

MATHEMATICS AND CAREER EXPLORATION **YEAR 10**



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



The Labour Market

The labour market is where workers trade their labour to an employer for a wage. Like any market, it is subject to forces such as supply and demand.



<https://youtu.be/fQZ4ze0unuU>

The Spread of Disease

A video about modelling the susceptibility, infection spread and recovery of disease in populations.

The mathematical models shown were vital during the COVID-19 pandemic for predicting the spread of the virus and informing public health decisions.



<https://youtu.be/buZjhRAAKH4>



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 with a navigation bar at the top containing '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 a title and a short description of the video's content.

Video Title	Thumbnail Description	Short Description
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 ...

Labour market exploration

- As a class or in groups discuss occupations that will involve mathematics in some way.
- Visit Jobs and Skills Australia and explore the Jobs and Skills Atlas - www.jobsandskills.gov.au/jobs-and-skills-atlas-dashboard
- Using the Occupations tab in the Atlas, search for the occupations the class or group decided on. Record and discuss the:
 - Median weekly earnings.
 - Median age.
 - Shortage and future demand.
 - Most recent estimated vacancies.

Complete Labour Market Exploration Worksheet

Game designer
Sports administrator
Truck driver
Environmental adviser
Cryptographer
Project manager
Professional builder
Network engineer
Pilot