

| 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   |
| <p>Students use their intuitive understandings of mathematical concepts as they identify and investigate mathematics inherent in real-life situations. They construct new knowledge by engaging in purposeful mathematical activities and investigations. They develop an understanding that mathematics is a way of thinking, reasoning and working. They see the place of mathematics in people's work and community lives.</p> <p>Students use the essential processes of <b>Ways of working</b> to develop and demonstrate their <b>Knowledge and understanding</b>. They develop their ability to work mathematically by posing mathematical questions and by individually and collaboratively planning and conducting mathematical investigations. They reflect on their learning and are able to transfer their thinking and reasoning to familiar everyday situations.</p> <p>Students use tools and technologies, including information and communication technologies (ICTs). They explore the use of ICTs to inquire, create and communicate within mathematical contexts.</p> <p>Students demonstrate evidence of their learning over time in relation to the following assessable elements:</p> <ul style="list-style-type: none"> <li>• knowledge and understanding</li> <li>• thinking and reasoning</li> <li>• communicating</li> <li>• reflecting.</li> </ul> | <p>Students use their existing understandings of mathematical concepts and processes to identify mathematics in a range of real-life situations. They understand that mathematics is a way of thinking, reasoning and working, and they construct new knowledge by engaging in a range of purposeful mathematical activities and investigations. They are aware that people of all ages and backgrounds engage in work related to mathematics.</p> <p>Students use the essential processes of <b>Ways of working</b> to develop and demonstrate their <b>Knowledge and understanding</b>. They individually and collaboratively plan and conduct mathematical activities and investigations, and develop solutions to questions, issues and problems. They reflect on their learning and are able to transfer their thinking and reasoning to a range of everyday situations.</p> <p>Students select and use tools and technologies, including information and communication technologies (ICTs), in purposeful ways. They use ICTs as an integral component of their learning, to inquire, create and communicate within mathematical contexts.</p> <p>Students demonstrate evidence of their learning over time in relation to the following assessable elements:</p> <ul style="list-style-type: none"> <li>• knowledge and understanding</li> <li>• thinking and reasoning</li> <li>• communicating</li> <li>• reflecting.</li> </ul> | <p>Students develop and use their existing understandings of mathematical concepts and processes to solve real-life and abstract problems and issues. They understand that mathematics is a way of thinking, reasoning and working that can be applied to solve problems in a range of real-life and abstract investigations. They recognise the different applications of mathematics in work situations and a range of occupations.</p> <p>Students use the essential processes of <b>Ways of working</b> to develop and demonstrate their <b>Knowledge and understanding</b>. They individually and collaboratively plan and conduct mathematical investigations, develop solutions to questions, problems and issues, and challenge the thinking and reasoning of others. They reflect on their learning and transfer their thinking and reasoning to a range of real-life situations.</p> <p>Students select and use tools and technologies, including information and communication technologies (ICTs), in purposeful ways. They make use of the potential that ICTs provide to inquire, create and communicate within mathematical contexts.</p> <p>Students demonstrate evidence of their learning over time in relation to the following assessable elements:</p> <ul style="list-style-type: none"> <li>• knowledge and understanding</li> <li>• thinking and reasoning</li> <li>• communicating</li> <li>• reflecting.</li> </ul> | <p>Students build on their existing understandings of mathematical concepts and can relate mathematics to real-life and purely mathematical situations. Through engagement in familiar and unfamiliar, and simple and complex, mathematical investigations they understand that mathematics is a way of thinking, reasoning and working that is used to develop solutions to questions, problems and issues posed by themselves and others. They recognise the application of mathematics in a large number of fields that provide career opportunities.</p> <p>Students use the essential processes of <b>Ways of working</b> to develop and demonstrate their <b>Knowledge and understanding</b>. They develop their ability to work mathematically and build on their prior understanding by individually and collaboratively planning and conducting mathematical investigations; by posing and solving mathematical questions, problems and issues; and by challenging the reasoning and perspectives of others. They reflect on their learning and transfer their thinking and reasoning to a range of real-life and purely mathematical situations.</p> <p>Students select and use tools and technologies, including information and communication technologies (ICTs). They routinely demonstrate an autonomous and purposeful use of ICTs to inquire, create and communicate within mathematical contexts.</p> <p>Students demonstrate evidence of their learning over time in relation to the following assessable elements:</p> <ul style="list-style-type: none"> <li>• knowledge and understanding</li> <li>• thinking and reasoning</li> <li>• communicating</li> <li>• reflecting.</li> </ul> |