



Maths Trek

NSW Syllabus Match Early Stage 1 – Stage 1

NSW Syllabus Edition

Availability information

Our NSW Syllabus Edition of **Maths Trek K–2** is ready for use in **2025**.

Note: Our NSW Syllabus Edition for **Years 3–6** will be ready for use in **2026**. In the meantime, schools can use the Australian Curriculum Edition of Maths Trek. Refer to the *NSW Syllabus Alignment Guide* to see how the Australian Curriculum Edition aligns to Stages 2 and 3.

Refer to the tables to see how the Maths Trek NSW Syllabus Edition topics, investigations and problem-solving units match the NSW Mathematics Syllabus for Early Stage 1 to Stage 1B.

Early Stage 1 Syllabus Match

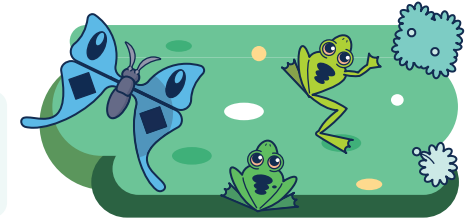
Maths Trek K

Working mathematically

Outcome MAO-WM-01 is comprehensively covered in the Maths Trek program. Students develop mathematical understanding, fluency, reasoning and problem-solving skills as they work through the sequence of topics, revision and investigations.

A student:

- develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01



Number and algebra

Mathematical concept	Outcomes	Content	Topics and investigations
Representing whole numbers	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 demonstrates an understanding of how whole numbers indicate quantity MAE-RWN-01 reads numerals and represents whole numbers to at least 20 MAE-RWN-02 	Instantly name the number of objects within small collections <ul style="list-style-type: none"> Instantly recognise (subitise) the number of items in small groups of up to four items without counting 	1.1 One 1.2 Two 2.1 Three 2.2 Count to three 3.2 Four 2.2 Count to three 3.2 Four 2.2 Count to three 14.1 Numbers before, after, in between 29.2 Count to 30 13.2 Count backwards from 10 12.1 One more than 13.1 One less than 9.1 Dot patterns Included in all topics that introduce numbers to 10.
		<ul style="list-style-type: none"> Identify the number of items in different arrangements 	2.2 Count to three 3.2 Four 2.2 Count to three 14.1 Numbers before, after, in between 29.2 Count to 30 13.2 Count backwards from 10 12.1 One more than 13.1 One less than 9.1 Dot patterns Included in all topics that introduce numbers to 10.
		Use the counting sequence of ones flexibly <ul style="list-style-type: none"> Count forwards to at least 30 and state the number after or before a given number, without needing to count from one 	10.1 Count to 10 14.1 Numbers before, after, in between 29.2 Count to 30 13.2 Count backwards from 10 12.1 One more than 13.1 One less than 9.1 Dot patterns Included in all topics that introduce numbers to 10.
		<ul style="list-style-type: none"> Identify and distinguish the 'teen' numbers from multiples of ten with the same initial sounds 	29.2 Count to 30 13.2 Count backwards from 10 12.1 One more than 13.1 One less than 9.1 Dot patterns Included in all topics that introduce numbers to 10.
		<ul style="list-style-type: none"> Count backwards from a given number 20 or less 	13.2 Count backwards from 10 12.1 One more than 13.1 One less than 9.1 Dot patterns Included in all topics that introduce numbers to 10.
		<ul style="list-style-type: none"> Identify the number before as 'one less' and the number after as 'one more' than a given number 	12.1 One more than 13.1 One less than 9.1 Dot patterns Included in all topics that introduce numbers to 10.
		Recognise number patterns <ul style="list-style-type: none"> Recognise dice and domino dot patterns Recognise different finger patterns for the same number 	2.2 Count to three 3.2 Four INV Oz-animal Olympics 3.3 Five 9.1 Dot patterns 29.2 Count to 30 31.2 Missing numbers to 30 28.2 Count forwards and backwards 14.1 Numbers before, after, in between

Early Stage 1 Syllabus Match

Maths Trek K

Number and algebra				
Mathematical concept	Outcomes	Content	Topics and investigations	
Representing whole numbers cont.		Connect counting and numerals to quantities		
		<ul style="list-style-type: none"> Count with one-to-one correspondence, recognising that the last number name represents the total number in the collection 	4.1 Count and match one-to-one 16.2 Numbers 11 to 15	16.3 Count collections 17.3 Count collections
		<ul style="list-style-type: none"> Count out a specified number of objects (from 5 to 20) from a larger collection, keeping track of the count 	16.2 Numbers 11 to 15	17.2 Numbers 16 to 20
		<ul style="list-style-type: none"> Make correspondences between collections (Reasons about quantity) 	8.2 Compare collections to 10	22.2 Compare collections to 20
		<ul style="list-style-type: none"> Read numerals to at least 20, including zero 	1.1 One 1.2 Two 2.1 Three 3.2 Four 3.3 Five 4.3 Six 4.4 Seven	7.1 Eight 7.2 Nine 7.3 Ten 8.1 Zero 16.2 Numbers 11 to 15 16.3 Count collections 17.2 Numbers 16 to 20
		<ul style="list-style-type: none"> Represent numbers as quantities to at least 20 using objects (such as fingers), number words and numerals 	1.1 One 1.2 Two 2.1 Three 3.2 Four 3.3 Five 4.3 Six 4.4 Seven 7.1 Eight 7.2 Nine 7.3 Ten	8.1 Zero 8.3 Represent numbers to 10 16.2 Numbers 11 to 15 16.3 Count collections 17.2 Numbers 16 to 20 17.3 Count collections 19.2 Represent numbers 11 to 15 20.2 Represent numbers 16 to 20 30.2 Use ten frames to represent numbers to 20
		<ul style="list-style-type: none"> Compare and order numbers to 20 	25.2 Order numbers to 20	33.2 Order numbers to 30
<ul style="list-style-type: none"> Use the term 'is the same as' to express equality of groups (Reasons about quantity) 	3.4 Equal groups	8.2 Compare collections to 10		

Early Stage 1 Syllabus Match

Maths Trek K

Number and algebra				
Mathematical concept	Outcomes	Content	Topics and investigations	
Combining and separating quantities	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 reasons about number relations to model addition and subtraction by combining and separating, and comparing collections MAE-CSQ-01 represents the relations between the parts that form the whole, with numbers up to 10 MAE-CSQ-02 	Model additive relations and compare quantities <ul style="list-style-type: none"> Identify situations in which addition and subtraction may be applied 	35.1 Addition and subtraction INV Zoo escape	
		<ul style="list-style-type: none"> Combine two or more groups of objects to model addition, identifying the relationship between the parts and the whole 	16.1 Combine two groups 17.1 Combine two groups 19.1 Model addition	20.1 Addition: How many altogether? 22.1 Addition stories
		<ul style="list-style-type: none"> Separate and take away part of a group of objects to model subtraction 	23.1 Model subtraction 23.2 Subtraction stories	29.1 Take away
		<ul style="list-style-type: none"> Use concrete materials or fingers to model and solve addition and subtraction questions, counting forwards or backwards by ones as necessary 	19.1 Model addition 21.1 Use beads to show addition	21.2 Make 10 33.4 Find the missing group
		<ul style="list-style-type: none"> Compare two groups of objects to determine how many more (Reasons about quantity) 	25.1 Find the difference	34.4 Compare two groups to find the difference
		Identify part-whole relationships in numbers up to 10 <ul style="list-style-type: none"> Use visual representations of numbers to assist with combining and separating quantities, identifying the relationship between the quantities 	22.4 Use ten frames to show addition	29.3 Add more to make 10
		<ul style="list-style-type: none"> Describe the action of combining, separating and comparing 	21.2 Make 10	
		<ul style="list-style-type: none"> Use five as a reference in forming numbers from six to ten 	4.3 Six 4.4 Seven 7.1 Eight	7.2 Nine 7.3 Ten
		<ul style="list-style-type: none"> Create, model and recognise combinations for numbers up to ten (Reasons about relations) 	10.3 Partition 6 and 7 11.1 Use ten frames to represent numbers to 10 12.3 Partition 8 and 9	13.3 Partition 10 21.2 Make 10 29.3 Add more to make 10
		<ul style="list-style-type: none"> Count by ones to find the total or difference 	28.1 Count on 1 and 2 29.3 Add more to make 10 33.3 Money	33.4 Find the missing group 34.3 Shopping
<ul style="list-style-type: none"> Use drawings, words and numerals to record addition and subtraction, and explain their thinking (Reasons about relations) 	19.1 Model addition 20.1 Addition: How many altogether? 21.2 Make 10 27.1 Draw pictures to show subtraction	33.4 Find the missing group 34.3 Shopping altogether? INV Zoo escape		

Early Stage 1 Syllabus Match

Maths Trek K

Number and algebra				
Mathematical concept	Outcomes	Content	Topics and investigations	
Forming groups	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 recognises, describes and continues repeating patterns MAE-FG-01 forms equal groups by sharing and counting collections of objects MAE-FG-02 	Copy, continue and create patterns <ul style="list-style-type: none"> Copy and continue repeating patterns using sounds and/or actions 	19.3 Copy a pattern	
		<ul style="list-style-type: none"> Copy, continue and create repeating patterns using shapes, objects, images or pictures (Reasons about patterns) 	21.3 Identify the next item in a pattern 22.3 Describe and continue patterns	23.3 Continue and create patterns
		Investigate and form equal groups by sharing <ul style="list-style-type: none"> Distribute a group of familiar objects into smaller groups and recognise whether the number in each group is equal or not 	30.1 Share equally	31.1 Share equally
		<ul style="list-style-type: none"> Group and share concrete materials by distributing objects one by one or using another method 	30.1 Share equally	
		Record grouping and sharing <ul style="list-style-type: none"> Label the number of objects in a group 	30.1 Share equally 31.1 Share equally	34.1 Make equal groups
		<ul style="list-style-type: none"> Record grouping and sharing using drawings, words and numerals, and explain their thinking (Reasons about relations) 	30.1 Share equally 31.1 Share equally	34.1 Make equal groups INV Hungry billy goats

Early Stage 1 Syllabus Match

Maths Trek K

Measurement and space				
Mathematical concept	Outcomes	Content	Topics and investigations	
Geometric measure	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 describes position and gives and follows simple directions MAE-GM-01 describes and compares lengths MAE-GM-02 identifies half the length and the halfway point MAE-GM-03 	Position: Describe position and movement of oneself		
		<ul style="list-style-type: none"> Give and follow simple directions to position themselves or objects 	9.3 Position	
		<ul style="list-style-type: none"> Describe the position of an object in relation to another object, such as in, on, under as well as the directions up and down 	5.3 High and low, near and far	9.3 Position
		<ul style="list-style-type: none"> Describe the position of an object using proximity terms and referring to frames of reference 	3.1 In front of, behind, between, next to	
		<ul style="list-style-type: none"> Use the ordinal names to at least third to describe order of position 	5.1 Ordinal numbers to 5th 28.3 Ordinal numbers to 10th	INV Oz-animal Olympics
		<ul style="list-style-type: none"> Begin to describe the positions of objects in relation to themselves using the terms 'left' and 'right' 	26.3 Left and right	
		Length: Use direct and indirect comparisons to decide which is longer		
		<ul style="list-style-type: none"> Identify the attribute of 'length' as the measure of an object from end to end 	2.3 Short and long	
		<ul style="list-style-type: none"> Use comparative language to describe length 	1.3 Short and tall 1.4 Long/short, wide/narrow, thick/thin	2.3 Short and long 16.4 Compare length 17.4 Longer than, shorter than
		<ul style="list-style-type: none"> Compare lengths directly by placing objects side by side and aligning the ends 	16.4 Compare length	17.4 Longer than, shorter than
		<ul style="list-style-type: none"> Explain why the length of a piece of string remains unchanged whether placed in a straight line or a curve 	2.3 Short and long	
		<ul style="list-style-type: none"> Compare lengths indirectly by copying a length (Reasons about relations) 	17.4 Longer than, shorter than	
		Length: Create half a length		
<ul style="list-style-type: none"> Divide a length into two equal parts (Reasons about relations) 	18.3 Half a length			
<ul style="list-style-type: none"> Distinguish between the halfway point and half a length 	18.3 Half a length			
<ul style="list-style-type: none"> Describe positions as 'about halfway', 'more than halfway' or 'less than halfway' 	18.3 Half a length			

Early Stage 1 Syllabus Match

Maths Trek K

Measurement and space				
Mathematical concept	Outcomes	Content	Topics and investigations	
Two-dimensional spatial structure	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 sorts, describes, names and makes two-dimensional shapes, including triangles, circles, squares and rectangles MAE-2DS-01 describes and compares areas of similar shapes MAE-2DS-02 	2D shapes: Sort, describe and name familiar shapes <ul style="list-style-type: none"> Identify familiar shapes in a range of contexts 	14.2 Name and sort shapes	
		<ul style="list-style-type: none"> Sort shapes according to features such as size and shape 	13.4 Sort shapes	
		<ul style="list-style-type: none"> Recognise and explain how a group of shapes has been sorted (Reasons about spatial relations) 	13.4 Sort shapes	14.2 Name and sort shapes
		<ul style="list-style-type: none"> Describe shapes, including circles, squares, triangles and rectangles 	10.4 Circles 11.2 Triangles 11.3 Squares	12.4 Rectangles 14.2 Name and sort shapes
		<ul style="list-style-type: none"> Ask and respond to questions that help identify and name a particular shape 	10.4 Circles 11.2 Triangles	11.3 Squares 12.4 Rectangles
		<ul style="list-style-type: none"> Distinguish examples of triangles from non-examples 	11.2 Triangles	
		2D shapes: Represent shapes <ul style="list-style-type: none"> Manipulate circles, squares, triangles and rectangles, and describe their features 	INV Hopscotch	
		<ul style="list-style-type: none"> Turn shapes to fit into or match a given space (Reasons about spatial relations) 	INV Hopscotch	
		<ul style="list-style-type: none"> Make representations of shapes in a variety of ways, using paint, paper, movements or technology 	10.4 Circles 11.2 Triangles	11.3 Squares 12.4 Rectangles
		<ul style="list-style-type: none"> Make pictures and designs using a selection of shapes 	INV Hopscotch	
		<ul style="list-style-type: none"> Make two-dimensional shapes by tracing around the faces of three-dimensional objects 	14.2 Name and sort shapes	
		<ul style="list-style-type: none"> Identify and draw lines and curves 	10.2 Lines and shapes	
		Area: Identify and compare area <ul style="list-style-type: none"> Make closed shapes and identify the attribute of area as the measure of the amount of surface 	9.2 Area	10.2 Lines and shapes
		<ul style="list-style-type: none"> Use comparative language to describe areas 	9.2 Area	35.2 Compare area
		<ul style="list-style-type: none"> Predict which of two surfaces will have the larger area and justify the answer (Reasons about spatial relations) 	35.2 Compare area	
		<ul style="list-style-type: none"> Compare areas of two similar shapes directly by drawing, tracing, or cutting and pasting 	9.2 Area	

Early Stage 1 Syllabus Match

Maths Trek K

Measurement and space				
Mathematical concept	Outcomes	Content	Topics and investigations	
Three-dimensional spatial structure	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 manipulates, describes and sorts three-dimensional objects MAE-3DS-01 describes and compares volumes MAE-3DS-02 	3D objects: Explore familiar three-dimensional objects		
		<ul style="list-style-type: none"> Describe the features of familiar objects 	18.2 Sort and describe 3D objects	
		<ul style="list-style-type: none"> Sort objects and identify the attribute used to sort them 	18.2 Sort and describe 3D objects	
		<ul style="list-style-type: none"> Make and describe a variety of three-dimensional models 	25.3 3D models	
		<ul style="list-style-type: none"> Predict the stacking capabilities of various three-dimensional objects (Reasons about spatial relations) 	26.2 Predict movement of 3D objects	
		Volume: Compare internal volume by filling and packing		
		<ul style="list-style-type: none"> Fill and empty containers using materials such as water or sand 	26.4 Holds more, holds less	27.3 Compare capacity
		<ul style="list-style-type: none"> Use the terms 'full', 'empty' and 'about half full' 	25.4 Full and empty	
		<ul style="list-style-type: none"> Compare the internal volumes (capacities) of two containers directly by filling one and pouring into the other 	27.3 Compare capacity	
		<ul style="list-style-type: none"> Compare the internal volumes of two containers indirectly by pouring their contents into two other identical containers and observing the level reached in each 	27.3 Compare capacity	
		<ul style="list-style-type: none"> Establish that containers of different shapes may hold the same amount 	26.4 Holds more, holds less	
		<ul style="list-style-type: none"> Stack and pack blocks into defined spaces 	26.4 Holds more, holds less	
		Volume: Compare volume by building		
<ul style="list-style-type: none"> Identify the attribute of <i>volume</i> as the amount of space an object or substance occupies 	30.3 Compare volume			
<ul style="list-style-type: none"> Compare the volumes of two objects made from blocks or connecting cubes directly by deconstructing one object and using its parts to construct a copy of the other object 	30.3 Compare volume			
<ul style="list-style-type: none"> Use comparative language to describe volume 	30.3 Compare volume			

Early Stage 1 Syllabus Match

Maths Trek K

Measurement and space			
Mathematical concept	Outcomes	Content	Topics and investigations
Non-spatial measure	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 describes and compares the masses of objects MAE-NSM-01 sequences events and reads hour time on clocks MAE-NSM-02 	Mass: Identify and compare mass using weight <ul style="list-style-type: none"> Identify that objects can be heavy or light Compare two masses directly by hefting 	19.4 Heavy and light 20.3 Compare mass by hefting 21.4 Heavier, lighter, the same as
		Time: Compare and order the duration of events using the language of time <ul style="list-style-type: none"> Use terms such as 'daytime', 'night-time', 'morning', 'afternoon', 'today', 'tomorrow', 'yesterday', 'before', 'after' and 'next' Sequence events in time Compare the duration of two events 	7.4 Events in my day 12.2 Yesterday, today, tomorrow 30.4 Sequence events 18.1 Duration of events 28.4 Before and after 30.4 Sequence events
		Time: Connect days of the week to familiar events and actions <ul style="list-style-type: none"> Recall that there are seven days in a week Name and order the days of the week Identify events that occur daily and relate events to a particular day or time of day 	8.4 Days of the week: The Hungry Caterpillar 8.4 Days of the week: The Hungry Caterpillar 7.4 Events in my day 8.4 Days of the week: The Hungry Caterpillar
		Time: Tell time on the hour on analog and digital clocks <ul style="list-style-type: none"> Create the layout of an analog clock Read analog and digital clocks to the hour using the term 'o'clock' Describe the position of the hour and minute hands on an analog clock when reading hour time 	4.2 O'clock 4.2 O'clock 4.2 O'clock 33.1 Analog and digital time

Early Stage 1 Syllabus Match

Maths Trek K

Statistics and probability			
Mathematical concept	Outcomes	Content	Topics and investigations
Data	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 contributes to collecting data and interprets data displays made from objects MAE-DATA-01 	Respond to questions, collect information and discuss possible outcomes of activities	
		<ul style="list-style-type: none"> Predict possible responses to a question 	26.1 Collect data 31.3 Collect data
		<ul style="list-style-type: none"> Collect information from their peers and about their environment 	14.3 Ask questions to collect data 31.3 Collect data 26.1 Collect data 34.2 Use tally marks to show data
		<ul style="list-style-type: none"> Pose and respond to questions about the information collected 	14.3 Ask questions to collect data 31.3 Collect data 26.1 Collect data 34.2 Use tally marks to show data
		Organise objects into simple data displays and interpret the displays	
		<ul style="list-style-type: none"> Group objects according to characteristics 	5.2 Sort data 27.2 Data displays
		<ul style="list-style-type: none"> Compare the sizes of groups of objects by counting (Reasons about relations) 	5.2 Sort data
		<ul style="list-style-type: none"> Arrange objects according to a characteristic to form a data display 	5.2 Sort data 27.2 Data displays
		<ul style="list-style-type: none"> Interpret information presented in a data display to answer questions (Reasons about quantity) 	5.2 Sort data 31.3 Collect data 26.1 Collect data 35.3 Interpret data displays 27.2 Data displays

Stage 1A Syllabus Match

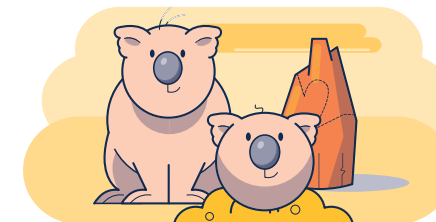
Maths Trek 1

Working mathematically

Outcome MAO-WM-01 is comprehensively covered in the Maths Trek program. Students develop mathematical understanding, fluency, reasoning and problem-solving skills as they work through the sequence of topics, revision, investigations, problem-solving strategies and practice problems.

A student:

- develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01


Number and algebra

Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving	
Representing whole numbers A	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 applies an understanding of place value and the role of zero to read, write and order two- and three-digit numbers MA1-RWN-01 reasons about representations of whole numbers to 1000, partitioning numbers to use and record quantity values MA1-RWN-02 	Use counting sequences of ones with two-digit numbers and beyond <ul style="list-style-type: none"> Identify the number before and after a given two-digit number 	1.2 Counting in ones 1.3 Reading and writing numbers to 20	2.1 Counting in ones to 100 17.3 One more, one less, ten more, ten less
		<ul style="list-style-type: none"> Count forwards and backwards by ones from a given number to at least 120 	1.2 Counting in ones	2.1 Counting in ones to 100
		Continue and create number patterns <ul style="list-style-type: none"> Model and describe 'odd' and 'even' numbers using items paired in two rows 	2.2 Odd and even number patterns	
		<ul style="list-style-type: none"> Count forwards and backwards by twos from any starting point 	2.3 Skip counting by twos to 20	14.2 Skip counting by twos to 100
		Represent numbers on a line <ul style="list-style-type: none"> Sequence numbers and arrange them on a line by considering the order and size of those numbers 	2.1 Counting in ones to 100 2.3 Skip counting by twos to 20 9.1 Ordering numbers to 100	19.1 Count and order numbers to 150
		<ul style="list-style-type: none"> Locate the approximate position of multiples of 10 on a model of a number line from 0 to 100 	9.1 Ordering numbers to 100	
		Represent the structure of groups of ten in whole numbers <ul style="list-style-type: none"> Recognise that ten ones is the same as one ten 	30.1 Regrouping two-digit numbers	
<ul style="list-style-type: none"> Use 10 as a reference in forming numbers from 11 to 20 	1.3 Reading and writing numbers to 20			

Stage 1A Syllabus Match

Maths Trek 1

Number and algebra					
Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving		
Representing whole numbers A cont.		<ul style="list-style-type: none"> Count large sets of objects by systematically grouping in tens 	3.2 Representing two-digit numbers to 30 3.3 Reading and writing two-digit numbers	9.2 Counting collections to 100 10.1 Counting groups of 10	
		<ul style="list-style-type: none"> Partition two-digit numbers to show quantity values 	11.1 Representing two-digit numbers 17.1 Representing tens and ones 18.1 Writing tens and ones	23.1 Partitioning tens and ones 30.1 Regrouping two-digit numbers	
		<ul style="list-style-type: none"> Use number lines and number charts to assist with locating the nearest ten to a number 	9.2 Counting collections to 100		
		<ul style="list-style-type: none"> Estimate, to the nearest ten, the number of objects in a collection and check by counting in groups of ten (Reasons about quantity) 	9.2 Counting collections to 100		
Combining and separating quantities A	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 uses number bonds and the relationship between addition and subtraction to solve problems involving partitioning MA1-CSQ-01 	Use advanced count-by-one strategies to solve addition and subtraction problems	7.1 Addition number sentences 15.1 Subtraction	18.2 Subtraction – find the difference 23.2 Subtraction facts	
		<ul style="list-style-type: none"> Apply the terms 'add', 'plus', 'equals', 'is equal to', 'is the same as', 'take away', 'minus' and 'the difference between' to describe combining and separating quantities 	7.1 Addition number sentences	16.1 Subtraction number sentences	
		<ul style="list-style-type: none"> Recognise and use the symbols for plus (+), minus (–) and equals (=) 	7.1 Addition number sentences 12.1 Addition using think boards 14.1 Partitioning to 20 15.1 Subtraction 16.1 Subtraction number sentences 16.2 Subtraction using think boards	18.2 Subtraction – find the difference 23.2 Subtraction facts 28.2 Addition and subtraction money problems	
		<ul style="list-style-type: none"> Fluently use advanced count-by-one strategies including counting on and counting back to solve addition and subtraction problems involving one- and two-digit numbers (Reasons about relations) 	8.1 Addition using number lines 9.3 Counting on 1 or 2 15.1 Subtraction 16.1 Subtraction number sentences	17.2 Counting back 1 or 2 17.3 One more, one less, ten more, ten less 23.2 Subtraction facts	

Stage 1A Syllabus Match

Maths Trek 1

Number and algebra				
Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving	
Combining and separating quantities A cont.		Recognise and recall number bonds up to ten		
		<ul style="list-style-type: none"> Recognise, recall and record combinations of two numbers that add up or bond to form 10 	7.1 Addition number sentences 10.2 Friends of 10	28.2 Addition and subtraction money problems INV Numbers up
		<ul style="list-style-type: none"> Model and record patterns for individual numbers up to ten by making all possible whole-number combinations (Reasons about patterns) 	4.1 Partitioning to 10 10.2 Friends of 10	23.4 Problem-solving practice
		<ul style="list-style-type: none"> Create, recall and recognise combinations of two numbers that add up to numbers less than 10 	4.1 Partitioning to 10 10.4 Guessing and checking	25.4 Finding smaller parts of a larger problem 26.4 Problem-solving practice
		<ul style="list-style-type: none"> Describe combinations for numbers using words such as <i>more than</i>, <i>less than</i> and <i>double</i> (Reasons about relations) 	22.1 Addition facts	23.2 Subtraction facts
		Use flexible strategies to solve addition and subtraction problems		
		<ul style="list-style-type: none"> Use non-count-by-one strategies such as using doubles for near doubles and combining numbers that add to ten 	12.2 Doubles and near doubles 19.2 Think addition to subtract 22.1 Addition facts 23.2 Subtraction facts	28.2 Addition and subtraction money problems INV Let's roll INV Breakfast cafe
		<ul style="list-style-type: none"> Represent addition and subtraction using structured materials such as a bead string or similar model 	8.1 Addition using number lines 16.1 Subtraction number sentences	18.3 Addition using ten frames and number lines 28.1 Working with coins and notes
		<ul style="list-style-type: none"> Select and apply strategies using number bonds to solve addition and subtraction problems with one- and two-digit numbers by partitioning numbers using quantity value and bridging to 10 (Reasons about relations) 	22.1 Addition facts 25.3 Addition – split and add	27.1 Bridging to tens 28.1 Working with coins and notes
		Represent equality		
<ul style="list-style-type: none"> Use the equals sign to record equivalent number sentences involving addition, and to mean 'is the same as', rather than as an indication to perform an operation (Reasons about relations) 	11.2 Turnarounds	24.1 Equivalent number sentences		
<ul style="list-style-type: none"> Model the commutative property for addition and apply it to aid the recall of addition facts (Reasons about relations) 	11.2 Turnarounds	24.1 Equivalent number sentences		
<ul style="list-style-type: none"> Recall related addition and subtraction facts for numbers to at least 10 (Reasons about relations) 	19.2 Think addition to subtract	20.1 Addition and subtraction are related		

Stage 1A Syllabus Match

Maths Trek 1

Number and algebra			
Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving
Forming groups A	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 uses the structure of equal groups to solve multiplication problems, and shares or groups to solve division problems MA1-FG-01 	Count in multiples using rhythmic and skip counting <ul style="list-style-type: none"> Count by twos, threes, fives and tens using rhythmic counting and skip counting 	2.3 Skip counting by twos to 20 7.2 Skip counting by fives 8.2 Skip counting by tens 14.2 Skip counting by twos to 100 20.3 Describing number patterns
		Use skip counting patterns <ul style="list-style-type: none"> Identify and describe patterns when skip counting forwards or backwards by twos, fives and tens 	3.4 Making a table or chart 19.4 Working backwards 20.3 Describing number patterns 23.4 Problem-solving practice
		<ul style="list-style-type: none"> Determine a missing number in a number pattern with a constant difference 	2.3 Skip counting by twos to 20 7.2 Skip counting by fives 8.2 Skip counting by tens 14.2 Skip counting by twos to 100
		<ul style="list-style-type: none"> Describe how the missing number in a number pattern was determined (Reasons about relations) 	20.3 Describing number patterns 22.2 Keeping the pattern going
		Model and use equal groups of objects to represent multiplication <ul style="list-style-type: none"> Model and describe collections of objects as <i>groups of</i> 	25.1 Equal groups
		<ul style="list-style-type: none"> Determine and distinguish between the <i>number of groups</i> and the <i>number in each group</i> when describing collections of objects (Reasons about relations) 	25.1 Equal groups 26.2 Equal groups
		<ul style="list-style-type: none"> Find the total number of objects using skip counting of equal groups of a known size 	26.2 Equal groups
		Recognise and represent division <ul style="list-style-type: none"> Use concrete materials to model a half of a collection and show the relation between the half and the whole 	26.3 Sharing equally
		<ul style="list-style-type: none"> Model sharing division by distributing a collection of objects equally into a given number of groups to determine how many in each group 	26.3 Sharing equally 27.3 Sharing and grouping
		<ul style="list-style-type: none"> Model grouping division by determining the number of groups of a given size that can be formed 	27.2 How many groups? 27.3 Sharing and grouping
<ul style="list-style-type: none"> Describe the part left over when a collection cannot be distributed equally using the given group size 	26.3 Sharing equally		

Stage 1A Syllabus Match

Maths Trek 1

Measurement and space				
Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving	
Geometric measure A	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 represents and describes the positions of objects in familiar locations MA1-GM-01 measures, records, compares and estimates lengths and distances using uniform informal units, as well as metres and centimetres MA1-GM-02 creates and recognises halves, quarters and eighths as part measures of a whole length MA1-GM-03 	Position: Follow directions to familiar locations <ul style="list-style-type: none"> Give and follow directions, including directions involving turns to the left and right, to move between familiar locations 	12.3 Following directions 26.1 Following and writing directions	
		<ul style="list-style-type: none"> Give and follow instructions to position objects in models and drawings 	11.3 Describing position	
		<ul style="list-style-type: none"> Describe the path from one location to another on drawings and diagrams 	26.1 Following and writing directions	
		Length: Measure the lengths of objects using uniform informal units <ul style="list-style-type: none"> Use uniform informal units to measure lengths and distances by placing the units end to end without gaps or overlaps 	5.3 Measuring length using informal units 19.3 Informal units to measure length	INV Ramp champ
		<ul style="list-style-type: none"> Select appropriate uniform informal units to measure lengths and distances 	19.3 Informal units to measure length	
		<ul style="list-style-type: none"> Recognise and explain the relationship between the size of a unit and the number of units needed (Reasons about relations) 	5.3 Measuring length using informal units	19.3 Informal units to measure length
		<ul style="list-style-type: none"> Count informal units to measure lengths or distances and describe the part left over 	19.3 Informal units to measure length	
		<ul style="list-style-type: none"> Record lengths and distances by referring to the number and type of unit used 	5.3 Measuring length using informal units 19.3 Informal units to measure length	INV Ramp champ
		<ul style="list-style-type: none"> Use a single informal unit repeatedly (iteratively) to measure length 	19.3 Informal units to measure length	
		Length: Compare lengths using uniform informal units <ul style="list-style-type: none"> Compare the lengths of two or more objects using appropriate uniform informal units and check by placing the objects side by side and aligning the ends 	19.3 Informal units to measure length	
		<ul style="list-style-type: none"> Explain why the length of an object remains constant when rearranged (Reasons about relations) 	5.3 Measuring length using informal units	
		<ul style="list-style-type: none"> Estimate lengths, indicating the number and type of unit used and check by measuring 	5.3 Measuring length using informal units	

Stage 1A Syllabus Match

Maths Trek 1

Measurement and space			
Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving
Geometric measure A cont.		Length: Subdivide lengths to find halves and quarters	25.2 Halves and quarters of a length
		<ul style="list-style-type: none"> Use concrete materials to model both half and quarters of a whole length, highlighting the length 	25.2 Halves and quarters of a length
		<ul style="list-style-type: none"> Identify two equal parts and the relationship of the parts to the whole length, linking words and images 	25.2 Halves and quarters of a length
Two-dimensional spatial structure A	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 recognises, describes and represents shapes including quadrilaterals and other common polygons MA1-2DS-01 measures and compares areas using uniform informal units in rows and columns MA1-2DS-02 	2D shapes: Recognise and classify shapes using obvious features	
		<ul style="list-style-type: none"> Explore, manipulate and describe features of polygons 	7.3 Which 2D shape is that?
		<ul style="list-style-type: none"> Use the terms 'side', 'vertex' and 'two-dimensional' to describe plane (flat) shapes 	8.3 Classifying 2D shapes
		<ul style="list-style-type: none"> Create repeating linear patterns with shapes, including two-shape and three-shape patterns 	15.2 Repeating shape patterns
		<ul style="list-style-type: none"> Compare, sort and classify polygons according to the number of sides or vertices 	8.3 Classifying 2D shapes 28.3 Triangles and quadrilaterals
		<ul style="list-style-type: none"> Select and name a shape from a description of its features, identifying triangles, quadrilaterals, pentagons, hexagons and octagons (Reasons about spatial relations) 	28.3 Triangles and quadrilaterals
		<ul style="list-style-type: none"> Recognise that shapes with the same name may have sides of equal or different lengths (Reasons about spatial relations) 	28.3 Triangles and quadrilaterals
		<ul style="list-style-type: none"> Identify shapes presented in different orientations 	7.3 Which 2D shape is that?
		2D shapes: Transform shapes with slides and reflections	
		<ul style="list-style-type: none"> Recognise that sliding or reflecting a shape does not change its size or features (Reasons about spatial relations) 	31.3 Reflect, slide, turn
<ul style="list-style-type: none"> Identify and create a slide (translation) or reflection of a single shape and use the terms 'slide' (translation) and 'reflection' to describe the movement of the shape 	31.3 Reflect, slide, turn		
<ul style="list-style-type: none"> Make designs with symmetry from reflection using paper-folding, mirrors, drawings or paintings 	31.3 Reflect, slide, turn		

Stage 1A Syllabus Match

Maths Trek 1

Measurement and space			
Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving
Two-dimensional spatial structure A cont.		Area: Indirectly compare area <ul style="list-style-type: none"> Indirectly compare the areas of two surfaces that cannot be moved or superimposed 	30.2 Compare area
		<ul style="list-style-type: none"> Predict which of two similar shapes has the larger area and check by covering 	30.2 Compare area
		Area: Measure areas using uniform informal units <ul style="list-style-type: none"> Explore area using uniform informal units to cover the surface in rows or columns without gaps or overlaps 	31.1 Measure area
		<ul style="list-style-type: none"> Measure area by selecting and using appropriate uniform informal units (Reasons about relations) 	31.1 Measure area
		<ul style="list-style-type: none"> Explain the relationship between the size of a unit and the number of units needed to measure an area (Reasons about relations) 	31.1 Measure area
		<ul style="list-style-type: none"> Explain why the area remains constant when units are rearranged (Reasons about relations) 	31.1 Measure area
		<ul style="list-style-type: none"> Record areas by referring to the number and type of uniform informal unit used 	31.1 Measure area
		<ul style="list-style-type: none"> Identify any parts of units left over when counting uniform informal units to measure area 	31.1 Measure area
		<ul style="list-style-type: none"> Estimate areas by referring to the number and type of uniform informal unit used and check by measuring 	31.1 Measure area

Stage 1A Syllabus Match

Maths Trek 1

Measurement and space			
Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving
Three-dimensional spatial structure A	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 recognises, describes and represents familiar three-dimensional objects MA1-3DS-01 measures, records, compares and estimates internal volumes (capacities) and volumes using uniform informal units MA1-3DS-02 	3D objects: Recognise familiar three-dimensional objects <ul style="list-style-type: none"> Use the term 'three-dimensional' to describe a range of objects 	15.3 Identify 3D objects
		<ul style="list-style-type: none"> Distinguish between objects, which are <i>three-dimensional (3D)</i> and shapes which are <i>two-dimensional (2D)</i> 	15.3 Identify 3D objects
		<ul style="list-style-type: none"> Identify and name familiar three-dimensional objects, including cubes, cylinders, spheres and rectangular prisms 	15.3 Identify 3D objects
		3D objects: Sort and describe three-dimensional objects <ul style="list-style-type: none"> Manipulate and describe familiar three-dimensional objects 	16.3 Sort and describe 3D objects
		<ul style="list-style-type: none"> Use the term 'surface' in describing familiar three-dimensional objects 	16.3 Sort and describe 3D objects
		<ul style="list-style-type: none"> Sort familiar three-dimensional objects according to obvious features 	16.3 Sort and describe 3D objects
		<ul style="list-style-type: none"> Use the term 'face' to describe the flat surfaces of three-dimensional objects with straight edges 	16.3 Sort and describe 3D objects
		<ul style="list-style-type: none"> Select and name a familiar three-dimensional object from a description of its features 	16.3 Sort and describe 3D objects
		Volume: Measure and compare the internal volumes (capacities) of containers by filling <ul style="list-style-type: none"> Use uniform informal units to measure how much a container will hold by counting the number of times a smaller container can be filled and emptied into the container being measured 	23.3 Measuring capacity
		<ul style="list-style-type: none"> Select appropriate informal units to measure the capacities of containers 	23.3 Measuring capacity
		<ul style="list-style-type: none"> Recognise and explain the relationship between the size of a unit and the number of units needed (Reasons about relations) 	23.3 Measuring capacity
		<ul style="list-style-type: none"> Compare the internal volumes of two or more containers using appropriate uniform informal units 	23.3 Measuring capacity
		<ul style="list-style-type: none"> Recognise and explain why containers of different shapes may have the same internal volume (Reasons about relations) 	23.3 Measuring capacity
<ul style="list-style-type: none"> Estimate how much a container holds by referring to the number and type of uniform informal units used and check by measuring 	23.3 Measuring capacity		

Stage 1A Syllabus Match

Maths Trek 1

Measurement and space			
Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving
Three-dimensional spatial structure A cont.		Volume: Measure the internal volume (capacity) of containers by packing	
		<ul style="list-style-type: none"> Pack cubic units (eg blocks) into rectangular containers so that there are no gaps 	20.2 Measure volume by packing
		<ul style="list-style-type: none"> Recognise that cubes pack better than other objects in rectangular containers (Reasons about spatial structure) 	20.2 Measure volume by packing
		<ul style="list-style-type: none"> Estimate and measure the internal volume of a container by filling the container with uniform informal units and counting the number of units used 	20.2 Measure volume by packing
		<ul style="list-style-type: none"> Explain that if there are gaps when packing and stacking, this will affect the accuracy of measuring the internal volume 	20.2 Measure volume by packing
		Volume: Construct volumes using cubes	
		<ul style="list-style-type: none"> Explore different rectangular prisms that can be made from a given number of cubes 	24.2 Building prisms with cubes
<ul style="list-style-type: none"> Devise and explain strategies for stacking and counting units to form a rectangular prism (Reasons about spatial structure) 	24.2 Building prisms with cubes		
<ul style="list-style-type: none"> Record volumes, referring to the number and type of uniform informal unit used 	24.2 Building prisms with cubes		

Stage 1A Syllabus Match

Maths Trek 1

Measurement and space			
Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving
Non-spatial measure A	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 measures, records, compares and estimates the masses of objects using uniform informal units MA1-NSM-01 describes, compares and orders durations of events, and reads half- and quarter-hour time MA1-NSM-02 	Mass: Investigate mass using an equal-arm balance <ul style="list-style-type: none"> Place objects on either side of an equal-arm balance to obtain a level balance 	4.2 Comparing mass – heavier, lighter
		<ul style="list-style-type: none"> Use an equal-arm balance to compare the masses of two objects and record, which is heavier or lighter 	4.2 Comparing mass – heavier, lighter
		<ul style="list-style-type: none"> Predict the action of an equal-arm balance before placing particular objects in each pan (Reasons about relations) 	4.2 Comparing mass – heavier, lighter
		<ul style="list-style-type: none"> Use a balance to find two collections of objects that have the same mass 	4.2 Comparing mass – heavier, lighter
		<ul style="list-style-type: none"> Compare and order the masses of two or more objects by hefting, and check using an equal-arm balance 	4.2 Comparing mass – heavier, lighter
		Time: Name and order the cycle of months <ul style="list-style-type: none"> Name and order the months of the year 	3.1 Days, weeks, months, years 10.3 Calendars and months
		<ul style="list-style-type: none"> Recall the number of days in each month 	10.3 Calendars and months
		<ul style="list-style-type: none"> Identify a day and date using a Gregorian calendar 	3.1 Days, weeks, months, years 10.3 Calendars and months
		<ul style="list-style-type: none"> Recognise monthly and annual cycles 	10.3 Calendars and months 31.2 Months and seasons
		Time: Tell time to the half-hour <ul style="list-style-type: none"> Read analog clocks to the half-hour using the terms 'o'clock' and 'half past' 	4.3 Time – o'clock, half past
		<ul style="list-style-type: none"> Describe the position of the hands on a clock for the half-hour 	4.3 Time – o'clock, half past
		<ul style="list-style-type: none"> Connect the use of half turns to the turn of the minute hand for the passing of the half-hour 	4.3 Time – o'clock, half past
		<ul style="list-style-type: none"> Explain why the hour hand on a clock is halfway between successive hour-markers when the minute hand shows the half-hour (Reasons about relations) 	4.3 Time – o'clock, half past
		<ul style="list-style-type: none"> Describe everyday events with particular hour and half-hour times 	4.3 Time – o'clock, half past
<ul style="list-style-type: none"> Record hour and half-hour time, making connections between analog and digital clocks 	4.3 Time – o'clock, half past		

Stage 1A Syllabus Match

Maths Trek 1

Statistics and probability			
Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving
Data A	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 gathers and organises data, displays data in lists, tables and picture graphs MA1-DATA-01 reasons about representations of data to describe and interpret the results MA1-DATA-02 	Ask questions and gather data <ul style="list-style-type: none"> Investigate a topic of interest by choosing suitable questions to obtain appropriate data 	30.3 Collecting data
		<ul style="list-style-type: none"> Gather data and track what has been counted by using concrete materials, tally marks, lists or symbols 	5.2 Collecting data using tally marks 14.3 Object graphs
		Represent data with objects and drawings and describe the displays <ul style="list-style-type: none"> Use concrete materials or pictures of objects as symbols to create data displays where one object or picture represents one data value 	14.3 Object graphs 24.3 Picture graphs
		<ul style="list-style-type: none"> Describe information presented in one-to-one data displays (Reasons about relations) 	14.3 Object graphs 24.3 Picture graphs
		<ul style="list-style-type: none"> Use comparative language to describe information presented in a display, such as 'more than' and 'less than' 	14.3 Object graphs 22.3 Collecting data 30.3 Collecting data
		<ul style="list-style-type: none"> Interpret a data display and identify the biggest or smallest values 	5.2 Collecting data using tally marks 14.3 Object graphs 22.3 Collecting data 24.3 Picture graphs 30.3 Collecting data
		Identify and describe possible outcomes <ul style="list-style-type: none"> Identify possible outcomes of familiar activities and events 	5.1 Possible outcomes
Chance A	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 recognises and describes the element of chance in everyday events MA1-CHAN-01 	<ul style="list-style-type: none"> Describe the chance of possible outcomes for familiar activities and events 	5.1 Possible outcomes

Stage 1B Syllabus Match

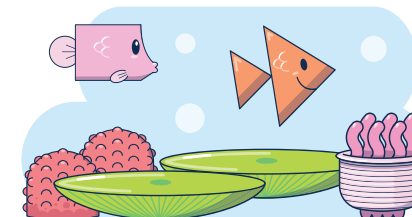
Maths Trek 2

Working mathematically

Outcome MAO-WM-01 is comprehensively covered in the Maths Trek program. Students develop mathematical understanding, fluency, reasoning and problem-solving skills as they work through the sequence of topics, revision, investigations, problem-solving strategies and practice problems.

A student:

- develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01



Number and algebra															
Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving												
Representing whole numbers B	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 applies an understanding of place value and the role of zero to read, write and order two- and three-digit numbers MA1-RWN-01 reasons about representations of whole numbers to 1000, partitioning numbers to use and record quantity values MA1-RWN-02 	Use counting sequences of ones and tens flexibly <ul style="list-style-type: none"> Identify the number before and after a given three-digit number Count forwards and backwards by tens, on and off the decade, with two- and three-digit numbers Identify how many more to the next multiple of ten within two- and three-digit numbers 	<table border="0"> <tr> <td>1.3</td> <td>Read, write and represent numbers to 150</td> <td>9.1</td> <td>Read, write and represent numbers to 500</td> </tr> <tr> <td>2.1</td> <td>Number patterns beyond 100</td> <td>5.1</td> <td>Number lines to 500</td> </tr> <tr> <td>5.1</td> <td>Number lines to 500</td> <td>20.2</td> <td>Number lines to 1000</td> </tr> </table>	1.3	Read, write and represent numbers to 150	9.1	Read, write and represent numbers to 500	2.1	Number patterns beyond 100	5.1	Number lines to 500	5.1	Number lines to 500	20.2	Number lines to 1000
		1.3	Read, write and represent numbers to 150	9.1	Read, write and represent numbers to 500										
		2.1	Number patterns beyond 100	5.1	Number lines to 500										
		5.1	Number lines to 500	20.2	Number lines to 1000										
		Form, regroup and rename three-digit numbers <ul style="list-style-type: none"> Count and represent large sets of objects by systematically grouping in tens and hundreds 	<table border="0"> <tr> <td>1.2</td> <td>Tens and ones with blocks</td> <td>9.1</td> <td>Read, write and represent numbers to 500</td> </tr> <tr> <td>1.3</td> <td>Read, write and represent numbers to 150</td> <td>18.4</td> <td>Solving a simpler problem</td> </tr> <tr> <td>2.3</td> <td>Grouping to count collections</td> <td></td> <td></td> </tr> </table>	1.2	Tens and ones with blocks	9.1	Read, write and represent numbers to 500	1.3	Read, write and represent numbers to 150	18.4	Solving a simpler problem	2.3	Grouping to count collections		
		1.2	Tens and ones with blocks	9.1	Read, write and represent numbers to 500										
		1.3	Read, write and represent numbers to 150	18.4	Solving a simpler problem										
2.3	Grouping to count collections														
<ul style="list-style-type: none"> Use models such as base 10 material and interlocking cubes to represent and explain grouping 	<table border="0"> <tr> <td>1.2</td> <td>Tens and ones with blocks</td> <td>11.1</td> <td>Place value to hundreds</td> </tr> <tr> <td>1.3</td> <td>Read, write and represent numbers to 150</td> <td>14.1</td> <td>Number expanders</td> </tr> <tr> <td>3.2</td> <td>Place value to hundreds</td> <td>23.1</td> <td>Place value to 999</td> </tr> </table>	1.2	Tens and ones with blocks	11.1	Place value to hundreds	1.3	Read, write and represent numbers to 150	14.1	Number expanders	3.2	Place value to hundreds	23.1	Place value to 999		
1.2	Tens and ones with blocks	11.1	Place value to hundreds												
1.3	Read, write and represent numbers to 150	14.1	Number expanders												
3.2	Place value to hundreds	23.1	Place value to 999												
<ul style="list-style-type: none"> State the quantity value of digits in numbers of up to three digits (Reasons about quantity) 	<table border="0"> <tr> <td>3.2</td> <td>Place value to hundreds</td> <td>14.2</td> <td>Expanded notation</td> </tr> <tr> <td>11.1</td> <td>Place value to hundreds</td> <td>17.1</td> <td>Place value problems</td> </tr> <tr> <td>12.1</td> <td>The role of a zero</td> <td>18.1</td> <td>Expanded notation</td> </tr> </table>	3.2	Place value to hundreds	14.2	Expanded notation	11.1	Place value to hundreds	17.1	Place value problems	12.1	The role of a zero	18.1	Expanded notation		
3.2	Place value to hundreds	14.2	Expanded notation												
11.1	Place value to hundreds	17.1	Place value problems												
12.1	The role of a zero	18.1	Expanded notation												
<ul style="list-style-type: none"> Identify the nearest hundred to a number 	<table border="0"> <tr> <td>5.1</td> <td>Number lines to 500</td> <td>20.2</td> <td>Number lines to 1000</td> </tr> </table>	5.1	Number lines to 500	20.2	Number lines to 1000										
5.1	Number lines to 500	20.2	Number lines to 1000												
<ul style="list-style-type: none"> Recognise units of 100 	<table border="0"> <tr> <td>11.1</td> <td>Place value to hundreds</td> <td>23.1</td> <td>Place value to 999</td> </tr> </table>	11.1	Place value to hundreds	23.1	Place value to 999										
11.1	Place value to hundreds	23.1	Place value to 999												

Stage 1B Syllabus Match

Maths Trek 2

Number and algebra				
Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving	
Representing whole numbers B cont.		<ul style="list-style-type: none"> Use place value to partition and rename three-digit numbers in different ways (Reasons about relations) 	3.2 Place value to hundreds 11.1 Place value to hundreds 12.1 The role of a zero 14.1 Number expanders 14.2 Expanded notation	18.1 Expanded notation 22.2 Regrouping and renaming numbers 30.1 Regrouping and renaming numbers
		<ul style="list-style-type: none"> Estimate, to the nearest hundred, the number of objects in a collection and check by grouping and counting 	3.2 Place value to hundreds	
Combining and separating quantities B	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 uses number bonds and the relationship between addition and subtraction to solve problems involving partitioning MA1-CSQ-01 	Represent and reason about additive relations <ul style="list-style-type: none"> Create, record and recognise combinations of two numbers that add to numbers from 11 up to and including 20 Create, model and solve word problems, using number sentences 	2.2 Addition using ten frames 4.1 Partitioning to 20	4.2 Addition facts 7.2 Addition using friendly pairs
		<ul style="list-style-type: none"> Represent the difference between two numbers using concrete materials and diagrams 	7.2 Addition using friendly pairs 11.2 Addition with bar models 15.1 Subtraction with bar models 20.3 Problem-solving with money	24.3 Addition and subtraction with bar models 26.1 Addition and subtraction problems INV Showtime
		<ul style="list-style-type: none"> Represent a constant difference between pairs of numbers 	8.1 Subtraction facts	
		<ul style="list-style-type: none"> Model how addition and subtraction are inverse operations using concrete materials, drawings and diagrams 	8.1 Subtraction facts	
		<ul style="list-style-type: none"> Recall and use related addition and subtraction number facts to at least 20 	10.3 Addition and subtraction facts are related	
		<ul style="list-style-type: none"> Recall and use related addition and subtraction number facts to at least 20 	10.3 Addition and subtraction facts are related	
		Form multiples of ten when adding and subtracting two-digit numbers <ul style="list-style-type: none"> Add two-digit numbers by building to multiples of ten 	5.2 Addition using friendly jumps	7.2 Addition using friendly pairs
		<ul style="list-style-type: none"> Add and subtract from a two-digit number and record on an empty number line 	5.2 Addition using friendly jumps 8.2 Subtraction using friendly jumps	16.1 Addition using jump strategy 17.2 Subtraction using jump strategy
		<ul style="list-style-type: none"> Use quantity values to separate tens and ones for addition (only) 	10.2 Addition using split strategy	11.2 Addition with bar models
		<ul style="list-style-type: none"> Use an inverse strategy to turn a subtraction into an addition (Reasons about relations) 	19.1 Inverse strategy of subtraction	

Stage 1B Syllabus Match

Maths Trek 2

Number and algebra				
Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving	
Combining and separating quantities B cont.		Use knowledge of equality to solve related problems		
		<ul style="list-style-type: none"> Use number bonds to determine a missing number 	25.1 Solve problems using number bonds	
		<ul style="list-style-type: none"> Use number knowledge to solve related problems (Reasons about relations) 	25.1 Solve problems using number bonds	
		<ul style="list-style-type: none"> Use a variety of ways of writing number sentences 	25.1 Solve problems using number bonds	
Forming groups B	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 uses the structure of equal groups to solve multiplication problems, and shares or groups to solve division problems MA1-FG-01 	Represent and explain multiplication as the combining of equal groups		
		<ul style="list-style-type: none"> Use objects, diagrams, images or actions to model multiplication as accumulating equal <i>groups</i> 	20.1 Multiplication as repeated addition	
		<ul style="list-style-type: none"> Solve multiplication problems using repeated addition 	20.1 Multiplication as repeated addition	
		<ul style="list-style-type: none"> Form arrays of equal rows and equal columns 	22.1 Groups and arrays	
		<ul style="list-style-type: none"> Determine and distinguish between the <i>number of rows/columns</i> and the <i>number in each row/column</i> when describing collections of objects 	20.1 Multiplication as repeated addition	22.1 Groups and arrays
		<ul style="list-style-type: none"> Model the commutative property of multiplication, using an array (Reasons about relations) 	25.2 Multiplication using arrays	
		<ul style="list-style-type: none"> Model division by deconstructing an array equally into a given number of rows or columns 	26.2 Division – How many in each group?	27.3 Division – How many groups?
		Model doubling and halving with fractions		
		<ul style="list-style-type: none"> Model doubling and halving groups and the relation between the processes 	27.2 Doubling and halving	
		<ul style="list-style-type: none"> Re-create the whole given half 	27.1 Fractions as part of a group	
<ul style="list-style-type: none"> Use concrete materials to model a half, a quarter or an eighth of a collection, and explain their thinking 	27.1 Fractions as part of a group			

Stage 1B Syllabus Match

Maths Trek 2

Number and algebra

Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving	
Forming groups B cont.		Represent multiplication and division problems <ul style="list-style-type: none"> Solve multiplication and division problems using objects, diagrams, images and actions 	26.2 Division – How many in each group? 27.3 Division – How many groups?	30.2 Multiplication and division problems
		<ul style="list-style-type: none"> Record answers to multiplication and division problems (including those with remainders) using drawings, words and numerals 	26.2 Division – How many in each group? 27.3 Division – How many groups?	30.2 Multiplication and division problems

Measurement and space

Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving	
Geometric measure B	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 represents and describes the positions of objects in familiar locations MA1-GM-01 measures, records, compares and estimates lengths and distances using uniform informal units, as well as metres and centimetres MA1-GM-02 creates and recognises halves, quarters and eighths as part measures of a whole length MA1-GM-03 	Position: Explore simple maps of familiar locations <ul style="list-style-type: none"> Make simple models from memory, photographs, drawings or descriptions 	9.3 Simple maps	
		<ul style="list-style-type: none"> Interpret simple maps by identifying objects in different locations 	9.3 Simple maps	15.2 Maps, pathways, directions
		<ul style="list-style-type: none"> Create a path from one location to another 	15.2 Maps, pathways, directions	
		Length: Compare and order lengths, using appropriate uniform informal units <ul style="list-style-type: none"> Make and use a tape measure calibrated in uniform informal units 	INV Marble ramp	
		<ul style="list-style-type: none"> Compare and order two or more shapes according to their lengths using an appropriate uniform informal unit 	12.2 Measuring length	23.3 Measuring length
		<ul style="list-style-type: none"> Compare the lengths of two or more objects that cannot be moved or aligned (Reasons about relations) 	12.2 Measuring length	23.3 Measuring length
<ul style="list-style-type: none"> Record length comparisons using drawings, numerals and words, and by referring to the uniform informal unit used 	12.2 Measuring length 23.3 Measuring length	INV Marble ramp		

Stage 1B Syllabus Match

Maths Trek 2

Measurement and space

Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving
Geometric measure B cont.		Length: Recognise and use formal units to measure the lengths of objects	
		<ul style="list-style-type: none"> Recognise the need for formal units to measure lengths and distances 	25.3 Measuring with metres
		<ul style="list-style-type: none"> Use the metre as a unit to measure lengths and distances to the nearest metre or half-metre 	25.3 Measuring with metres
		<ul style="list-style-type: none"> Record lengths and distances using the abbreviation for metres (m) 	25.3 Measuring with metres
		<ul style="list-style-type: none"> Estimate lengths and distances to the nearest metre and check by measuring 	25.3 Measuring with metres
		<ul style="list-style-type: none"> Recognise the need for a formal unit smaller than the metre 	26.3 Measuring with centimetres
		<ul style="list-style-type: none"> Recognise that there are 100 centimetres in one metre 	26.3 Measuring with centimetres
		<ul style="list-style-type: none"> Measure lengths to the nearest centimetre, using a device with 1-cm markings 	26.3 Measuring with centimetres
		<ul style="list-style-type: none"> Record lengths and distances using the abbreviation for centimetres (cm) 	26.3 Measuring with centimetres
		<ul style="list-style-type: none"> Estimate lengths and distances to the nearest centimetre and check by measuring 	26.3 Measuring with centimetres
		Length: Repeatedly halve lengths to form eighths	
		<ul style="list-style-type: none"> Use materials to model an eighth of a whole length, highlighting the length 	30.3 Representing halves, quarters, eighths
		<ul style="list-style-type: none"> Recognise when a length is divided into eight equal parts 	30.3 Representing halves, quarters, eighths

Stage 1B Syllabus Match

Maths Trek 2

Measurement and space			
Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving
Two-dimensional spatial structure B	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 recognises, describes and represents shapes including quadrilaterals and other common polygons MA1-2DS-01 measures and compares areas using uniform informal units in rows and columns MA1-2DS-02 	2D shapes: Represent, combine and separate two-dimensional shapes <ul style="list-style-type: none"> Make representations of two-dimensional shapes and combinations of shapes in different orientations Combine and split single shapes and arrangements of shapes to form new shapes (Reasons about spatial relations) 	8.3 Classifying 2D shapes 11.3 Features of 2D shapes 8.3 Classifying 2D shapes
		2D shapes: Identify and describe the orientation of shapes using quarter turns <ul style="list-style-type: none"> Identify full, half and quarter turns of a single shape and describe the movement of the shape Identify and describe directions of turns as 'left turn', 'right turn', 'clockwise' or 'anti-clockwise' Connect the use of quarter and half turns to the turn of the minute hand on a clock for the passing of quarter and half-hours (Reasons about relations) Perform full, half and quarter turns with a single shape Describe the result of a turn of a shape Determine the repeating pattern formed by quarter turns 	31.3 Turns 31.3 Turns 31.3 Turns 31.3 Turns 31.3 Turns 31.3 Turns
		Area: Compare rectangular areas using uniform square units of an appropriate size in rows and columns <ul style="list-style-type: none"> Cover rectangular surfaces by creating repeated rows of square tiles Use a single square to create the array structure of area in rows and columns Use the structure of repeated units to find the area of a rectangle Explain how the grid structure of rows and columns helps to find the area (Reasons about spatial structure) 	7.3 Measuring area 7.3 Measuring area 7.3 Measuring area 28.2 Measuring and comparing area of rectangles

Stage 1B Syllabus Match

Maths Trek 2

Measurement and space			
Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving
Two-dimensional spatial structure B cont.		<ul style="list-style-type: none"> Compare the areas of two or more surfaces that cannot be moved, or superimposed, by measuring in uniform informal units 	28.2 Measuring and comparing area of rectangles
		<ul style="list-style-type: none"> Record comparisons of area using drawings, numerals and words, and by referring to the uniform informal unit used 	28.2 Measuring and comparing area of rectangles
Three-dimensional spatial structure B	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 recognises, describes and represents familiar three-dimensional objects MA1-3DS-01 measures, records, compares and estimates internal volumes (capacities) and volumes using uniform informal units MA1-3DS-02 	3D objects: Describe the features of three-dimensional objects <ul style="list-style-type: none"> Describe three-dimensional objects (prisms) using the terms 'face', 'edge' and 'vertex' Represent three-dimensional objects by making simple models Recognise and name flat surfaces of three-dimensional objects as two-dimensional shapes 	12.3 Classifying 3D objects 16.2 Faces, edges, vertices 17.3 3D objects and their faces
		Volume: Compare containers based on internal volume (capacity) by filling and packing <ul style="list-style-type: none"> Make and use a device for measuring internal volume (capacity) calibrated in uniform informal units Compare, order and record the internal volumes (capacities) of two or more containers by measuring each container in uniform informal units Estimate internal volume (capacity) by referring to the number and type of uniform informal unit used 	24.2 Measuring capacity 24.2 Measuring capacity 24.2 Measuring capacity
		Volume: Compare volumes using uniform informal units <ul style="list-style-type: none"> Estimate the volumes of two or more models and check by counting the number of blocks used in each model Compare models with different appearances, recognising when they have the same volume (Reasons about spatial structure) Record the results of volume comparisons using drawings, numerals and words, referring to the units used Explain that models made of the same number of units may have different volumes depending on the size of the units used (Reasons about spatial relations) 	23.2 Packing and stacking 23.2 Packing and stacking 23.2 Packing and stacking 23.2 Packing and stacking

Stage 1B Syllabus Match

Maths Trek 2

Measurement and space

Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving	
Non-spatial measure B	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 measures, records, compares and estimates the masses of objects using uniform informal units MA1-NSM-01 describes, compares and orders durations of events, and reads half- and quarter-hour time MA1-NSM-02 	Mass: Compare the masses of objects using an equal-arm balance <ul style="list-style-type: none"> Use uniform informal units to measure the mass of an object by counting the number of units needed to obtain a level balance on an equal-arm balance 	15.3 Measuring and comparing mass	16.3 Measuring and comparing mass
		<ul style="list-style-type: none"> Select an appropriate uniform informal unit to measure the mass of an object and justify the choice (Reasons about relations) 	15.3 Measuring and comparing mass	
		<ul style="list-style-type: none"> Explain the relationship between the mass of a unit and the number of units needed (Reasons about relations) 	15.3 Measuring and comparing mass	16.3 Measuring and comparing mass
		<ul style="list-style-type: none"> Compare the masses of two or more objects using the same informal units 	15.3 Measuring and comparing mass	16.3 Measuring and comparing mass
		<ul style="list-style-type: none"> Estimate mass by referring to the number and type of uniform informal unit used and check by measuring 	15.3 Measuring and comparing mass	16.3 Measuring and comparing mass
		<ul style="list-style-type: none"> Recognise that mass is conserved 	15.3 Measuring and comparing mass	
		Time: Describe duration using units of time <ul style="list-style-type: none"> Use a calendar to calculate the number of months, weeks or days until an upcoming event 	3.1 Months of the year 5.3 Calendars	31.2 Reading calendars INV All about birthdays
		<ul style="list-style-type: none"> Estimate and measure the duration of an event using a repeated informal unit 	28.1 Hours, minutes, seconds	
		<ul style="list-style-type: none"> Compare and order the duration of events measured using a repeated informal unit 	28.1 Hours, minutes, seconds	
		<ul style="list-style-type: none"> Use the terms 'hour', 'minute' and 'second' 	28.1 Hours, minutes, seconds	
		<ul style="list-style-type: none"> Compare the duration of standard time units 	28.1 Hours, minutes, seconds	
		<ul style="list-style-type: none"> Make predictions about the time remaining until a particular event starts or finishes (Reasons about relations) 		

Stage 1B Syllabus Match

Maths Trek 2

Measurement and space

Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving
○ Non-spatial measure B cont.		Time: Tell time to the quarter-hour using the language of 'past' and 'to'	
		<ul style="list-style-type: none"> Read analog clocks to the quarter-hour using the terms 'past' and 'to' 	18.3 Time – o'clock, half past 19.3 Time – quarter past, half past
		<ul style="list-style-type: none"> Describe the position of the hands on a clock for quarter past and quarter to and relate this to quarter turns 	19.3 Time – quarter past, half past 22.3 Time – quarter past, quarter to
		<ul style="list-style-type: none"> Identify which hour has just passed when the hour hand is not pointing to a numeral 	18.3 Time – o'clock, half past 19.3 Time – quarter past, half past
		<ul style="list-style-type: none"> Record quarter-past and quarter-to time on analog and digital clocks 	19.3 Time – quarter past, half past 22.3 Time – quarter past, quarter to
		<ul style="list-style-type: none"> Associate the numerals 3, 6 and 9 with 15, 30 and 45 minutes and with the terms 'quarter past', 'half past' and 'quarter to', respectively 	19.3 Time – quarter past, half past 22.3 Time – quarter past, quarter to

Stage 1B Syllabus Match

Maths Trek 2

Statistics and probability

Mathematical concept	Outcomes	Content	Topics, investigations and problem-solving			
Data B	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 gathers and organises data, displays data in lists, tables and picture graphs MA1-DATA-01 reasons about representations of data to describe and interpret the results MA1-DATA-02 	Identify a question of interest and gather relevant data <ul style="list-style-type: none"> Pose suitable questions where the answers form categories, and predict the likely responses 	3.3	Picture graphs		
		<ul style="list-style-type: none"> Collect data on familiar topics 	3.3	Picture graphs	4.3	Collecting data using tally marks
		<ul style="list-style-type: none"> Sort data into relevant categories 	3.3	Picture graphs	4.3	Collecting data using tally marks
		Create displays of data and interpret them <ul style="list-style-type: none"> Organise collected data into lists and tables to display information 	4.3	Collecting data using tally marks		
		<ul style="list-style-type: none"> Represent data in a picture graph using a baseline, equal spacing and same-sized symbols 	3.3	Picture graphs	INV	All about birthdays
		<ul style="list-style-type: none"> Give reasons why some representations of data are misleading (Reasons about relations) 	3.3	Picture graphs		
		<ul style="list-style-type: none"> Interpret information presented in tables and picture graphs (Reasons about relations) 	3.3 4.3	Picture graphs Collecting data using tally marks	31.1 INV	Interpreting graphs All about birthdays
		<ul style="list-style-type: none"> Record answers to questions using the information in tables and picture graphs 	3.3 4.3	Picture graphs Collecting data using tally marks	31.1 INV	Interpreting graphs All about birthdays
		Chance B	A student: <ul style="list-style-type: none"> develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly MAO-WM-01 recognises and describes the element of chance in everyday events MA1-CHAN-01 	Identify and describe activities that involve chance <ul style="list-style-type: none"> Describe possible outcomes in everyday activities and events as being <i>likely</i> or <i>unlikely</i> to happen 	24.1	Chance – How likely?
				<ul style="list-style-type: none"> Compare familiar activities and events and describe them as being <i>more</i> or <i>less</i> likely to happen (Reasoning about relations) 	24.1	Chance – How likely?
<ul style="list-style-type: none"> Describe familiar events as being <i>possible</i> 	28.3			Certain, possible, impossible		