

FOUNDATION YEAR		Scope & Sequence – Key Ideas (Content Descriptors)	
Number & Algebra			
Understanding Whole Numbers	Place Value	Addition & Subtraction	Patterns & Algebra
Establish understanding of the language and processes of counting by naming numbers in sequences, initially to and from 20, moving from any starting point	Compare, order and make correspondences between collections initially up to 20, and explain reasoning <i>(see also understanding number)</i>	Compare, order and make correspondences between collections initially up to 20, and explain reasoning	Sort and classify familiar objects and explain the basis for these classifications. Copy, continue and create patterns with objects and drawings
Connect number names, numerals and quantities, including zero, initially up to 10 then beyond		Subitise small collections of objects	
Subitise small collections of objects		Represent practical situations to model addition and sharing	
Compare, order and make correspondences between collections initially up to 20, and explain reasoning			
Measurement & Geometry			
Using Units of Measurement (length, area, capacity, mass)	Using Units of Measurement (time)	Shape	Location
Use direct and indirect comparisons to decide which is longer, heavier or holds more, and explain reasoning in everyday language	Compare and order the duration of events using the everyday language of time	Sort, describe and name familiar two-dimensional shapes and three-dimensional objects in the environment	Describe position and movement
	Connect days of the week to familiar events and actions		
Statistics & Probability			
Chance	Data Representation & Interpretation		
n/a	Answers yes/ no questions to collect information		

YEAR 1						
Scope & Sequence – Key Ideas (Content Descriptors)						
Number & Algebra						
Understanding Whole Numbers	Place Value	Addition & Subtraction	Multiplication & Division	Patterns & Algebra	Fractions & Decimals	Money & Financial Matters
Develop Confidence with number sequences to and from 100 by ones from any starting point. Skip count by 2's, 5's, 10's starting from 0	Recognise, model, read, write and order numbers to at least 100. Locate these numbers on a number line.	Represent and solve simple addition and subtraction problems using a range of strategies including counting on, partitioning and rearranging parts.	Investigate and describe number patterns formed by skip counting and patterns with objects	Investigate and describe number patterns formed by skip counting and patterns with objects.	Recognise and describe one half as one of two equal parts of a whole	Recognise, describe and order Australian coins according to their value
	Count collections to 100 by partitioning numbers using place value					
Measurement & Geometry						
Using Units of Measurement (length, capacity, area, mass)	Using Units of Measurement (time)		Shape		Location	
Measure and compare the lengths and capacities of pairs of objects using uniform informal units	Tell time to the half-hour		Recognise and classify familiar two-dimensional shapes and three-dimensional objects using obvious features		Give and follow directions to familiar locations	
	Describe duration using months, weeks, days and hours					
Statistics & Probability						
Chance		Data Representation & Interpretation				
Identify outcomes of familiar events involving chance and describe them using everyday language such as 'will happen', 'wont happen' or 'might happen'		Choose simple questions and gather responses			Represent data with objects and drawings where one object or drawing represents one data value. Describe the displays.	

YEAR 2						
Scope & Sequence – Key Ideas (Content Descriptors)						
Number & Algebra						
Understanding Whole Numbers	Place Value	Addition & Subtraction	Multiplication & Division	Patterns & Algebra	Fractions & Decimals	Money & Financial Matters
Investigate number sequences, initially those increasing and decreasing by 2's, 3's, 5's and 10's from any starting point, then moving on to other sequences	Recognise, model, represent and order numbers to at least 1000	Explore the connection between addition and subtraction <i>(see also patterns & algebra)</i>	Recognise and represent multiplication as repeated addition, groups and arrays	Describe patterns with numbers and identify missing elements	Recognise and interpret common uses of halves, quarters and eighths of shapes and collections	Count and order small collections of Australian coins and notes according to their value
	Group, partition and rearrange collections up to 1000 in hundreds, tens and ones to facilitate more efficient counting	Solve simple addition and subtraction problems using a range of efficient mental and written strategies	Recognise and represent division as grouping into equal sets and solve simple problems using these representations	Solve problems by using number sentences for addition and subtraction		
Measurement & Geometry						
Using Units of Measurement (length, capacity, area, mass)	Using Units of Measurement (time)	Shape	Location	Transformation		
Compare and order several shapes and objects based on length, area, volume and capacity using appropriate uniform informal units	Tell the time to the quarter-hour, using the language of 'past' and 'to'	Describe and draw two-dimensional shapes, with and without digital technologies	Interpret simple maps of familiar locations and identify the relative positions of key features	Investigate the effect of one-step slides and flips with and without digital technologies		
	Name and order months and seasons	Describe the features of three-dimensional objects			Identify and describe half and quarter turns	
Compare masses of objects using balance scales	Use a calendar to identify the date and determine the number of days in each month					
Statistics & Probability						
Chance		Data Representation & Interpretation				
Identify practical activities and everyday events that involve chance. Describe outcomes as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible'		Identify a question of interest based on one categorical variable. Gather data relevant to the question.	Collect, check and classify data	Create displays of data using lists, table and picture graphs and interpret them		

YEAR 3						
Scope & Sequence – Key Ideas (Content Descriptors)						
Number & Algebra						
Understanding Whole Numbers	Place Value	Addition & Subtraction	Multiplication & Division	Patterns & Algebra	Fractions & Decimals	Money & Financial Matters
Investigate the conditions required for a number to be odd or even by identifying odd and even numbers	Recognise, model, represent and order numbers to at least 10 000	Recognise & explain the connection between addition and subtraction	Recall multiplication facts of two, three, five and ten and related division facts	Describe, continue and create number patterns resulting from performing addition and subtraction	Model and represent unit fractions including $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$ and $\frac{1}{5}$ and their multiples to a complete whole	Represent money values in multiple ways and count the change required for simple transactions to the nearest five cents
	Apply place value to partition, rearrange and regroup (rename) numbers to at least 10 000 to assist calculations & solve problems	Recall addition facts for single-digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation	Represent and solve problems involving multiplication using efficient mental strategies and appropriate digital technologies			
		Describe, continue and create number patterns resulting from performing addition and subtraction				
Measurement & Geometry						
Using Units of Measurement (length, capacity, area, mass)	Using Units of Measurement (time)	Shape	Location	Transformation	Geometric Reasoning (angles)	
Measure, order and compare objects using familiar metric units of length, mass and capacity	Tell the time to the minute and investigate the relationship between units of time	Make models of three-dimensional objects and describe key features	Create and interpret simple grid maps to show position and pathways	Identify symmetry in the environment	Identify angles as measures of turn and compare angle sizes in everyday situations	
Statistics & Probability						
Chance	Data Representation & Interpretation					
Conduct chance experiments, identify and describe possible outcomes and recognise variation in results	Identify questions or issues for categorical variables. Identifying data sources and plan methods of data collection and recording.		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		Interpret and compare data displays	

YEAR 4							Scope & Sequence – Key Ideas (Content Descriptors)							
Number & Algebra														
Understanding Whole Numbers		Place Value		Addition & Subtraction <i>(also see patterns & algebra)</i>		Multiplication & Division <i>(also see patterns & algebra)</i>		Patterns & Algebra		Fractions & Decimals		Money & Financial Matters		
Investigate and use properties of odd and even numbers		Recognise, represent and order numbers to at least tens of thousands		Describe, continue and create number patterns resulting from performing addition and subtraction		Recall multiplication facts up to 10 x 10 and related division facts		Explore and describe number patterns resulting from performing multiplication		Investigate equivalent fractions used in contexts		Solve problems involving purchases and the calculation of change to the nearest five cents with & without digital technologies		
Investigate number sequences involving multiples of 3, 4, 6, 7, 8 and 9		Apply place value to partition, rearrange and regroup (rename) numbers to at least tens of thousands to assist calculations & solve problems		Use equivalent number sentences involving addition & subtraction to find unknown quantities		Investigate number sequences involving multiples of 3, 4, 6, 7, 8 and 9		Solve word problems by using number sentences involving multiplication & division where there is no remainder		Count by quarters, halves and thirds, including with mixed numerals. Locate and represent these fractions on a number line.				
		Recognise that the place value system can be extended to tenths and hundredths.						Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division where there is no remainder		Use equivalent number sentences involving addition & subtraction to find unknown quantities				Recognise that the place value system can be extended to tenths and hundredths. Make connections between fractions and decimal notation.
Measurement & Geometry														
Using Units of Measurement <i>(length, capacity, area, mass)</i>			Using Units of Measurement <i>(time)</i>			Shape			Location		Transformation		Geometric Reasoning <i>(angles)</i>	
Use scaled instruments to measure and compare lengths, masses, capacities and temperatures			Convert between units of time			Compare the areas of regular and irregular shapes by informal means			Use simple scales, legends and directions to interpret information contained in basic maps		Create symmetrical patterns, pictures and shapes with and without digital technologies		Compare angles and classify them as equal to, greater than or less than a right angle	
Compare objects using familiar metric units of area and volume			Use am and pm notation and solve simple time problems			Compare and describe two dimensional shapes that result from combining and splitting common shapes, with and without digital technologies								
Statistics & Probability														
Chance						Data Representation & Interpretation								
Describe possible everyday events and order their chances of occurring		Identify everyday events where one cannot happen if the other happens		Identify events where the chance of one will not be affected by the occurrence of the other		Select and trial methods for data collection, including survey questions and recording sheets		Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Includes tables, column graphs and picture graphs where one picture can represent many data values			Evaluate the effectiveness of different displays in illustrating data features including variability			

YEAR 5							Scope & Sequence – Key Ideas (Content Descriptors)						
Number & Algebra													
Understanding Whole Numbers	Place Value	Addition & Subtraction <i>(also see patterns & algebra)</i>	Multiplication & Division <i>(also see patterns & algebra)</i>		Patterns & Algebra	Fractions & Decimals	Money & Financial Matters						
Identify and describe factors and multiples of whole numbers and use them to solve problems	Recognise that the number system can be extended beyond hundredths	Use estimation and rounding to check the reasonableness of answers to calculations	Identify and describe factors and multiples of whole numbers and use them to solve problems		Describe, continue and create patterns with fractions, decimals and whole numbers resulting from addition and subtraction	Compare and order common unit fractions and locate and represent them on a number line		Create simple financial plans					
			Solve problems involving multiplication of large numbers by one or two-digit numbers using efficient mental, written strategies and appropriate digital technologies			Investigate strategies to solve problems involving addition and subtraction of fractions with the same denominator							
			Solve problems involving division by a one-digit number, including those that result in a remainder		Use equivalent number sentences involving multiplication & division to find unknown quantities		Recognise that the number system can be extended beyond hundredths						
			Use efficient mental and written strategies and apply appropriate digital technologies to solve problems				Compare, order and represent decimals						
Measurement & Geometry													
Using Units of Measurement (length, capacity, area, mass)		Using Units of Measurement (time)		Shape	Location	Transformation			Geometric Reasoning (angles)				
Choose appropriate units of measurement for length, area, volume, capacity and mass		Compare 12 and 24 hour time systems and convert between them		Connect three-dimensional objects with their nets and other two-dimensional representations	Use a grid reference system to describe locations. Describe routes using landmarks and directional language.	Describe translations, reflections and rotations of two-dimensional shapes. Identify line and rotational symmetry			Estimate, measure and compare angles using degrees. Construct angles using a protractor				
Calculate the perimeter and area of rectangles using familiar metric units						Apply the enlargement transformation to familiar two-dimensional shapes and explore the properties of the resulting image compared with the original							
Statistics & Probability													
Chance					Data Representation & Interpretation								
List outcomes of chance experiments involving equally likely outcomes and represent probabilities of those outcomes using fractions		List outcomes of chance experiments involving equally likely outcomes and represent probabilities of those outcomes using fractions			Pose questions and collect categorical or numerical data by observation or survey			Pose questions and collect categorical or numerical data by observation or survey		Pose questions and collect categorical or numerical data by observation or survey			

YEAR 6								Scope & Sequence – Key Ideas (Content Descriptors)							
Number & Algebra															
Understanding Whole Numbers		Addition & Subtraction		Multiplication & Division		Patterns & Algebra		Fractions & Decimals				Money & Financial Matters			
Identify and describe properties of prime, composite, square and triangular numbers		Investigate everyday situations that use positive and negative whole numbers and zero. Locate and represent these numbers on a number line.		Identify and describe properties of prime, composite, square and triangular numbers		Continue and create sequences involving whole numbers, fractions and decimals. Describe the rule used to create the sequence.		Compare fractions with related denominators and locate and represent them on a number line		Solve problems involving addition and subtraction of fractions with the same and related denominators		Add and subtract decimals, with and without digital technologies, and use estimation and rounding to check the reasonableness of answers		Investigate and calculate percentage discounts of 10%, 25% & 50% on sale items, with and without digital technologies	
Investigate everyday situations that use positive and negative whole numbers and zero. Locate and represent these numbers on a number line.				Select and apply efficient mental and written strategies and appropriate digital technologies to solve problems involving all four operations with whole numbers				Explore the use of brackets and order of operations to write number sentences							
Measurement & Geometry															
Using Units of Measurement (length, capacity, area, mass)				Using Units of Measurement (time)		Shape				Transformation				Geometric Reasoning (angles)	
Connect decimal representations to the metric system		Solve problems involving the comparison of lengths and areas using appropriate units		Interpret and use timetables		Construct simple prisms and pyramids				Investigate combinations of translations, reflections and rotations, with and without digital technologies				Investigate, with and without digital technologies, angles on a straight line, angles at a point and vertically opposite angles. Use results to find unknown angles.	
Convert between common metric units of length, mass and capacity		Connect volume and capacity and their units of measurement								Introduce the Cartesian coordinates system using all four quadrants					
Statistics & Probability															
Chance								Data Representation & Interpretation							
Describe probabilities using fractions, decimals and percentages		Conduct chance experiments with both small and large numbers of trials using appropriate digital technologies		Compare observed frequencies across experiments with expected frequencies				Interpret and compare a range of data displays, including side-by-side column graphs for two categorical variables				Interpret secondary data presented in digital media and elsewhere			

YEAR 7								Scope & Sequence – Key Ideas (<i>Content Descriptors</i>)							
Number & Algebra															
Understanding Whole Numbers		Addition & Subtraction		Multiplication & Division		Patterns & Algebra		Fractions & Decimals				Money & Financial Matters			
Investigate index notation and represent whole numbers as products and powers of prime numbers <i>(see also Multiplication & Division)</i>		Compare, order, add and subtract integers		Investigate index notation and represent whole numbers as products and powers of prime numbers		Introduce the concept of variables as a way of representing number using letters		Compare fractions using equivalence. Locate and represent fractions as mixed numerals on a number line		Solve problems involving addition and subtraction of fractions, including those with unrelated denominators		Multiply and divide fractions and decimals using efficient written strategies and digital technologies		Investigate and calculate 'best buys', with and without digital technologies	
				Investigate and use square roots of perfect square numbers		Create algebraic expressions and evaluate them by substituting a given value for each variable		Express one quantity as a fraction of another, with and without the use of digital technologies		Round decimals to a specified number of decimal places		Connect fractions, decimals and percentages and carry out simple conversations			
				Apply the associate, commutative and distributive laws to aid mental and written computation		Extend and apply the laws and properties of arithmetic terms and expressions		Finds percentages of quantities and express one quantity as a percentage of another, with and without digital technologies				Recognise and solve problems involving simple ratios			
Measurement & Geometry															
Using Units of Measurement (length, capacity, area, mass)			Shape		Transformation		Geometric Reasoning (<i>angles</i>)								
Establish the formulas for areas of rectangles, triangles and parallelograms and use these in problem solving		Calculate volumes of rectangular prisms		Draw different views of prisms and solids formed from combinations of prisms		Describe translations, reflections in an axis, and rotations of multiples of 90° on the Cartesian plane using coordinates. Identify line and rotational symmetry.		Identify corresponding, alternative and co-interior angles when two parallel straight lines are crossed by a transversal		Investigate conditions for two lines to be parallel and solve simple numerical problems using reasoning		Classify triangles according to their side and angle properties and describe quadrilaterals		Demonstrate that the sum of a triangle is 180° and use this to find the angle sum of a quadrilateral	
Statistics & Probability															
Chance				Data Representation & Interpretation											
Construct sample spaces for single-step experiments with equally likely outcomes		Assign probabilities to the outcomes of events and determine probabilities for events		Identify and investigate issues involving continuous or large count data collected from primary and secondary sources				Construct and compare a range of data displays including stem-and-leaf plots and dot plots		Calculate mean, median, mode and range for sets of data. Interpret these statistics in the context of data		Describe and interpret data displays and the relationship between the median and mean			

