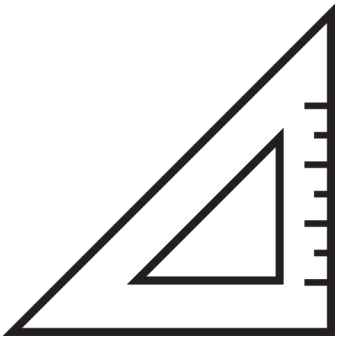
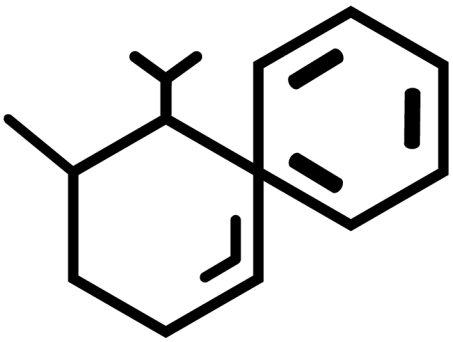
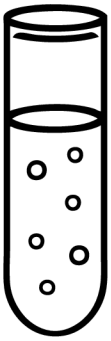
Colour me in and take some mindfulness time

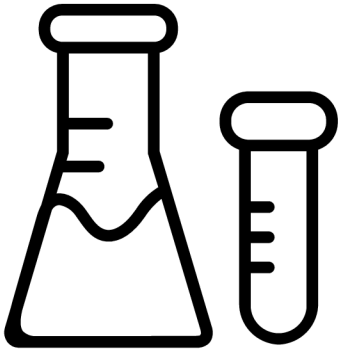
Name:

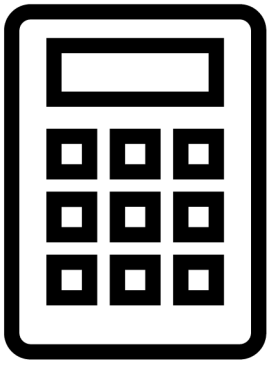


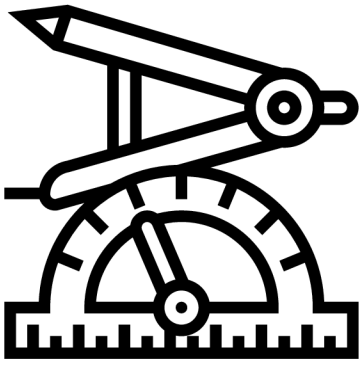


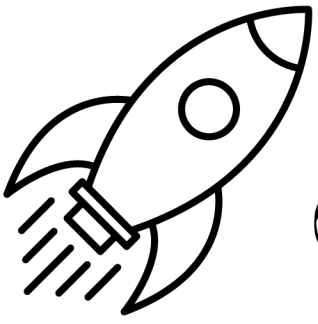


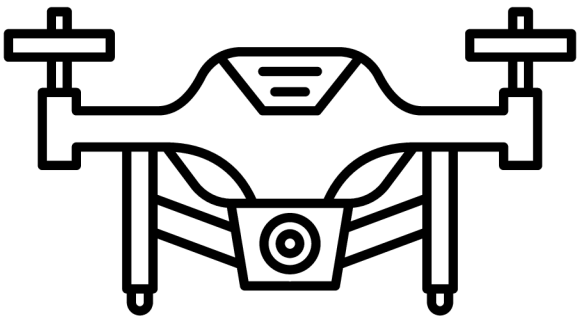
Finding the ME in STEM











Daisy'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

Daisy

Student name:

Comprehension Questions

What does Daisy's work involve?

What two jobs does Daisy have?

1.

2.

What made Daisy want to pursue a career in research?

Name two things Daisy is not good at.

1.

2.

Name two things Daisy is good at.

1.

2.

What does Daisy love about her job?

What is Daisy helping to build?

What is Daisy's ultimate goal?

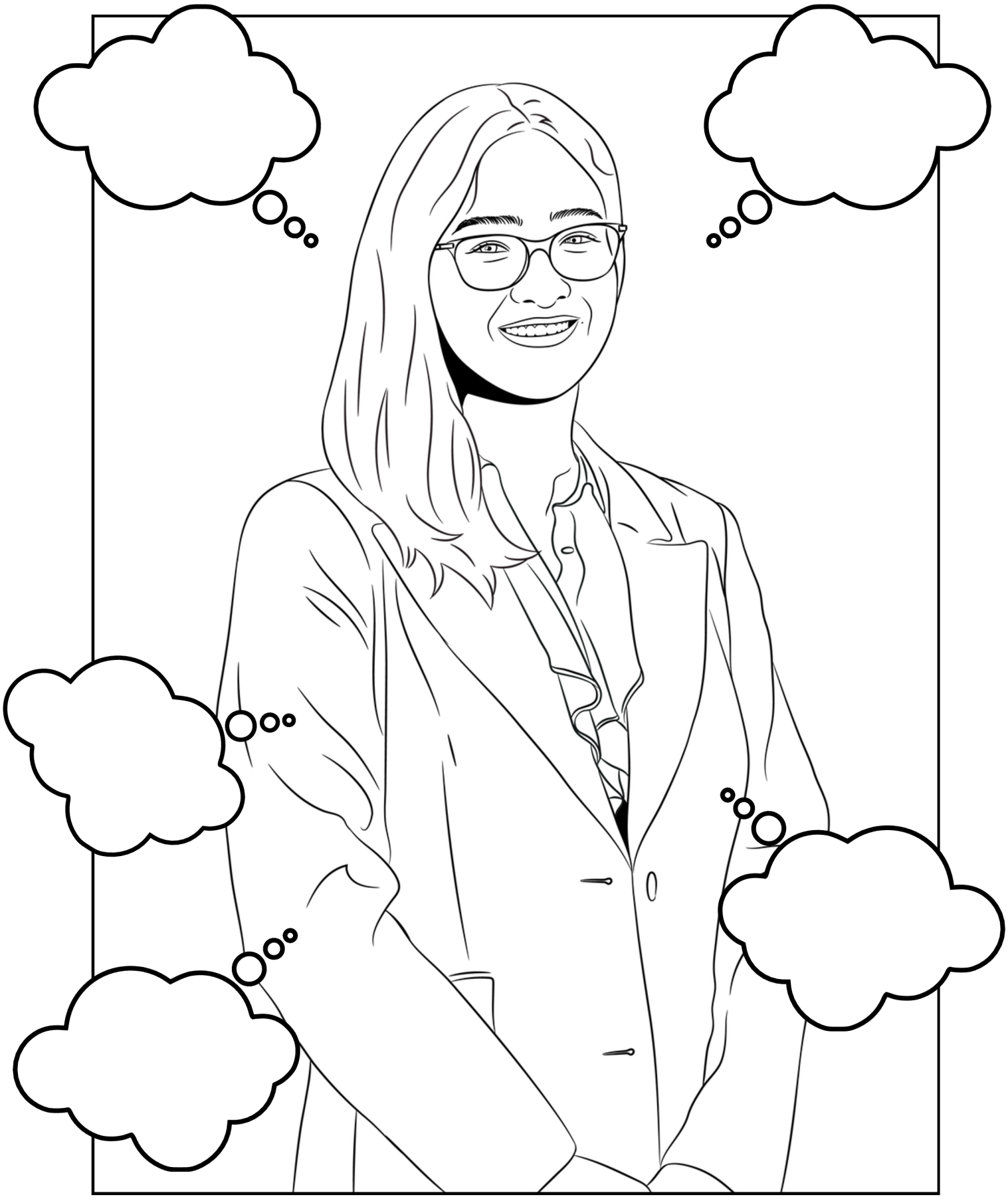
What brings Daisy a sense of calm and balance?

1.

2.

How does attending conferences enrich Daisy's work?

Meet Daisy. She's an optometrist who wants to cure blindness and improve the lives of millions around the world. 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

Optometrist

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

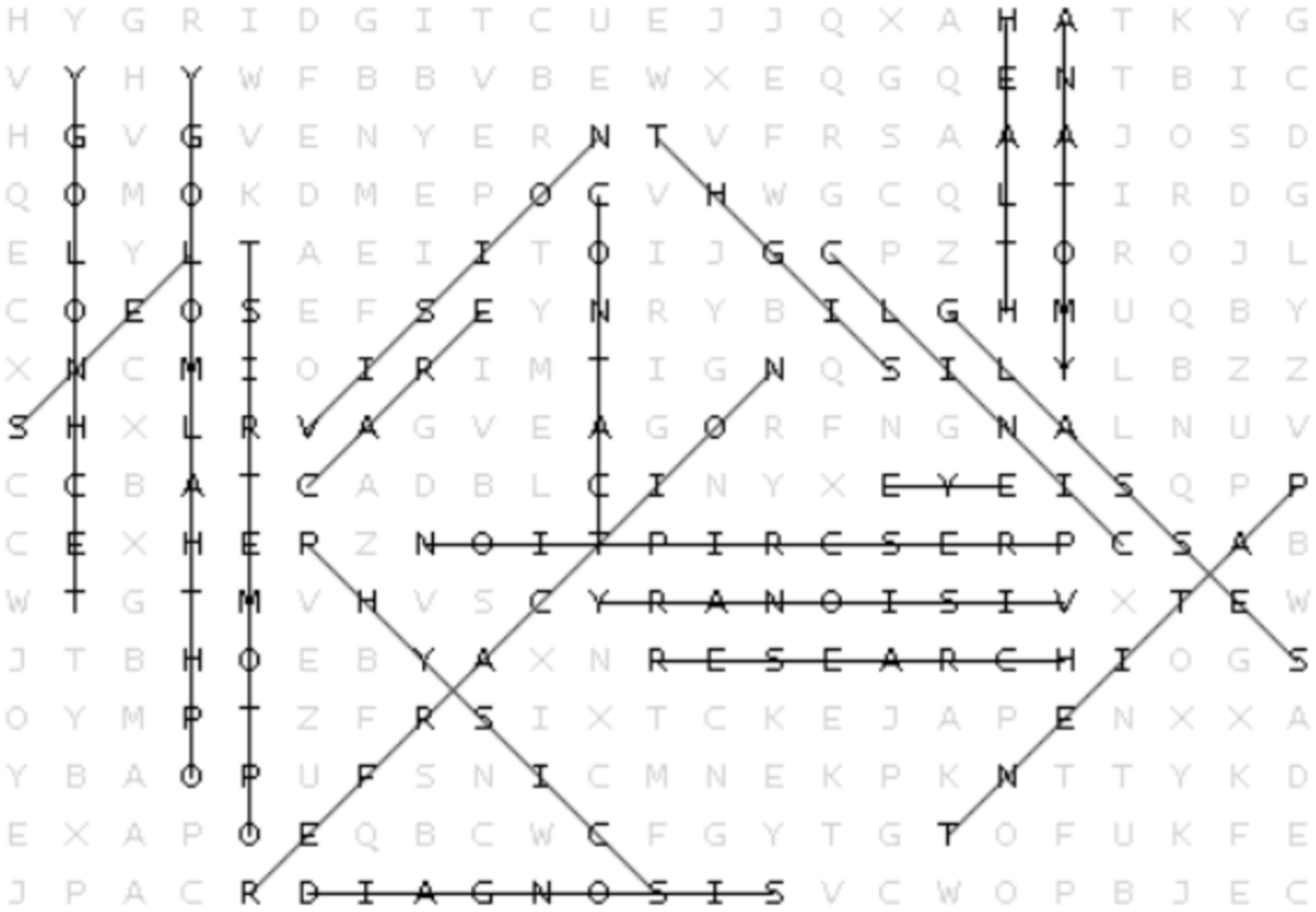
Find 20 words Daisy needs to do her job.

1. OPTOMETRIST
2. VISION
3. EYE
4. GLASSES
5. CONTACT
6. LENS
7. PRESCRIPTION
8. SIGHT
9. OPHTHALMOLOGY
10. REFRACTION
11. DIAGNOSIS
12. CLINIC
13. HEALTH
14. PATIENT
15. VISIONARY
16. TECHNOLOGY
17. CARE
18. RESEARCH
19. PHYSICS
20. ANATOMY

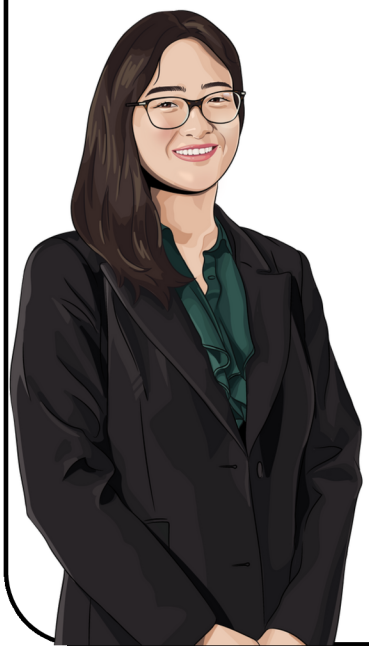
Scan this QR code to find out more about Daisy.

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 Daisy might need to do her job?

_____

A day in the life of a research scientist/optometrist

7.30am I wake up around 7:30 am and start my day with a slow, peaceful routine. I spend some time doing yoga and meditation, which helps me centre myself and set a calm tone for the day ahead. Afterwards, I enjoy a light breakfast while I mentally prepare for the day's tasks.

9.00am My day typically begins with a virtual meeting with my research collaborators in the Northern Hemisphere. It's their late afternoon, so it's the perfect time to sync up and discuss our latest findings and ongoing projects. It's always so great to be able to collaborate with people around the world, although it does require some careful time zone management. I'm fortunate to have many collaborators and friends from my Harvard days, which keeps our research dynamic and internationally connected.

10.00am After the meeting, I grab a coffee and have a chat with one of my mentees. This is a time where I provide advice and support for their career, helping them navigate their path in research and offering insights from my own experiences. It's fulfilling to see them grow and develop as scientists.

10.30am I dive into running our clinical study. We're currently testing participants as part of a project aimed at developing new therapies for age-related macular degeneration. I oversee the testing process, ensuring everything runs smoothly, and check in with my team on the progress.

11.30am I dedicate time to writing. Whether it's working on a grant proposal or drafting a manuscript, this part of the day is crucial for pushing our research forward and securing the funding we need to keep our projects going.

1.00pm I meet one-on-one with a student to discuss their research progress and any challenges they're facing. Mentoring is one of the most rewarding parts of my job, and I enjoy guiding the next generation of scientists.

2.00pm Every fortnight, we have a lab meeting where the entire group comes together to discuss our latest updates and brainstorm ideas. It's a collaborative and energising session where we share progress, troubleshoot issues, and plan the next steps in our projects.

3.30pm I attend a virtual seminar presentation from my department, where the latest research in our field is showcased. It's a fantastic opportunity to learn from colleagues and stay up-to-date with cutting-edge science at UNSW.

4.00pm I spend the late afternoon working on data analysis and preparing for upcoming presentations. We've got a big international conference coming up in Buenos Aires, Argentina, where I'll be sharing our latest findings, so I'm making sure everything is in order.

5.00pm I wrap up the workday by organising tasks for tomorrow and making sure everything is set for another productive day. I then head home to unwind.

7.00pm After dinner with my family, I might spend some time reading or working on plans for the next episode of my podcast, "Behind Our Science." It's a relaxing way to wind down while still engaging with my passion for science communication.

9.00pm As the day comes to a close, I do some evening yoga and meditation to help me relax and clear my mind. This routine helps me transition into a restful night.

10.00pm I hop into bed around 10 pm, feeling content with the day's accomplishments and ready to recharge for tomorrow. And who knows, maybe tonight I'll dream up the next big breakthrough, or at least a brilliant idea for my next podcast episode.

Optometrist / Research Scientist

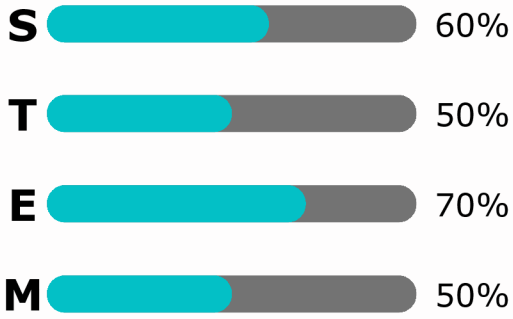
Daisy is an optometrist and a research scientist. She uses cutting edge technology to explore the mysteries of the human eye. She hopes her work will find a cure for blindness and improve life for millions around the world. Find out more at:

futureyouaustralia.com.au/pathfinders/daisy

"It's incredibly rewarding to know that the work we're doing today could change lives tomorrow"

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. Improve the lives of lots of people
2. Work with really cool technology
3. Travel the world to share your work
4. Work in a team with interesting people
5. Solve puzzles

3 STEM skills required for this job	Subjects to develop these skills
Research	Science, Humanities and Social Science
Complex problem solving	Design and Technologies, Digital Technology
Biology	Science