

**MATHEMATICS
AND CAREER
EXPLORATION**
YEAR 8



These resources are proudly supported by Toyota Community Trust, Australian Mathematical Sciences Institute, Australian Centre for Career Education, Aurecon Group, and Champion Data.



Dancing with Maths

Karin Ditchfield has a Bachelor of Mathematics and Economics from University College London. She is now a Principal in the Portfolio Strategy and Development team at BHP.

Discuss the kinds of problems Karin from BHP might solve.

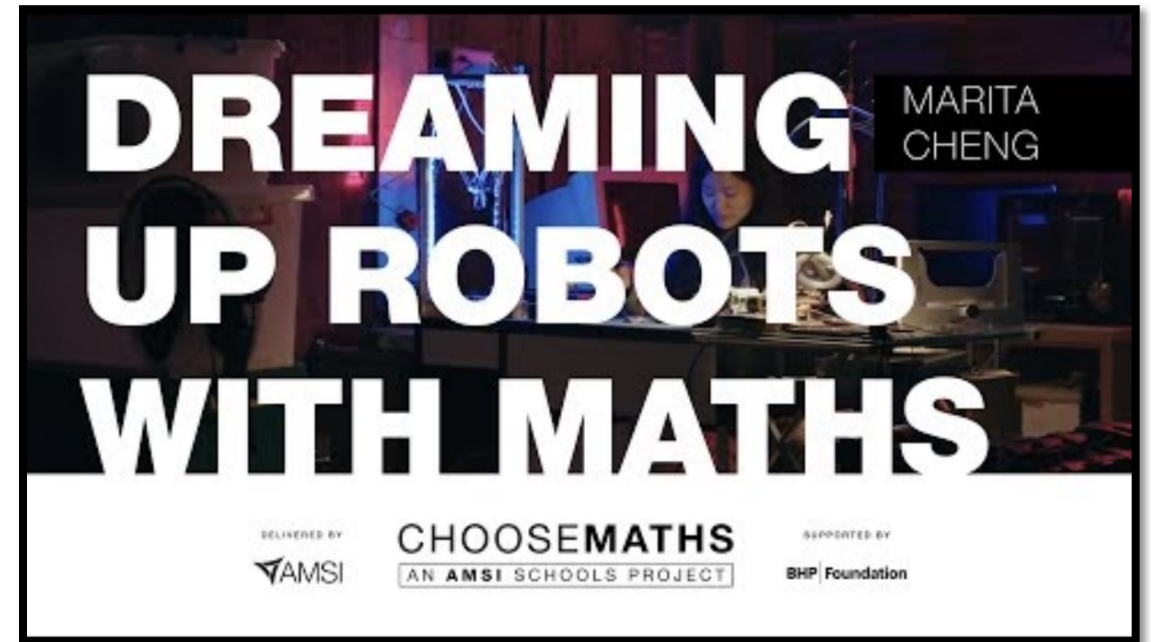


<https://youtu.be/WUGFGl0CsNU>



Dreaming up Robots with Maths

Marita Cheng is the Founder of the International organisation Robogals, designed to encourage more women into Engineering. She is also the CEO and Founder of Aubot.



<https://youtu.be/4MxBbjvrjo>



For more teacher and student resources including job ads, career profiles and videos visit careers.amsi.org.au

From computing and robotics to medical research and engineering, maths is critical to so many careers.

The screenshot displays the 'MATHS CAREERS' website interface. At the top, there is a navigation menu with links for 'JOB ADS', 'PROFILES', 'VIDEOS', 'STUDY TIPS', and 'PARENTS & TEACHERS'. The main content area is a grid of nine video thumbnails, each with a red play button icon. Below each thumbnail is the video title and a short introductory text snippet.

Video Title	Thumbnail Description	Introductory Text
Tuning into Statistics	Thumbnail: Tuning into Statistics with Saskia Freytag	Science and medicine rely heavily on data and statistics. Bioinformatician Saskia Freytag uses the power of data to reveal the ...
Protecting Forests with Maths	Thumbnail: Protecting Forests with Maths with Cristina Aponte	Forest Scientist Cristina Aponte uses Maths to study and protect our forests. In nature, just like in Maths, there is ...
Competing with Maths	Thumbnail: Competing with Maths with Lesley West	Lesley West has a Bachelor of Mathematics & Statistics from the University of Strathclyde. She also competes as an amateur ...
Dreaming up Robots with Maths	Thumbnail: Dreaming up Robots with Maths with Marita Cheng	Marita Cheng is the Founder of the International organisation Robogals, designed to encourage more women into Engineering. She is also ...
Climbing with Maths	Thumbnail: Climbing with Maths with Solai Valliappan	Solai Valliappan has a Bachelor of Commerce (Actuarial Studies) from the University of NSW. She is a Fellow of the ...
Taking Off with Maths	Thumbnail: Taking Off with Maths with Lee Turnley	Lee Turnley has a double degree in engineering and science (biotechnology) from Swinburne University and is a Composite Research Engineer ...
Coding Up a Revolution	Thumbnail: Coding Up a Revolution with Ally Watson	Co-founder of Code Like a Girl, Ally Watson has a degree in computer science from Glasgow University in Scotland ...
Reaching the Stars with Maths	Thumbnail: Reaching the Stars with Maths with Karlie Noon	Karlie Noon was the first Indigenous Australian in New South Wales to complete a double degree in Maths and Physics ...
Fighting Malaria with Maths	Thumbnail: Fighting Malaria with Maths with Lyndal Henden	Lyndal Henden is a Post Doc Researcher at the Walter and Eliza Hall Institute of Medical Research. Her research focuses ...

Year 8 Worksheet – Growing Patterns

- How do you see the pattern growing?
- What is the next figure in the pattern?
How many blocks does it contain?
- What is the 10th item in the pattern
and how many blocks does it contain?
- Draw a table (chart) like the one below
and complete it.

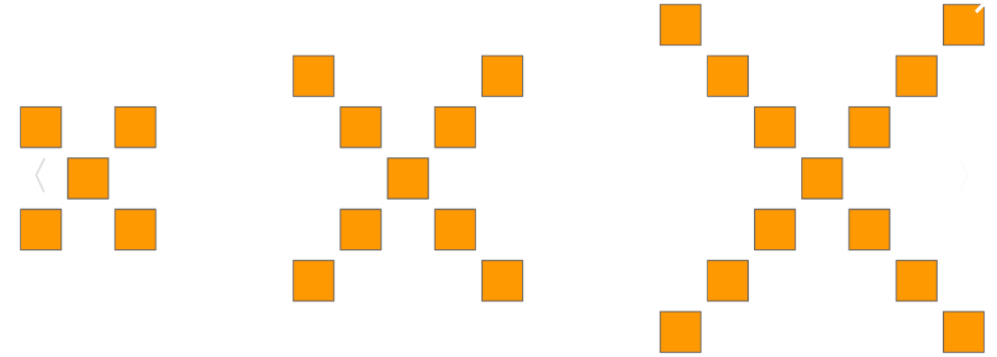


Figure no.(f)	1	2	3	4	5	6	7	8
No. of blocks (b)	5	9	13	17				

- Does this table make it easier to predict how many blocks will be in later figures?