

3 April 2024

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Dear Parents

TEACHING PACKAGE ON USE OF MATHEMATICS HEURISTICS

- 1. Mathematical problem solving is central to the learning of mathematics. Students have to use mathematical concepts, skills, processes and metacognition in problem solving. Heuristics are general methods or strategies that are used to obtain a solution to a given problem, and is a process that students make use of.
- In school, students are taught to use these heuristics to solve problems. As parents, you play an integral part in your daughter's education and we would like to share with you how some of these heuristics are taught.
- 3. The Mathematics department has developed a teaching package for parents on the use of heuristics. Parents can access the package on a computer, phone or tablet. Please find below the internet links to access the Primary 3 and 4 packages. We have attached the link to the Primary 3 package to enable you and your child to revisit concepts taught in Primary 3.

Primary 3 package:https://go.gov.sg/oln-p3mathPrimary 4 package:https://go.gov.sg/oln-p4math

- 4. Please note that the above sites are best viewed with the two most recent versions of the following browsers:
 - Chrome
 - Firefox
 - Internet Explorer
 - Microsoft Edge
 - Safari

5. Further details on the package are as follows:

Level	Skills	Duration (minutes)
Primary 3	Model Drawing (Part-whole) – Sample 1	2:48
	Model Drawing (Part-whole) – Sample 2	3:58
	Model Drawing (Comparison) – Sample 1	3:57
	Model Drawing (Comparison) – Sample 2	3:52
	Guess & Check (Involving Total) – Sample 1	6:41
	Guess & Check (Involving Difference)	6:24
	Age Problem (Involving Age Difference) – Sample 1	2:25
	Age Problem (Involving Age Difference) – Sample 2	2:31
	Age Problem (Involving Age Total) – Sample 1	2:12
	Age Problem (Involving Age Total) – Sample 2	1:44
Primary 4	Guess & Check (Involving As Many As) – Sample 1	8:54
	Guess & Check (Involving As Many As) – Sample 2	7:28
	Guess & Check (Involving Common Multiples)	5:24
	Internal Transfer (Unchanged Total) – Sample 1	2:04
	Internal Transfer (Unchanged Total) – Sample 2	2:26
	Internal Transfer (Unchanged Total) – Sample 3	3:17
	Internal Transfer (Unchanged Total) – Sample 4	3:02
	External Transfer 1 – Sample 1	3:31
	External Transfer 1 – Sample 2	3:21
	External Transfer 2 – Sample 1	3:39
	External Transfer 2 – Sample 2	3:37
	Age Problem (Involving Age Difference) – Sample 1	3:05
	Age Problem (Involving Age Difference) – Sample 2	3:09
	Age Problem (Involving Age Total) – Sample 1	3:26
	Age Problem (Involving Age Total) – Sample 2	3:26
	Internal Transfer (from larger quantity to smaller quantity) – Sample 1	2:34
	Internal Transfer (from larger quantity to smaller quantity) – Sample 2	2:40
	Internal Transfer (from smaller quantity to larger quantity) – Sample 1	2:40
	Internal Transfer (from smaller quantity to larger quantity) – Sample 2	2:50

 We hope that you will find the packages useful. Please do contact Mrs Tan Cheh Hia, Senior Teacher (Mathematics), at <u>tan cheh hia@moe.edu.sg</u> if you need further clarification. Alternatively, you could leave her a message at 6385 2455.

Thank you.

Yours faithfully

Ms Christina Teo Principal