

Picking the Investigations you want to conduct in your class is easy with the *iMaths 3 Investigation Overview* document. Simply peruse the table below for a 'snapshot' of every Investigation in the year.

Investigation	About the Investigation	Duration	Group size	Students will need	Ideal for ...	Related learning area	ACARA Sub-strands
Investigation 1 How do I measure up?	Children enjoy collecting data and information about themselves. This Investigation requires students to collect and compare their own body measurements in order to find relationships between various body parts, such as, 'my arm span equals my height.' Students will write comparative statements about their own body measurements. This activity reinforces literacy skills and integrates well with a Getting to Know You unit.	3 weeks	pairs	<ul style="list-style-type: none"> internet access Tear-out 1 – <i>My data</i> coloured pencils calculator digital camera tape measure, ruler craft materials – string and rolls of paper, butcher's paper, glue, scissors, sticky tape 	Works well with a 'getting to know you and your classmates' unit towards the start of a school year.	English, Science, HPE	<ul style="list-style-type: none"> Using units of measure Chance Data representation and interpretation
Investigation 2 It's on the cards	In this Investigation, students will invent their own clever card game. Card games offer an entertaining way to practise the social skills of following rules, taking turns, and healthy competitive interaction. This Investigation gives students experience in giving and receiving positive, constructive criticism. In order to create their own card game, students must make cards, matching analogue and digital times to daily activities.	2 weeks	small groups	<ul style="list-style-type: none"> internet access BLM 2.1 – <i>Activity time sheet</i> BLM 2.2 – <i>Blank card shapes</i> BLM 2.3 – <i>Analogue clocks</i> BLM 2.4 – <i>Card box net</i> card card games clocks scissors 	Any local sporting games in which people must follow rules, have healthy competition etc.	Technologies	<ul style="list-style-type: none"> Using units of measurement Shape
Investigation 3 Kilogram quest	This Investigation asks students to find 12 everyday objects around the classroom that have a combined total mass of 1000 g (1 kg). This requires thorough investigating and calls on problem solving skills in order to get as close as possible to the total mass. Students will enjoy weighing objects, and the challenge of seeing who can get closest to the total.	3 weeks	2 or 3 students	<ul style="list-style-type: none"> internet access Tear-out 2 – <i>Kilogram quest table</i> calculator 12 counters per student gram and kilogram masses kitchen scales or other devices to measure mass 	Learning about requirements for meeting a goal as it relates to construction parts needing to be a certain mass, length etc.		<ul style="list-style-type: none"> Number and place value Using units of measurement
Investigation 4 Slide show	This Investigation allows students to develop a thorough understanding of fractions. By making a slide show and investigating a single fraction in depth, students should reach a deeper understanding of the concept of a fraction as a part of a whole and a part of a set or group.	3 weeks	2 to 3 students	<ul style="list-style-type: none"> BLM 4.1 – <i>Slide show storyboard</i> internet access digital camera program to create a slide show 	Learning how to use appropriate computer software to create a successful slideshow.	The Arts, Technologies	<ul style="list-style-type: none"> Fractions and decimals

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Investigation 5 Smarty pants	Year 3 students enjoy the challenge of competing against older students or adults, particularly if they believe they have the ability to prove their skills are superior. This Investigation requires students to set maths tests for people in various age groups, then mark and record the results. The maths tests will focus on multiplication, providing very good motivation for students to master this concept.	4 weeks	pairs	<ul style="list-style-type: none"> • BLM 5.1 – <i>Group scores</i> • internet access • paper • coloured pencils • scissors 	Learning about competition relating to local sporting games etc.	Science	<ul style="list-style-type: none"> • Number and place value • Chance • Data representation and interpretation
Investigation 6 Trash or treasure	In this Investigation, students will set up a class market stall, giving them the opportunity to practise money concepts, both as buyers and sellers. Many Year 3 students will have had some experience buying things, but very few will have had much selling experience. Setting reasonable prices, establishing attractive displays and giving the correct change are all sales skills that students will practise during the course of this Investigation.	3 weeks	2 to 3 students	<ul style="list-style-type: none"> • BLM 6.1 – <i>Buying record sheet</i> • internet access • magazines, catalogues, shopping brochures • play money (Australian notes and coins) • money tray • products to sell 	Local markets that involve the buying/ selling dynamic or a school car boot sale.	Technologies, Financial Literacy	<ul style="list-style-type: none"> • Number and place value • Money and financial mathematics
Investigation 7 What's in 1000 words?	This is a number-oriented Investigation, which gives students the opportunity to explore the use of numbers in our lives. They will also be able to see what 10, 100 and 1000 look like, in terms of words on a page. Estimation is an important mathematical skill, which students will practise in a realistic way as they work through the Investigation.	4 weeks	1 or 2 students	<ul style="list-style-type: none"> • Tear-out 3 – <i>Word grid</i> • internet access • newspapers and magazines • highlighters 			<ul style="list-style-type: none"> • Number and place value • Using units of measurement
Investigation 8 Picture perfect patterns	In this Investigation, students will investigate numbers and patterns in art. They will enjoy using their imagination and creativity to explore shape and design. Students must investigate a way to fill in an art piece with patterns of symbols in order to create their own symmetrical art.	2 weeks	individuals	<ul style="list-style-type: none"> • internet access • BLMs 8.1–8.4 – <i>Symmetry art</i> • coloured paper • coloured pencils • crayons • paint 	Links well with a school or community art event or perhaps a planned display of the art in the school foyer.	The Arts	<ul style="list-style-type: none"> • Number and place value • Patterns and algebra • Location and transformation
Investigation 9 Sprouting surprises	Planting and watching seeds grow is an enjoyable and fascinating activity for many Year 3 students. This Investigation adds a scientific perspective, by asking students to predict the effect that changing the growing conditions might have on whether or not plants flourish. Other skills taught and practised in the course of this Investigation include measurement, organising and recording data.	4 weeks	2 to 3 students	<ul style="list-style-type: none"> • Tear-out 4 – <i>Experiment plan</i> • BLM 9.1 – <i>Plant diary</i> • internet access • metre ruler • small containers • seeds • potting mix • mask and gloves • watering containers and calibrated measuring jugs 	Learning about seasons and where our food comes from.	Science	<ul style="list-style-type: none"> • Using units of measurement • Chance • Data representation and interpretation

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Investigation 10 Top team	Exercise and daily fitness are an important part of school life. In this Investigation, students will create enjoyable team activities that improve athletic skills. Measuring, timing and scoring these activities allow students to make real use of the maths concepts they have learned. Writing the instructions for the activities provides a meaningful link between literacy and numeracy.	3 weeks	5 equal groups	<ul style="list-style-type: none"> • Tear-outs 5–6 – <i>Top team rules</i> • BLM 10.1 – <i>Top team scoring sheet</i> • internet access • trundle wheel • digital camera • stop watch • tape measure • equipment – balls, skipping ropes, hoops 	Learning about maintaining a healthy lifestyle. Also ties in with sporting events such as a school athletics carnival.	English	<ul style="list-style-type: none"> • Number and place value • Using units of measurement
Investigation 11 Big spender	We all dream about having large sums of money to spend on our loved ones and ourselves. This Investigation gives students the chance to spend \$1000 on gifts for their family and friends. By using backtracking and closely monitoring their funds, students will come up with a list of carefully selected presents within their budget of \$1000.	4 weeks	individuals	<ul style="list-style-type: none"> • internet access • Tear-out 7 – <i>Big spender table</i> • magazines, catalogues, shopping brochures • craft materials – coloured pencils, scissors, tape and glue 	The end of the year in the lead up to Christmas.	Financial Literacy	<ul style="list-style-type: none"> • Number and place value • Money and financial mathematics
Investigation 12 Follow Freddy	This Investigation asks students to write their own set of clues in order to work their way through a grid map. With a wild rainforest setting, students will be eager to design a challenge for Freddy the Tiger. Sequencing, spatial understanding and working on a grid are the key concepts developed through this Investigation.	3 weeks	individuals or pairs	<ul style="list-style-type: none"> • Tear-out 8 – <i>Freddy's adventure</i> • Tear-out 9 – <i>Freddy's new adventure</i> • BLM 12.1 – <i>Symmetrical stars</i> • internet access • craft materials • markers and counters 	Learning about mapping.	History, Geography	<ul style="list-style-type: none"> • Location and transformation • Geometric reasoning