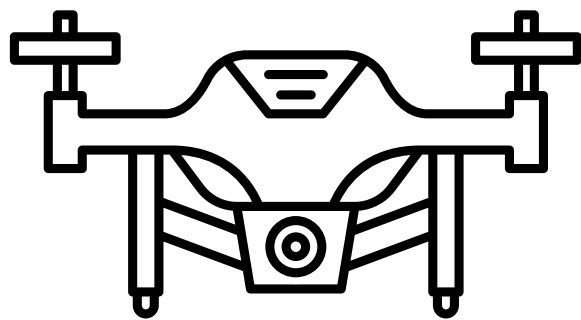
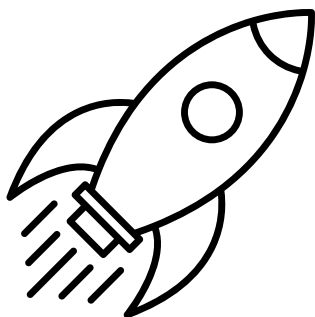
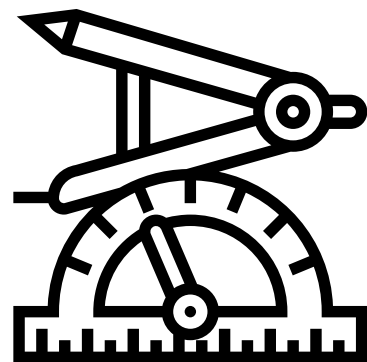
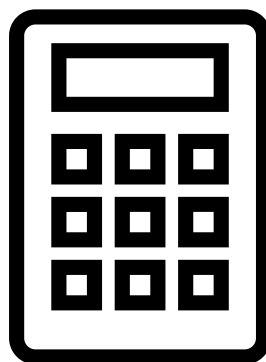
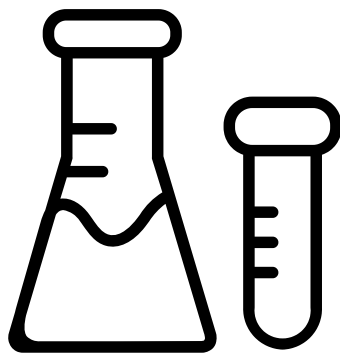


Finding the ME in STEM



Mikaela's student activity pack

Imagining the Future

Let us take you on an incredible journey into the world of space exploration with the Callistan Cycle.

The Callistan Cycle is a series of five short stories from our Imagining the Future series that explore STEM areas like robotics, AI, climate change and resource management.

You can read, watch or listen to each story, for free.



Far Out! by Lili Wilkinson

As the seconds count down to the launch of humanity's first family into deep space, young stargazer Stella is sure that today is going to be the most exciting day of her life. But she has no idea of just HOW exciting and terrifying and important it will be. And what it will mean for the future of interstellar travel.

Join the Kaufmanns as they go FAR OUT! in a story that explores space and robotics.



SCAN ME



Calculating Apple Pie by Melissa Keil

Kal and her sister Arche are hurtling through space towards Callisto in a ship shaped like a beluga whale that is the size of a city block. Arche does something a bit (very!) reckless to try to help her sister feel a little less homesick.

Calculating Apple Pie explores future food production and coding and how tampering with it can cause serious real-world problems.



SCAN ME



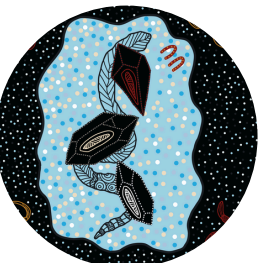
Semper by Rebecca Lim

Shang travelled to Callisto on the Hohmann transfer from Earth, which took almost six years. She sacrificed everything for the chance to explore distant moons for resources and critical minerals, but gets paired with a Drobo called Semper that always wants to play, like a real dog. Shang doesn't have time for games, so why has she been paired with such a useless Drobo?

Semper explores robotics, AI and mineral exploration.



SCAN ME



Proof by Gary Lonesborough

Tanner has been noticing that lots of people in his town on the lunar outpost on Callisto are getting sick. What is causing this mysterious illness plaguing his community? Tanner's sister Rachel thinks she knows what's causing it and takes Tanner on an eye-opening adventure where they discover a lot more than just the cause of the illness.

Proof explores filtration, waste management and environmental science.



SCAN ME



Earthbound by Alison Evans

Pen and their father have arrived on Earth. Pen's comms device isn't working, and when Pen tries to fix it, they hear a strange rhythmic sound coming from it. Determined to figure it out, Pen seeks the help of an android to help decipher the mysterious sound.

Earthbound explores transportation and telecommunication.



SCAN ME

Comprehension Questions

Student name: _____

To answer these questions, scan this QR code and watch Mikaela's film.



What happened when Mikaela was eight?

Name **FOUR** things Mikaela can do.

- 1.
- 2.
- 3.
- 4.

Name **TWO** things Mikaela can't do.

- 1.
- 2.

What was Mikaela's vision?

What's the icing on the cake for Mikaela?

Meet Mikaela. She's a digital entrepreneur. Fill in the bubbles with 5 STEM (Science, Technology, Engineering and Mathematics) skills she uses in her job. Which of these skills do you think is most important? Which do you think would be the hardest to develop? When you've thought of the skills, colour in the rest of the image.



Pathfinder Workwords

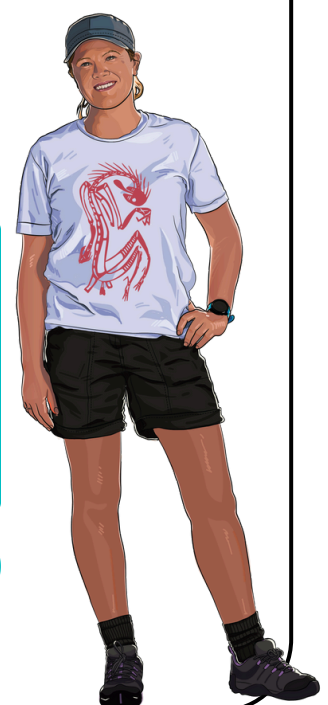
Digital Entrepreneur



Find 20 words Mikaela needs to her do her job.

- | | |
|-----------------|-----------------|
| 1. LEADER | 11. INTERNET |
| 2. JUDGEMENT | 12. NEGOTIATION |
| 3. FINANCES | 13. MATHEMATICS |
| 4. BUDGETING | 14. COMPUTERS |
| 5. MONITORING | 15. ECONOMICS |
| 6. EVALUATING | 16. ACCOUNTING |
| 7. ANALYSIS | 17. PSYCHOLOGY |
| 8. CREATIVITY | 18. AUGMENTED |
| 9. STORYTELLING | 19. REALITY |
| 10. LISTENING | 20. PRODUCTION |

Scan this QR code to find out more about Mikaela.



Pathfinder Workwords

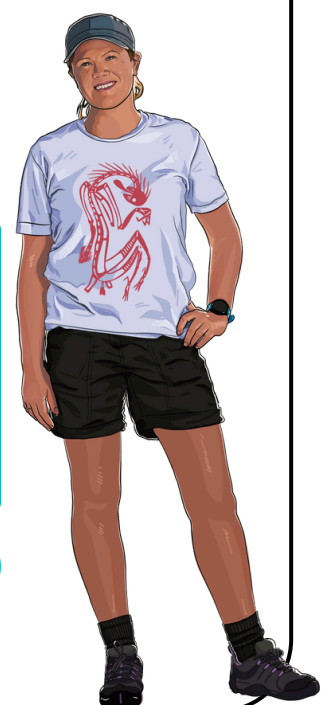
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An example of a day in the life of a digital entrepreneur

This is what a typical day could look like if you became a digital entrepreneur.

- 5.00am** I wake up anywhere between 5am and 6am, depending on what time I went to bed. I prioritise waking up early so I can ease into the morning and function properly. I've got to be switched on and my mind has to be sharp.
- 6.00am** I start my day by switching on my computer, which I left in the kitchen last night. As my laptop is my business, I can start work as soon as I wake up, which helps me stay on top of the day.
- 6.30am** The first task I complete each morning is checking and responding to emails that have come in overnight. Some of these relate to the projects my team is working on, so by staying on top of them I ensure projects keep moving forward. Some of the emails relate to finance – invoices that need to be paid, quotes that need to be approved. I make sure I am across the budget because at the end of the day, I am responsible for my own company and if I'm not earning enough income, I can't pay myself.
- 7.30am** It's time for breakfast. I typically have a bowl of cereal accompanied by some fruit and a coffee while reading up on the morning's news. I pay particular attention to tech news. I keep my finger on the pulse about new tech and am always interested in finding out about what innovative new things are happening. After breakfast I get ready for work.
- 9.00am** I get to the office and review the task list on my whiteboard with my assistant. We work through this as part of our daily routine. It helps keep us on track and to understand what the priorities are for each day. Today we have some important planning for a school visit I am doing next week so we want to make sure my presentation is valuable, exciting, interesting and gives the students something to think about
- 10.00am** I spend a significant amount of time posting in forums and reading about augmented reality. When I hit a mental roadblock, I find this can help me. It's important that I stay on top of the latest news in augmented reality, and I also like to share my knowledge and expertise. I have done some really cool things with the technology and I want to inspire others to do the same.
- 11.30am** It's time for the weekly team meeting. This is a really important opportunity for me to connect with my team and for us to find out what's been happening in other areas of the business. I like to use this time to brainstorm solutions to any blockers anyone has and to find out if there are any opportunities we should be pursuing. I am very hands-on and lead these meetings because I like to make sure the outcomes are always focused on actions and delivery. No point having meetings if they don't accomplish anything.
- 1.00pm** Lunchtime. I use this time to eat and also Skype with family and friends. I like to carve out time each day to fill my cup, and I find socialising over lunch is a really great way to re-energise myself for the afternoon.
- 2.00pm** TESTING TIME! Some of the new software my team has been working on is ready for testing. I am always first to put my hand up for this. It's exciting and also gives me great insight into the issues the tech teams have had to overcome, which I can then chat about in the online forums I enjoy participating in.
- 4.00pm** It's report-writing time. I report back to my investors about the things we have been working on and the progress we're making. It's important to me that I am transparent and provide relevant information so that my investors know exactly what I am spending money on.
- 5.00pm** I am off to the pool to get my blood pumping and my body moving. Physical activity is so important and I make sure to prioritise it every week. Some days I don't make it, but I generally try my best to make sure I make my health a priority.
- 6.00pm** I finish at the pool and head home to get ready for dinner.
- 7.00pm** I go to dinner at a restaurant in town where I am meeting with some potential partners to discuss new applications for my technology. They want to investigate using it in aged-care facilities to improve brain function for those with dementia. It's a very exciting opportunity, and I am looking forward to what will no doubt be a lively discussion.
- 10.00pm** Home from dinner. It was fantastic. Lots of work to do tomorrow and the calendar in my office will have to be reshuffled. I send myself an email to ensure the talks from tonight stay fresh in my head, and then get ready for bed.
- 10.30pm** Time for sleep. I set my alarm, turn on my white noise machine and drift off, excited about what tomorrow might bring.

Digital Entrepreneur

Mikaela is a digital entrepreneur. She started Australia's first Indigenous edu-tech company, Indigital. Mik also created an app that uses augmented reality to let Indigenous people share extraordinary stories on Country. Find out more:

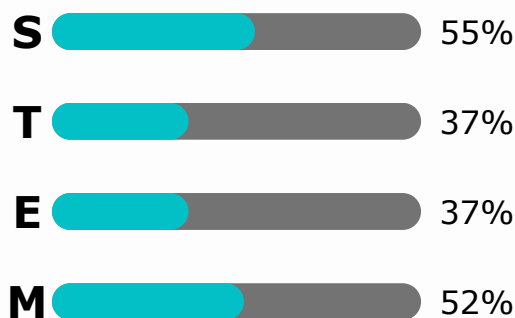
futureyouaustralia.com.au/pathfinders/mikaela



'I had this vision of being able to share our cultural stories through holograms.'

STEM Meter

How much Science, Technology, Engineering and Mathematics (STEM) does this job use?



Source: jobsandskills.gov.au

5 reasons why you should do this job

- 1** Transform education
- 2** Boost local economies
- 3** Make life better for everyone
- 4** Improve living standards
- 5** Drive technological advances

3 STEM skills required for this job

Finance management

Data analysis

Problem-solving

Subjects to develop these skills

Mathematics, HASS

Science, Mathematics

Design and Technologies, Digital Technology