

Maths Circles Curriculum Overview

These tables provide an overview of the strands of mathematical contexts that weave through the maths circles curriculum from Blocks 1 to 12. Please note that we are constantly making improvements to our curriculum based on the experiences of our schools, delivery partners and students.

This map is the current working model for students who started Block 1 in or after September 2023. Please consult the Hub to obtain the correct session materials for circles that have started before September 2023.

Block 1								
Context strand	Introductory		Games	Investigation	Parity	Strandless	Combinatorics	Strandless
Sequence	Session 1	Sessions 2 and 3	Session 4	Session 5	Session 6	Session 7	Sessions 8 and 9	Session 10
Title	Systematic searching	One, many or none?	Game trees	Rulers	Odd and even Sums	Splitting in half	Systematic listing	Auction 1

Block 2							
Context strand	Parity	Networks	Investigation	Digits, remainders and divisibility	Strandless	Combinatorics	Strandless
Sequence	Sessions 1 and 2	Sessions 3 and 4	Session 5	Session 6	Session 7	Sessions 8 and 9	Session 10
Title	Parity of sums, differences and products	Networks and Hamiltonian paths	Pyramids and Ziggurats	Cryptarithmic	Extra cryptarithmic	Counting leaves on trees	Olympiad 1

Block 3							
Context strand	Parity	Networks	Investigation	Digits, remainders and divisibility	Strandless	Combinatorics	Strandless
Sequence	Sessions 1 and 2	Sessions 3 and 4	Session 5	Session 6	Session 7	Sessions 8 and 9	Session 10
Title	Invariant and alternating parity	Networks and space stations	Sums in pairs	Last digits and squares	Fair game	Permutations	Auction 2

	Block 4							
Context strand	Algebra		Combinatorics	Investigation	Games	Strandless	Digits, remainders and divisibility	Strandless
Sequence	Session 1	Session 2	Session 3 and 4	Session 5	Session 6	Session 7	Sessions 8 and 9	Session 10
Title	Sums of odd numbers	Differences of squares	Colouring chessboards	Attacking rooks	Parity games	TBD	Factors and primes	Olympiad 2

Block 5							
Context strand	Networks	Geometry	Investigation	Algebra	Strandless	Digits, remainders and divisibility	Strandless
Sequence	Sessions 1 and 2	Sessions 3 and 4	Session 5	Sessions 6 and 7	Session 7	Sessions 8 and 9	Session 10
Title	Directed networks	Geometry transformations	Diagonals in rectangles	Algebra expressions	TBD	HCF/LCM	Finale

Block 6							
Context strand	Algebra	Geometry	Investigation	Logic	Strandless	Networks	Strandless
Sequence	Sessions 1 and 2	Sessions 3 and 4	Session 5	Session 6	Session 7	Sessions 8 and 9	Session 10
Title	Linear equations	Symmetry	Tetrominoes	Venn diagrams	TBD	Bipartite networks	Same structure problems

Block 7							
Context strand	Digits, remainders and divisibility	Algebra	Investigation	Logic	Strandless	Geometry	Strandless
Sequence	Sessions 1 and 2	Sessions 3 and 4	Session 5	Session 6	Session 7	Sessions 8 and 9	Session 10
Title	Martian arithmetic	Geometry and algebra	Induction problems	Two way tables	TBD	Combining transformations	BIG Sums

Block 8							
Context strand	Digits, remainders and divisibility	Networks	Investigation	Logic	Strandless	Combinatorics	Strandless
Sequence	Sessions 1 and 2	Sessions 3 and 4	Session 5	Session 6	Session 7	Sessions 8 and 9	Session 10
Title	Divisibility rules	Colouring networks and maps	Magic squares	Sets and logic	TBD	Counting in tables	TBD

Block 9							
Context strand	Digits, remainders and divisibility	Games	Investigation	Logic	Strandless	Combinatorics	Strandless
Sequence	Sessions 1 and 2	Sessions 3 and 4	Session 5	Session 6	Session 7	Sessions 8 and 9	Session 10
Title	Squares in columns	The end is the answer	TDB	Sizes of sets	TBD	Choosing two	TBD

Block 10							
Context strand	Games	Geometry	Investigation	Networks	Strandless	Logic	Strandless
Sequence	Sessions 1 and 2	Sessions 3 and 4	Session 5	Session 6	Session 7	Sessions 8 and 9	Session 10
Title	Winning with symmetry	Circles and squares	TBD	Tournaments	TBD	If... then... but... so...	TBD

Block 11							
Context strand	Digits, remainders and divisibility	Geometry	Investigation	Games	Strandless	Logic	Strandless
Sequence	Sessions 1 and 2	Sessions 3 and 4	Session 5	Session 6	Session 7	Sessions 8 and 9	Session 10
Title	Binary arithmetic	How fast? How far? How long?	Continued fractions	Games with remainders	TBD	Formal proofs	TBD

Block 12							
Context strand	Combinatorics	Digits, remainders and divisibility	Investigation	Geometry	Strandless	Networks	Strandless
Sequence	Sessions 1 and 2	Sessions 3 and 4	Session 5	Session 6	Session 7	Sessions 8 and 9	Session 10
Title	Choosing more than two	Arithmetic with remainders	Weighing problems	Operations	TBD	Euler's amazing formula	TBD