2 & 10.3 SF-11.1 to 11.6 SF-12.1 to 12.3 1-1.1 to 1.6 1-2.1 to 2.7 1-4.3 to 4.6				

Level	Content strands	Sub-strands and IDs	Australian Curriculum content descriptions	Number, Pattern and Calculating Teaching Resources				Geometry, Measurement & Statistics Resources			
				Getting Started	Pattern and Algebra	Numbers and the Number System	Calculating	Geometry	Measurement		
F	Number and Algebra	Patterns and algebra									
F		ACMNA005	Sort and classify familiar objects and explain the basis for these classifications. Copy, continue and create patterns with objects and drawings	FF-2b FF-3a FF-5a FF-5b FF-6a FF-9b FF-14a FF-14b SF-1.2 to 1.4 SF-5.3	SF-2.1 to 2.3 SF-4.1& 4.2 SF-5.1 SF-6.1 & 6.2 SF-7.1& 7.2 SF-8.2 & 8.3	1-1.3	SF-7.1				
F	Measurement and Geometry	Using units of measurement									
F		ACMMG006	Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language	SF-1.5	SF-8.4 SF-10.1 to 10.3	SF-4.3 to 4.6	SF-10.1& 10.2	1-5.1 & 5.2	1-1.1 1-1.3		
F		ACMMG007	Compare and order the duration of events using the everyday language of time		SF-1.1 & 1.2 SF-3.1 & 3.2			1-6.1 to 6.3	1-3.1 to 3.3		
F		ACMMG008	Connect days of the week to familiar events and actions		SF-1.5				1-3.2		
F		Shape									
F		ACMMG009	Sort, describe and name familiar two-dimensional shapes and three-dimensional objects in the environment	SF-1.5	SF-12.1			1-1.1 to 1.5 1-2.5 1-3.1 to 3.5			
F		Location and transformation									
F		ACMMG010	Describe position and movement		SF-1.4	SF-4.3 & 4.4		1-5.1 & 5.2			
F		Stats & Prob.	Data representation and interpretation								
F			ACMSP011	Answer yes/no questions to collect information and make simple inferences.		SF-9.1 to 9.3					
1	Number and Algebra	Number and place value									
1		ACMNA012	Develop confidence with number sequences to and from 100 by ones from any starting point. Skip count by twos, fives and tens starting from zero			1-3.7 & 3.8					
1		ACMNA013	Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number line		1-3.1 to 3.4 1-4.5 1-5.2	SF-1.3 SF-3.1 1-3.2 & 3.3 1-3.5 & 3.6 1-4.3 to 4.6 2-1.4 to 1.6 2-2.1 to 2.5 2-4.1 to 4.5 2-5.3 to 5.7	2-3.1 to 3.5				
1		ACMNA014	Count collections to 100 by partitioning numbers using place value			1-2.1 & 2.2 1-3.1 1-3.3 to 3.5 1-4.1 & 4.2 2-2.6 & 2.7 2-3.1 to 3.8	1-9.1 & 9.2 1-9.8 to 9.10				

Level	Content strands	Sub-strands and IDs	Australian Curriculum content descriptions	Number, Pattern and Calculating Teaching Resources				Geometry, Measurement & Statistics Resources		
				Getting Started	Pattern and Algebra	Numbers and the Number System	Calculating	Geometry	Measurement	
1	Number and Algebra	ACMNA015	Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts		1-2.1 1-2.5 & 2.6 2-3.1 to 3.3 2-4.9 & 4.10	2-5.2	1-3.4 1-4.1 to 4.22 1-6.1 1-6.4 & 6.5 1-6.7 1-7.1 to 7.6 1-8.1 & 8.2 1-8.4 to 8.13 1-9.3 to 9.7 1-9.9 2-5.1 to 5.11 2-7.1 to 7.8			
1		Fractions and decimals								
1		ACMNA016	Recognise and describe one-half as one of two equal parts of a whole.					1-5.1 to 5.5		
1		Money and financial mathematics								
1		ACMNA017	Recognise, describe and order Australian coins according to their value							1-2.1 to 2.5 (adjusted)
1		Patterns and algebra								
1		ACMNA018	Investigate and describe number patterns formed by skip counting and patterns with objects		1-3.4 2-1.5 to 1.7 2-4.1 to 4.8	1-3.7 & 3.8				
1		Using units of measurement								
1	Measurement and Geometry	ACMMG019	Measure and compare the lengths and capacities of pairs of objects using uniform informal units		1-1.1		1-6.2	1-4.2 to 4.4 1-5.1 to 5.4	1-1.2	
1		ACMMG020	Tell time to the half-hour			2-5.1		1-6.1 to 6.5		
1		ACMMG021	Describe duration using months, weeks, days and hours		2-1.1 & 1.2			1-3.1 to 3.5		
1		Shape								
1		ACMMG022	Recognise and classify familiar two-dimensional shapes and three-dimensional objects using obvious features		2-6.1 to 6.3			1-2.3 to 2.6 1-4.1 to 4.6		
1		Location and transformation								
1		ACMMG023	Give and follow directions to familiar locations					1-5.1 to 5.8		
1		Chance								
1	S Statistics and Probability	ACMSP024	Identify outcomes of familiar events involving chance and describe them using everyday language such as 'will happen', 'won't happen' or 'might happen'		2-6.1					
1		Data representation and interpretation								
1		ACMSP262	Choose simple questions and gather responses and make simple inferences		1-4.1 1-4.3 1-4.5					
1		ACMSP263	Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays		1-4.2 1-5.1 1-5.3	2-1.1 & 1.2	1-6.3			

Level	Content strands	Sub-strands and IDs	Australian Curriculum content descriptions	Number, Pattern and Calculating Teaching Resources				Geometry, Measurement & Statistics Resources		
				Getting Started	Pattern and Algebra	Numbers and the Number System	Calculating	Geometry	Measurement	
2	Number and Algebra	Number and place value								
2		ACMNA026	Investigate number sequences, initially those increasing and decreasing by twos, threes, fives and ten from any starting point, then moving to other sequences.		2-5.1 to 5.12		2-9.1 (adjusted)			
2		ACMNA027	Recognise, model, represent and order numbers to at least 1000	2-GS.1 to GS.12	2-7.3 & 7.4					
2		ACMNA028	Group, partition and rearrange collections up to 1000 in hundreds, tens and ones to facilitate more efficient counting			3-1.1 to 1.4 3-2.1 to 2.5 3-3.5 3-4.1 to 4.5 (adjusted)	2-6.1 to 6.9			
2		ACMNA029	Explore the connection between addition and subtraction		2-2.1 to 2.6 3-1.1 to 1.5					
2		ACMNA030	Solve simple addition and subtraction problems using a range of efficient mental and written strategies		2-1.1 to 1.6 2-7.2 3-1.1 to 1.5		2-1.1 to 1.8 2-2.1 to 2.5 2-3.6 to 3.10 2-4.1 to 4.13 2-6.1 to 6.9 2-10.1 to 10.11 2-11.1 to 11.5 2-12.1 to 12.9 2-13.1 to 13.10 2-14.1 to 14.8 3-1.1 to 1.6 3-2.1 to 2.10 3-3.1 to 3.3 3-4.1 to 4.5			
2		ACMNA031	Recognise and represent multiplication as repeated addition, groups and arrays				2-8.1 to 8.8 2-9.1 to 9.9			
2		ACMNA032	Recognise and represent division as grouping into equal sets and solve simple problems using these representations				2-15.1 to 15.7 3-11.1 to 11.4			
2		Fractions and decimals								
2		ACMNA033	Recognise and interpret common uses of halves, quarters and eighths of shapes and collections			2-6.1 to 6.5 2-16.1 to 16.7				
2		Money and financial mathematics								
2		ACMNA034	Count and order small collections of Australian coins and notes according to their value		2-7.5 (adjusted)		2-4.11 to 4.13 (adjusted)		2-2.1 to 2.6 (adjusted) 2-3.1 to 3.4 (adjusted)	
2		Patterns and algebra								
2		ACMNA035	Describe patterns with numbers and identify missing elements		2-1.6 & 1.7 2-5.1 to 5.12 3-2.1 to 2.3					
2		ACMNA036	Solve problems by using number sentences for addition or subtraction		2-7.2		2-1.1 to 1.3 2-2.1 2-3.5 & 3.6			

Level	Content strands	Sub-strands and IDs	Australian Curriculum content descriptions	Number, Pattern and Calculating Teaching Resources				Geometry, Measurement & Statistics Resources			
				Getting Started	Pattern and Algebra	Numbers and the Number System	Calculating	Geometry	Measurement		
2	Measurement and Geometry	Using units of measurement									
2		ACMMG037	Compare and order several shapes and objects based on length, area, volume and capacity using appropriate uniform informal units						2-1.1 to 1.6 2-4.1 to 4.4 2-6.1 to 6.3		
2		ACMMG038	Compare masses of objects using balance scales		3-1.1 to 1.5				2-5.1 to 5.4		
2		ACMMG039	Tell time to the quarter-hour, using the language of 'past' and 'to'						2-7.1 to 7.5		
2		ACMMG040	Name and order months and seasons		2-1.3 & 1.4						
2		ACMMG041	Use a calendar to identify the date and determine the number of days in each month		2-1.3 & 1.4				3-2.4		
2		Shape									
2		ACMMG042	Describe and draw two-dimensional shapes, with and without digital technologies						2-1.1 to 1.4		
2		ACMMG043	Describe the features of three-dimensional objects						2-2.1 to 2.4 2-4.1 to .4.4		
2		Location and transformation									
2		ACMMG044	Interpret simple maps of familiar locations and identify the relative positions of key features						2-5.1 3-4.1		
2		ACMMG045	Investigate the effect of one-step slides and flips with and without digital technologies						2-3.1 to 3.4		
2		ACMMG046	Identify and describe half and quarter turns						2-5.1 to 5.4		
2		Statistics and Probability	Chance								
2			ACMSP047	Identify practical activities and everyday events that involve chance. Describe outcomes as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible'		2-6.1					
2			Data representation and interpretation								
2	ACMSP048		Identify a question of interest based on one categorical variable. Gather data relevant to the question		2-6.1 to 6.10						
2	ACMSP049		Collect, check and classify data		2-6.5 to 6.14 2-7.1	3-1.2 to 1.4	2-3.1				
2	ACMSP050	Create displays of data using lists, table and picture graphs and interpret them		2-6.5 to 6.14 2-7.6 & 7.7	2-1.1 & 1.2			2-1.4 & 1.5			
3	Number and Algebra	Number and place value									
3		ACMNA051	Investigate the conditions required for a number to be odd or even and identify odd and even numbers	3-GS.1	3-4.1 to 4.4 3-5.6						
3		ACMNA052	Recognise, model, represent and order numbers to at least 10 000			3-5.1 to 5.11 3-6.1 to 6.9 4-6.3 to 6.5 4-1.1 to 1.7 4-2.1 to 2.3					
3		ACMNA053	Apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems			4-2.4 & 2.5 4-3.1 to 3.7	3-12.1 to 12.7 3-13.1 to 13.6 4-3.2				
3		ACMNA054	Recognise and explain the connection between addition and subtraction				3-8.6 to 8.8 3-9.1 to 9.12 3-12.1 to 12.9 3-13.1 to 13.6				

Level	Content strands	Sub-strands and IDs	Australian Curriculum content descriptions	Number, Pattern and Calculating Teaching Resources				Geometry, Measurement & Statistics Resources		
				Getting Started	Pattern and Algebra	Numbers and the Number System	Calculating	Geometry	Measurement	
3	Number and Algebra	ACMNA055	Recall addition facts for single-digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation				3 -1.1 to 1.6 3 -2.1 to 2.10 3 -3.1 to 3.3 3 -4.1 to 4.5 3 -14.1 to 14.6 4 -1.1 to 1.7 4 -2.1 to 2.6 4 -3.1 to 3.7 4 -4.1 to 4.7			
3		ACMNA056	Recall multiplication facts of two, three, five and ten and related division facts		4 -1.1 to 1.4		3 -5.1 to 5.4 3 -6.1 to 6.5 3 -7.1 to 7.5 3 -8.1 to 8.8 3 -10.1 to 10.5			
3		ACMNA057	Represent and solve problems involving multiplication using efficient mental and written strategies and appropriate digital technologies		4 -1.4 to 1.8 4 -7.1 & 7.2		3 -15.1 to 15.8			
3		Fractions and decimals								
3		ACMNA058	Model and represent unit fractions including $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$ and their multiples to a complete whole			3 -7.1 to 7.7 3 -8.1 to 8.8 4 -5.1	3 -16.1 to 16.6			
3		Money and financial mathematics								
3		ACMNA059	Represent money values in multiple ways and count the change required for simple transactions to the nearest five cents			3 -4.3 to 4.5 (adjusted)	3 -8.1 & 8.2 (adjusted) 3 -13.5 & 13.6 (adjusted)		3 .4.1 to 4.5 (adjusted)	
3		Patterns and algebra								
3		ACMNA060	Describe, continue, and create number patterns resulting from performing addition or subtraction		3 -2.1 to 2.6 3 -3.2 to 3.7 3 -4.5 to 4.7 3 -5.1 to 5.5 4 -5.1 4 -5.6					
3		Using units of measurement								
3	Measurement and Geometry	ACMMG061	Measure, order and compare objects using familiar metric units of length, mass and capacity		3 -3.1	3 -5.3 to 5.5 3 -6.4 to 6.6 3 -6.8 & 6.9 4 -1.6	4 -1.5 & 1.6		2 -5.1 to 5.4 2 -6.1 to 6.4 3 -1.1 to 1.5 3 -5.1 to 5.7 3 -6.1 to 6.4	
3		ACMMG062	Tell time to the minute and investigate the relationship between units of time		3 -3.2				2 -7.1 to 7.5 3 -1.1 to 1.5 3 -2.1 to 2.5	
3		Shape								
3		ACMMG063	Make models of three-dimensional objects and describe key features					3 -1.3 to 1.4 3 -3.1 to 3.5		

Level	Content strands	Sub-strands and IDs	Australian Curriculum content descriptions	Number, Pattern and Calculating Teaching Resources				Geometry, Measurement & Statistics Resources	
				Getting Started	Pattern and Algebra	Numbers and the Number System	Calculating	Geometry	Measurement
3		Location and transformation							
3		ACMMG065	Create and interpret simple grid maps to show position and pathways					3-4.1 to 4.5	
3		ACMMG066	Identify symmetry in the environment					3-3.5 4-2.1 to 2.3	
3		Geometric reasoning							
3		ACMMG064	Identify angles as measures of turn and compare angle sizes in everyday situations					3-1.1 & 1.2 3-2.1 to 2.4	
3		Chance							
3		ACMSP067	Conduct chance experiments, identify and describe possible outcomes and recognise variation in results		3-5.1 3-5.4				
3		Data representation and interpretation							
3		ACMSP068	Identify questions or issues for categorical variables. Identify data sources and plan methods of data collection and recording		4-7.5				3-3.6
3		ACMSP069	Collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies		3-3.3 to 3.6 4-6.1 & 6.2	3-5.6 & 5.7			3-3.6
3		ACMSP070	Interpret and compare data displays		3-3.3 to 3.6	3-5.6 & 5.7			3-3.6
4		Number and place value							
4		ACMNA071	Investigate and use the properties of odd and even numbers		4-7.3				
4		ACMNA072	Recognise, represent and order numbers to at least tens of thousands	4-GS-1 to 7		4-3.1 to 3.7			
4		ACMNA073	Apply place value to partition, rearrange and regroup numbers to at least tens of thousands to assist calculations and solve problems			4-3.1 to 3.7	4-4.3 4-8.1 to 8.7 4-9.1 to 9.6 4-14.1 to 14.4		
4		ACMNA074	Investigate number sequences involving multiples of 3, 4, 6, 7, 8, and 9		4-1.1 to 1.7		3-10.5		
4		ACMNA075	Recall multiplication facts up to 10×10 and related division facts		4-1.4 to 1.8 4-4.1 to 4.6 4-5.1 to 5.4 4-10.1 & 10.2				
4		ACMNA076	Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division where there is no remainder		3-3.8		3-7.6 4-5.1 to 5.8 4-6.1 to 6.8 4-7.1 to 7.8 4-10.3 to 10.5 4-11.1 to 11.4 4-12.1 to 12.6		
4		Fractions and decimals							
4		ACMNA077	Investigate equivalent fractions used in contexts			4-5.2 to 5.5 4-7.1 to 7.4			
4		ACMNA078	Count by quarters halves and thirds, including with mixed numerals. Locate and represent these fractions on a number line			4-5.1 to 5.6	4-11.5		
4		ACMNA079	Recognise that the place value system can be extended to tenths and hundredths. Make connections between fractions and decimal notation			4-6.1 to 6.9 4-7.5 4-8.1 to 8.8			

Level	Content strands	Sub-strands and IDs	Australian Curriculum content descriptions	Number, Pattern and Calculating Teaching Resources				Geometry, Measurement & Statistics Resources		
				Getting Started	Pattern and Algebra	Numbers and the Number System	Calculating	Geometry	Measurement	
4		Money and financial maths								
4		ACMNA080	Solve problems involving purchases and the calculation of change to the nearest five cents with and without digital technologies			4-8.6 (adjusted)	4-9.5 (adjusted)		4-2.16 (adjusted)	
4		Patterns and algebra								
4		ACMNA081	Explore and describe number patterns resulting from performing multiplication		4-1.1 to 1.7 4-5.2 to 5.4					
4		ACMNA082	Solve word problems by using number sentences involving multiplication or division where there is no remainder			4-7.5	4-11.2			
4		ACMNA083	Find unknown quantities in number sentences involving addition and subtraction and identify equivalent number sentences involving addition and subtraction		4-3.1 to 3.8					
4	Measurement and Geometry	Using units of measurement								
4		ACMMG084	Use scaled instruments to measure and compare lengths, masses, capacities and temperatures			4-3.4	4-1.6 4-9.6		4-3.1 to 3.6 4-4.1 to 4.4	
4		ACMMG290	Compare objects using familiar metric units of area and volume						4-5.1 to 5.4 4-6.1 to 6.6	
4		ACMMG085	Convert between units of time						4-1.1 to 1.5	
4		ACMMG086	Use am and pm notation and solve simple time problems						4-1.6 to 1.8	
4		Shape								
4		ACMMG087	Compare the areas of regular and irregular shapes by informal means						4-6.1 to 6.6	
4		ACMMG088	Compare and describe two dimensional shapes that result from combining and splitting common shapes, with and without the use of digital technologies					4-1.1 to 1.4		
4		Location and transformation								
4		ACMMG090	Use simple scales, legends and directions to interpret information contained in basic maps					4-4.1 to 4.4		
4		ACMMG091	Create symmetrical patterns, pictures and shapes with and without digital technologies					4-2.1 to 2.6		
4		Geometric reasoning								
4		ACMMG089	Compare angles and classify them as equal to, greater than or less than a right angle					4-1.1 4-3.1 to 3.4		
4		Statistics and Probability	Chance							
4	ACMSP092		Describe possible everyday events and order their chances of occurring		4-7.4					
4	ACMSP093		Identify everyday events where one cannot happen if the other happens							
4	ACMSP094		Identify events where the chance of one will not be affected by the occurrence of the other							
4	Data representation and interpretation									
4	ACMSP095		Select and trial methods for data collection, including survey questions and recording sheets				4-5.8		4-2.4 to 2.6 4-3.5	
4	ACMSP096		Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values				4-5.8	4-1.3 & 1.4	4-3.5	
4	ACMSP097	Evaluate the effectiveness of different displays in illustrating data features including variability				4-5.8		4-1.8 4-3.5		