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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. |