

TE PAEPAE O AOTEA MATHS BADGE: TECHNOLOGY

SECTION A		SECTION B	
Select and complete three out of the five in Section A		Select and complete three out of the six in Section B	
1	Estimate the differences that your family vehicle/s travel in a typical week. Then measure the distance accurately. How accurate was your estimation and why do you think this is? Extend your measured findings to show how far the vehicle travels in one month and one year.	1	Investigate how mathematics and technology are used together in sport. Select one activity that you have investigated within a sport and analyse how maths is used to: a) enhance performance b) communicate an event c) measure time d) another interesting aspect Use technology creatively to publish your findings.
2	Design and make an original DVD cover for your favourite movie/pop group using symmetry and/or tessellation.	2	Design and create an artwork using 3-D shapes. You could use wood, polystyrene, tiles, cardboard, etc Use a chart to show the polyhedral used in your design.
3	Research and produce a timeline showing technological inventions over the past 100 years.	3	Investigate Braille and use a similar process to develop and produce a simple board game that uses mathematical ideas.
4	Use a computer to produce a poster promoting mathematical concepts clearly, concisely and visually. Include no more than 10 words	4	On A4 paper, compose an original design using 2-D shapes. Enlarge and print this design onto a piece of fabric, using permanent inks or dyes. Use this fabric to create a wall-hanging, garment or an item for interior decorating.
5	Design and produce a slide show (Power Point, Google Slides) using your computer/iPad, portraying some aspect of mathematics (eg. 2-D shapes, angles, patterns in nature, enlargement, etc).	5	Select a home appliance (eg. washing machine, DVD, stereo, dryer) or a personal item involving technology (eg. spectacles, watch, phone). Create an in-depth analysis of the mathematics involved in the design and use of this technology. Create a visual presentation explaining the importance of the mathematics used.
		6	Produce an entertaining movie that promotes interest in mathematics. Choices could include: a) famous mathematicians and their discoveries b) explain a mathematical concept and its application c) state what the relevance of maths in everyday life is