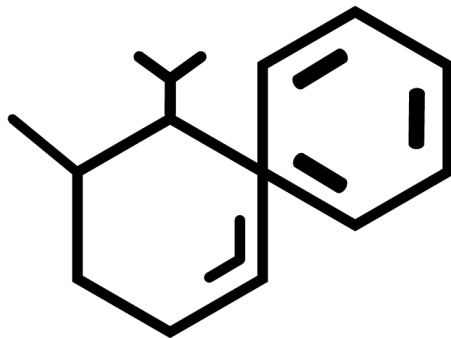
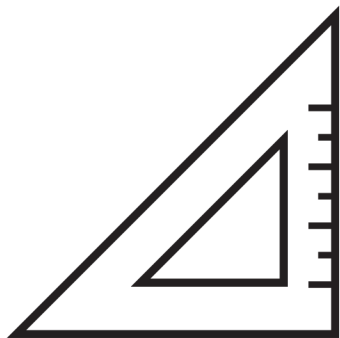
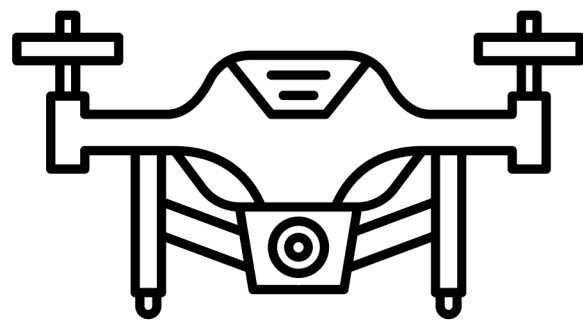
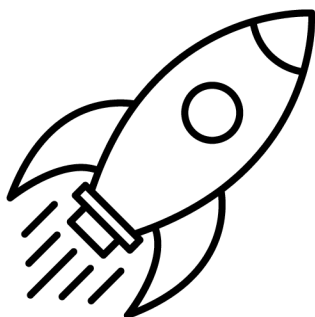
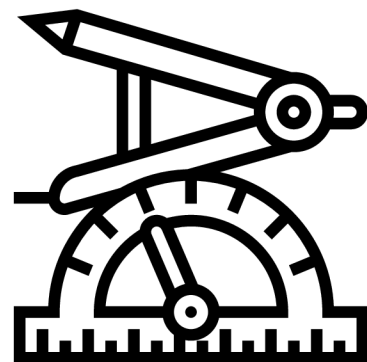
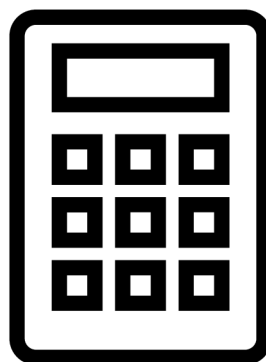
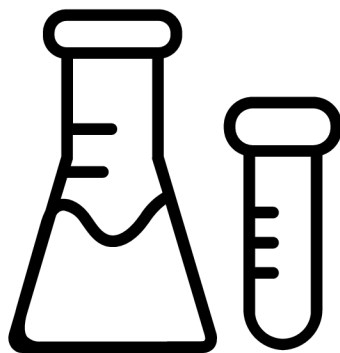


Finding the ME in STEM



Kayta'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



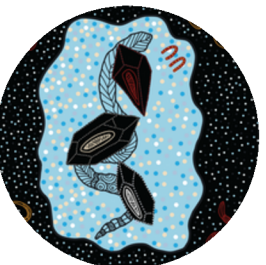
Semper by Rebecca Lim

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

Watch my film to answer these questions.



Name two things Kayta is good at.

1. _____

2. _____

What inspired Kayta to make the change to software engineering?

Name two things Kayta can't do.

1. _____

2. _____

What does Kayta say was the hardest part about changing careers?

What career did Kayta used to have?

How does Kayta stay connected to her creative side?

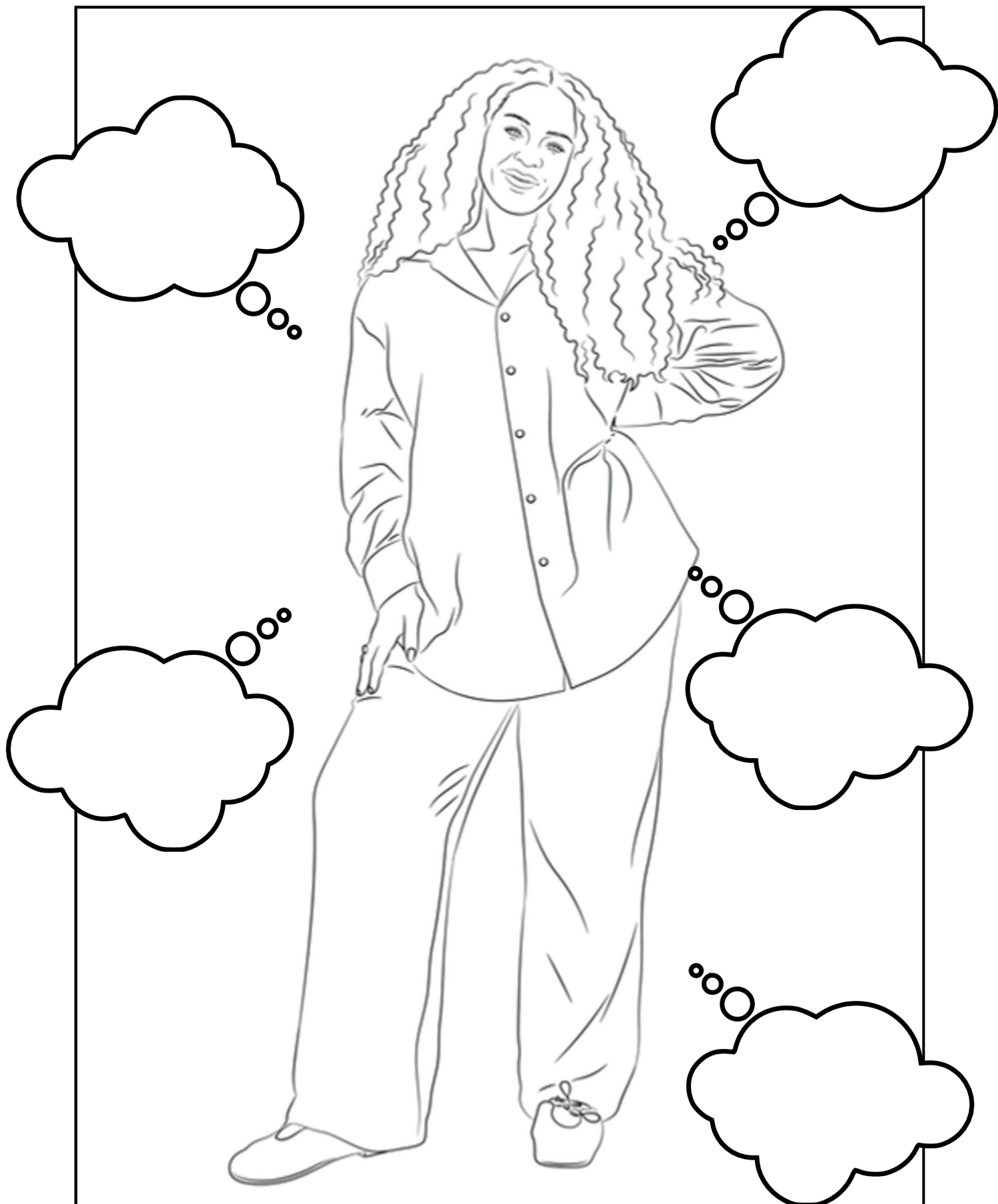
Who does Kayta say she loves spending time with outside of work?

What does Kayta say makes her a better engineer?

What advice does Kayta have for people thinking about changing jobs?

What impacts does Kayta want to have in her job?

Meet Kayta. She's a software engineer who used to work in marketing. 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

Software Engineer

C A E I I O R M J K I N E N D L Q C E M D A M
O M U S I C A E C T E R L G I A O F I B I T A
O E Y R T R B A M E E A L U A D G V A S F A R
K I N X G E R G S C K E J D I P D C U O I D K
I F B O T E A V G H W L W N R Y B O P E Y H E
N S R Z E X X M T B K T G Z R A I E P C H T T
G P I R E M X V W R U S I G N R W L W G M N I
F P C G A R D E N O O I L M U F J I F V E M N
G D R E T U P M O C R P L C M T J T N W T T G
T Y N K E M U D N M X K P D L Z F X S G E S E
W D S B G Z G H T K A T N U U G Z L G Y C O R
A L D Y K J F S D R Y U E B S V E X G B V Q A
O B R V L T M O T F U F T I M T N K F H J J K
H F E J Q M E L B O R P A N T R Z N R A U F X
L F U V A I S D N E I R F E B Z S Z N U Q T H
G R S F O B R X T N M T R Z Z S K M G D T U F

Find 20 words connected to Kayta.

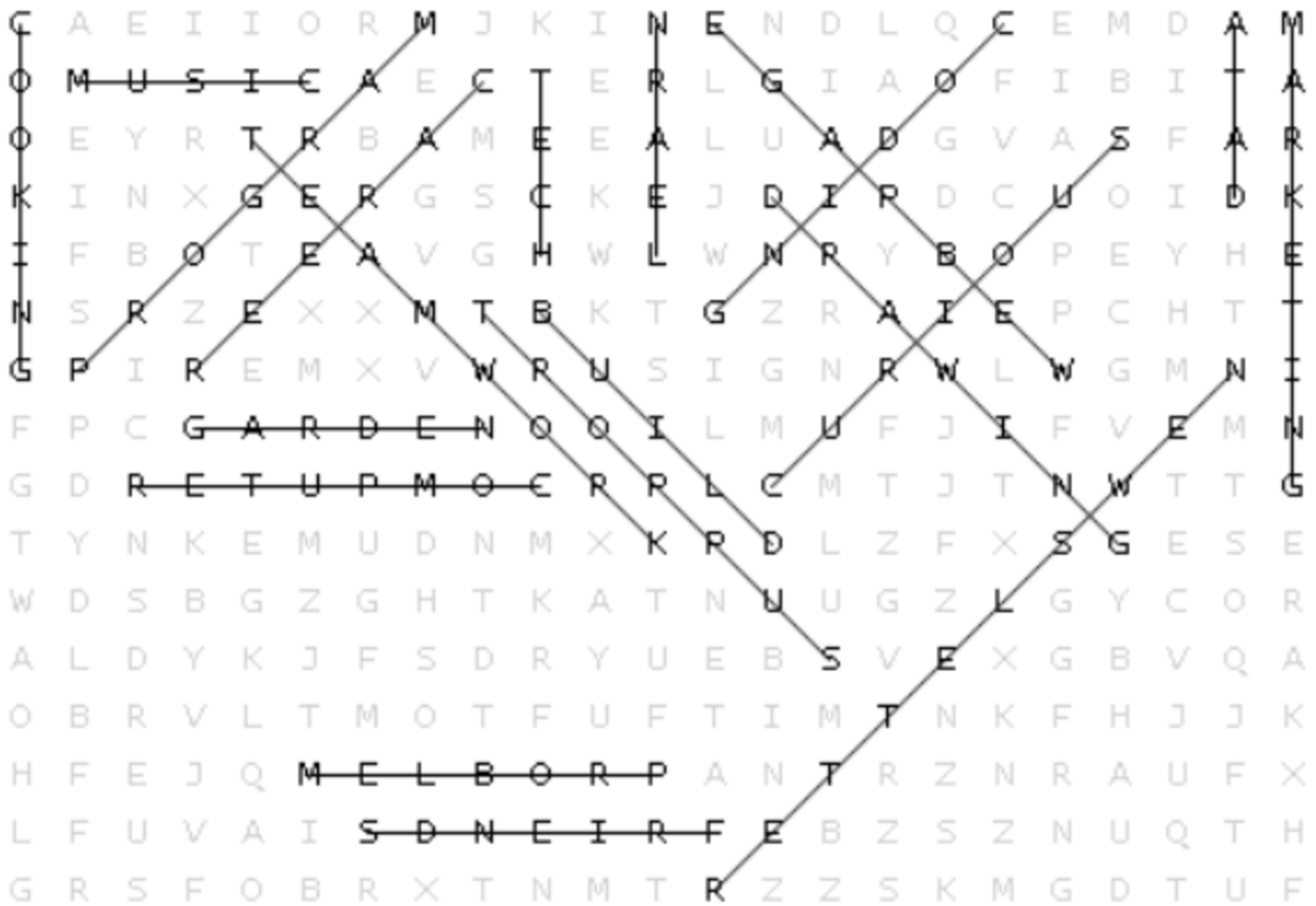
- | | |
|---------------|----------------|
| 1. DRAWING | 11. CAREER |
| 2. COOKING | 12. FRIENDS |
| 3. CODING | 13. SUPPORT |
| 4. COMPUTER | 14. LEARN |
| 5. WEBPAGE | 15. CURIOUS |
| 6. DATA | 16. GARDEN |
| 7. PROGRAM | 17. BUILD |
| 8. MUSIC | 18. TECH |
| 9. TEAMWORK | 19. NEWSLETTER |
| 10. MARKETING | 20. PROBLEM |

Scan this QR code to find out more about Kayta.



Pathfinder Workwords

Answers



Let's reflect

Were any of these words new to you? Look them up and find out what they mean.

Which of these skills do you think you are best at, or would like to get better at?

1. _____

2. _____

3. _____

Can you think of anything else Kayta might need to do her job?



An example of a day in the life of a software engineer

- 7.30am** I start my day with coffee and make a really tasty breakfast for myself and my husband. He loves my cooking, and cooking helps me start my day in a positive way.
- 8.30am** I am working from home today, so I log in and check the dashboard that shows how all our newsletters are running. If something isn't working, it's my job to get it fixed it before the morning rush.
- 9.15am** Team stand-up time! That's our short daily meeting where we share what we're working on and any problems we need help with. My team's great. We support each other a lot.
- 10.00am** Today I'm improving part of our API. API is a tool that helps move stories from journalists to readers' inboxes. It feels good to know my code helps people read the news they love.
- Midday** Lunch! I stretch my legs and grab sushi from the café down the street. When I'm in the office, I eat with a few colleagues who also work in tech. We chat about new tools and funny coding bugs. Today though, I sit by the river and watch enjoy the peace and quiet.
- 1.00pm** Back to work. I join a quick call with the marketing team to check how our system is handling a big new campaign. I like these chats. They connect the creative and technical sides of my work.
- 3.30am** I test my new code with a teammate. We use "pair programming," where two people work on one problem together. It's a great way to learn new tricks and spot errors faster.
- 4.15pm** The day's nearly done. I write notes for tomorrow and update our shared board with what's finished. Before logging off, I double-check that everything's running smoothly.
- 5.00pm** Work finished! I close my laptop and head out for an afternoon walk. Moving after a day of thinking helps me unwind.
- 7.00pm** Dinner at my mum's tonight with the whole family. I get to spend time with my nephew who always makes me laugh. He's a bundle of energy, and he always makes me happy.
- 9.00pm** My husband and I arrive home, and I want to do some painting while listening to music. Staying creative outside of work helps me be a better engineer.
- 11.00pm** I read for a bit before bed. Usually a mystery novel or something about design. Tomorrow I'll wake up ready to solve more puzzles with code.

Software Engineer

Kayta is a software engineer who keeps people up to date with what's happening in the world. Kayta used to work in marketing, but become more interested in the technical side of her job, which inspired her to change her career pathway.

futureyouaustralia.com.au/pathfinders/kayta



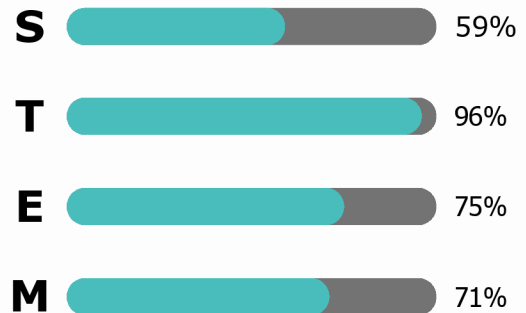
"My curiosity about how things work led me from marketing into software engineering."



SCAN ME

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** Solve problems with creative thinking.
- 2** Build cool apps, games, and tools.
- 3** Keep learning as technology changes.
- 4** Work with smart, creative teams.
- 5** Shape the future through innovation.

3 STEM skills required for this job

Programming

Evaluation

Communication

Subjects to develop these skills

Digital Technologies, Mathematics

English, HASS, Science, Technologies, The Arts

English, Digital Technologies, HASS, Mathematics, Science, The Arts,