Heuristics in Focus (Primary 1)

- 23 June to 27 June 2025

The Seriously Addictive Mathematics Heuristics in Focus course is designed to help children develop strong problem-solving skills and approach word problems with confidence. Based on Singapore Maths, the course introduces step-by-step strategies that nurture critical thinking and enhance children's ability to solve problems effectively.

Time	Monday	Tuesday	Wednesday	Thursday	Friday
2.00pm to 4.00pm	**Act It Out** is a problem-solving heuristic that encourages children to physically or visually represent the elements of a word problem. By using simple objects, drawings, or role-play, children can better understand the relationships in the word problem and identify a logical path to the solution. This method is especially helpful for younger children or word problems involving sequences, movement, or interactions.	**Draw a Diagram/Model** is a problem-solving heuristic that involves using visual tools such as bar models or sketches to create a visual representation of the elements in a word problem. This helps children break down complex information and identify relationships between quantities. This method is especially helpful for word problems involving part-whole relationships, comparisons, or proportional reasoning.	**Look for Pattern(s)** is a problem-solving heuristic that helps children identify and use repeated elements or predictable sequences in a word problem. By observing similarities, trends, or cycles in numbers, shapes, or actions, children can make generalisations and anticipate what comes next. This method is especially helpful for word problems involving sequences, growth patterns, or repeated procedures.	**Look for Pattern(s)** **Draw a Diagram/Model**	**Act It Out** **Look for Pattern(s)** **Draw a Diagram/Model**
	Outcome: Solve word problems involving permutations, number bonds, addition, and spatial visualisation.	Outcome: Solve word problems involving permutations, ordinal numbers and positions, and multiplication	Outcome: Solve word problems involving shape and number patterns.	Outcome: Solve word problems involving number patterns, addition and subtraction.	Outcome: Solve word problems involving number patterns, ordinal numbers and positions, permutations, addition and subtraction.

Heuristics in Focus (Primary 2)

- 23 June to 27 June 2025

The Seriously Addictive Mathematics Heuristics in Focus course is designed to help children develop strong problem-solving skills and approach word problems with confidence. Based on Singapore Maths, the course introduces step-by-step strategies that nurture critical thinking and enhance children's ability to solve problems effectively.

Time	Monday	Tuesday	Wednesday	Thursday	Friday
2.00pm to 4.00pm	**Look for Pattern(s)** is a problem-solving heuristic that helps children identify and use repeated elements or predictable sequences in a word problem. By observing similarities, trends, or cycles in numbers, shapes, or actions, children can make generalisations and anticipate what comes next. This method is especially helpful for word problems involving sequences, growth patterns, or repeated procedures.	**Draw a Diagram/Model** is a problem-solving heuristic that involves using visual tools such as bar models or sketches to create a visual representation of the elements in a word problem. This helps children break down complex information and identify relationships between quantities. This method is especially helpful for word problems involving part-whole relationships, comparisons, or proportional reasoning.	**Make a Systematic List** is a problem-solving heuristic that guides children to list and organise possible outcomes or combinations in an orderly way. By listing options methodically, children can keep track of their thinking, avoid repetition, and ensure that all possible options are considered. This method is especially helpful for word problems involving permutations, combinations, or exhaustive possibilities.	**Guess and Check** is a problem-solving heuristic that involves making a reasonable guess, testing it against the conditions of the word problem, and adjusting the guess if needed. By thinking critically about each trial, children refine their approach towards the correct solution. This method is especially helpful for word problems involving unknown values, trial-and-error reasoning, or limited possibilities.	**Look for Pattern(s) Draw a Diagram/Model Make a Systematic List Guess and Check**
	Outcome: Solve word problems involving shape and number patterns.	Outcome: Solve word problems involving addition, subtraction, multiplication and division	Outcome: Solve word problems involving addition, subtraction, multiplication and division	Outcome: Solve word problems involving money, addition, subtraction and multiplication.	Outcome: Solve word problems involving shape and number patterns, money, addition, subtraction and multiplication.

Heuristics in Focus (Primary 3)

- 23 June to 27 June 2025

The Seriously Addictive Mathematics Heuristics in Focus course is designed to help children develop strong problem-solving skills and approach word problems with confidence. Based on Singapore Maths, the course introduces step-by-step strategies that nurture critical thinking and enhance children's ability to solve problems effectively.

Time	Monday	Tuesday	Wednesday	Thursday	Friday
2.00pm to 4.00pm	**Guess and Check** is a problem-solving heuristic that involves making a reasonable guess, testing it against the conditions of the word problem, and adjusting the guess if needed. By thinking critically about each trial, children refine their approach towards the correct solution. This method is especially helpful for word problems involving unknown values, trial-and-error reasoning, or limited possibilities.	**Work Backwards** is a problem-solving heuristic that involves starting with the final result given in the word problem and reversing the steps to find the unknown starting value. By thinking in reverse and undoing each operation, students can uncover missing information or the original state. This method is especially helpful for word problems involving final outcomes, reverse operations, or sequential changes.	**Simplify the Problem** is a problem-solving heuristic that helps children reduce a word problem to a simpler version that is easier to understand. By working through a smaller or more familiar version, children can uncover the structure of the task and apply the same reasoning to solve the original task. This method is especially helpful for word problems involving large numbers or multiple variables.	**Draw a Diagram/Model** is a problem-solving heuristic that involves using visual tools such as bar models or sketches to create a visual representation of the elements in a word problem. This helps children break down complex information and identify relationships between quantities. This method is especially helpful for word problems involving part-whole relationships, comparisons, or proportional reasoning.	**Guess and Check** **Work Backwards** **Simplify the Problem** **Draw a Diagram/Model**
	Outcome: Solve word problems involving money, addition, subtraction, multiplication and division.	Outcome: Solve word problems involving addition, subtraction, multiplication and division.	Outcome: Solve word problems involving money, addition, subtraction, multiplication and division.	Outcome: Solve word problems involving length, addition, subtraction, multiplication and division.	Outcome: Solve word problems involving graphs, money, patterns, addition, subtraction, multiplication and division.

Heuristics in Focus (Primary 4)

- 23 June to 27 June 2025

The Seriously Addictive Mathematics Heuristics in Focus course is designed to help children develop strong problem-solving skills and approach word problems with confidence. Based on Singapore Maths, the course introduces step-by-step strategies that nurture critical thinking and enhance children's ability to solve problems effectively.

Time	Monday	Tuesday	Wednesday	Thursday	Friday
2.00pm to 4.00pm	**Look for Pattern(s)** is a problem-solving heuristic that helps children identify and use repeated elements or predictable sequences in a word problem. By observing similarities, trends, or cycles in numbers, shapes, or actions, children can make generalisations and anticipate what comes next. This method is especially helpful for word problems involving sequences, growth patterns, or repeated procedures.	**Draw a Table** is a problem-solving heuristic that helps children organise information into rows and columns to make relationships in a word problem easier to identify. By displaying values and changes step by step, children can better track patterns, compare quantities, and make logical deductions. This method is especially helpful for word problems involving repeated steps, logical sequences, or multiple sets of data.	**Make Suppositions** is a problem-solving heuristic in which children begin by assuming a reasonable value or condition to help move forward with the solution. By testing the assumption, children can adjust their reasoning accordingly and work towards an accurate solution. This method is especially helpful for word problems involving hidden values, indirect relationships, or conditions that require estimation.	**Simplify the Problem** is a problem-solving heuristic that helps children reduce a word problem to a simpler version that is easier to understand. By working through a smaller or more familiar version, children can uncover the structure of the task and apply the same reasoning to solve the original task. This method is especially helpful for word problems involving large numbers or multiple variables.	**Look for Pattern(s)** **Draw a Table** **Make Suppositions** **Simplify the Problem**
	Outcome: Solve word problems involving shape and number patterns.	Outcome: Solve word problems involving factors and multiples	Outcome: Solve word problems involving addition, subtraction, multiplication and division.	Outcome: Solve word problems involving area and perimeter.	Outcome: Solve word problems involving patterns, factors and multiples, addition, subtraction, multiplication and division.