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| MATHEMATICS |  |  |
| By the end of **Year 3** | By the end of **Year 5** | By the end of **Year 7** | By the end of **Year 9** |
| Students are able to:• identify mathematics in everyday situations• pose basic mathematical questions and identify simple strategies to investigate solutions• plan activities and investigations to explore mathematical concepts, questions, issues and problems in familiar situations• use everyday and mathematical language, mental computations, representations and technology to generate solutions and check for reasonableness of the solution• make statements and decisions based on interpretations of mathematical concepts in familiar everyday situations• evaluate their own thinking and reasoning, giving consideration to how mathematical ideas have been applied• communicate thinking and reasoning, using everyday and mathematical language, concrete materials, visual representations, and technologies• reflect on and identify the contribution of mathematics to everyday situations• reflect on learning to identify new understandings. | Students are able to:• identify and describe the mathematical concepts, strategies and procedures required to generate solutions• pose questions and make predictions based on experience in similar situations• plan activities and investigations to explore concepts, pathways and strategies and solve mathematical questions, issues and problems• identify and use mental and written computations, estimations, representations and technologies to generate solutions and check for reasonableness of solutions• make statements, predictions, inferences and decisions based on mathematical interpretations• evaluate their own thinking and reasoning, in relation to the application of mathematical ideas, strategies and procedures• communicate and justify thinking and reasoning, using everyday and mathematical language, concrete materials, visual representations and technologies• reflect on mathematics and identify the contribution of mathematics to personal activities• reflect on learning to identify new understandings and future applications. | Students are able to:• analyse situations to identify mathematical concepts and the relationships between key features and conditions necessary to generate solutions• pose questions that draw on familiar examples to clarify thinking and support predictions• plan activities and investigations to explore concepts through selected pathways, and plan strategies to solve mathematical questions, problems and issues• select and use suitable mental and written computations, estimations, representations and technologies to generate solutions and to check for reasonableness• develop arguments to justify predictions, inferences, decisions and generalisations from solutions• evaluate thinking and reasoning, to determine whether mathematical ideas, strategies and procedures have been applied effectively• communicate thinking and justify reasoning and generalisations, using mathematical language, representations and technologies• reflect on and identify the contribution of mathematics to their life• reflect on learning, apply new understandings and identify future applications. | Students are able to:• analyse situations to identify the key mathematical features and conditions, strategies and procedures that may be relevant in the generation of a solution• pose and refine questions to confirm or alter thinking and develop hypotheses and predictions• plan and conduct activities and investigations, using valid strategies and procedures to solve problems• select and use mental and written computations, estimations, representations and technologies to generate solutions and to check for reasonableness of the solution• use mathematical interpretations and conclusions to generalise reasoning and make inferences• evaluate their own thinking and reasoning, considering their application of mathematical ideas, the efficiency of their procedures and opportunities to transfer results into new learning• communicate thinking, and justify and evaluate reasoning and generalisations, using mathematical language, representations and technologies• reflect and identify the contribution of mathematics to their own and other people’s lives• reflect on learning, apply new understandings and justify future applications. |