Picking the Investigations you want to conduct in your class is easy with the *iMaths 4 Investigation Overview* document. Simply peruse the table below for a ‘snapshot’ of every Investigation in the year.

<table>
<thead>
<tr>
<th>Investigation</th>
<th>About the Investigation</th>
<th>Duration</th>
<th>Group size</th>
<th>Students will need</th>
<th>Ideal for …</th>
<th>Related learning area</th>
<th>ACARA Sub-strands</th>
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</table>
| Investigation 1 | Ripper rides                                                                                                                                                                                                          | 3 weeks  | 2 to 3 students | • BLMs 1.1–1.3 – Blank board shapes  
• internet access  
• coloured pencils  
• paints  
• ruler  
• surf, skate or snowboard magazines |            | The Arts                                             | • Fractions and decimals  
• Patterns and algebra  
• Using units of measurement  
• Shape  
• Location and transformation  
• Geometric reasoning |
| Investigation 2 | Keep the keys                                                                                                                                                                                                          | 3 weeks  | 2 to 4 students | • BLM 2.1 – Keys  
• BLM 2.2 – Key tags  
• internet access  
• hole punch  
• string, cotton and wire  
• cardboard and paper  
• craft materials  
• rice, grains, beads, seeds |            |                                                                      | • Number and place value  
• Patterns and algebra |
| Investigation 3 | Plenty of pikelets                                                                                                                                                                                                     | 4 weeks  | 3 to 4 students | • Tear-out 1 – Pikelet Day  
• internet access  
• ingredients required to make pikelets: eggs, sugar, milk, self-raising flour, salt, butter and toppings such as honey or jam  
• utensils required to make pikelets: frying pan, scales, measuring jug or cup, bowl, spoons, spatula, whisk and sifter | Reinforcing social skills used when sharing a meal. Also an opportunity to invite family members to visit the school. | Financial Literacy                                    | • Number and place value  
• Money and financial mathematics  
• Using units of measurement |
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| Investigation 4 | The time of my life | 4 weeks  | individuals | • Tear-out 2 – The time of my life  
• internet access  
• calculator  
• stopwatch  
• calendar | At the start of the year to help students get to know one another. | HPE | • Number and place value |
| Investigation 5 | Lengthy leaps | 3 weeks  | 2 to 3 students | • measuring tape  
• sandpit with suitable run-up  
• internet access | School sports days or local competitions. Great for getting outside. | Science, HPE | • Fractions and decimals  
• Using units of measurement  
• Data representation and interpretation |
| Investigation 6 | iFlicks movie marathon | 2 weeks  | individuals or pairs | • Data page 1 – iFlicks guide  
• Tear-out 3 – My day at the movies  
• internet access | Linking to a school excursion to the movies or a school movie event. | Science | • Using units of measurement  
• Data representation and interpretation |
| Investigation 7 | Aussie adventure | 4 weeks  | 2 to 3 students | • BLM 7.1 – Aussie adventure table  
• BLM 7.2 – Aussie adventure map  
• internet access  
• map of Australia | Learning about the geography and history of Australia. | History, Geography | • Number and place value  
• Location and transformation  
• Data representation and interpretation |
| Investigation 8 | Super sports stadium | 3 weeks  | 2 to 4 students | • internet access  
• A4 paper  
• craft materials  
• tape measure | Any sports game in and around the local area, or on an international stage. | Technologies | • Number and place value  
• Patterns and algebra |
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| Investigation 9 | This Investigation lets students explore the relationship between net size and 3D objects, developing the early concept of volume. Students will use trial and error and deduction to create net designs that, when completed and constructed, will hold the maximum number of marbles.                                                                                      | 3 weeks  | 2 to 3 students | • internet access  
• coloured cardboard  
• A4 paper  
• craft materials (glue, scissors, tape)  
• marbles                                                                 | Technologies |                             | Using units of measurement, Shape                                                                 |
| Investigation 10 | The natural world is fascinating. This Investigation demonstrates that maths exists outside the classroom in many plants and other natural phenomena, such as shells and snowflakes. Students explore the Topics of Number and Algebra, Measurement and Geometry as they investigate and display the pattern they discover in the natural world around them. This Investigation is closely linked to science. | 4 weeks  | individuals or pairs | • BLM 10.1 – Squared grid paper  
• internet access  
• cardboard  
• digital camera  
• string and cotton  
• collection of leaves and flowers, images of plants  
• library  
• craft materials                                                                 | Getting outside | Science, The Arts | Number and place value, Patterns and algebra, Using units of measurement, Shape, Location and transformation |
| Investigation 11 | Food provides real-life, everyday opportunities to experience fractions and consolidate mathematical concepts. This Investigation gives students the opportunity to plan a fraction party. Students should reach a deeper understanding of the concept of fractions by looking at fractions as part of a whole and part of a set.                                                                 | 4 weeks  | 2 to 3 students | • BLM 11.1 – Small food items  
• BLM 11.2 – Large food items  
• internet access  
• grocery and department store catalogues  
• craft materials                                                                 | HPE |                             | Number and place value, Fractions and decimals |
| Investigation 12 | This Investigation combines statistics and probability with the spatial concept of 3D dice to create non-traditional, fair dice with unique, interesting shapes. Students are required to design dice that have a fair chance of landing on any face and also have a fair representation of letters, colours or symbols on the faces.                                                                 | 3 weeks  | individuals or pairs | • internet access  
• cardboard  
• craft materials                                                                 | English, Science, Technologies |                             | Using units of measurement, Shape, Chance, Data representation and interpretation |