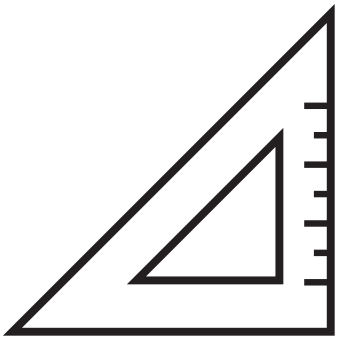
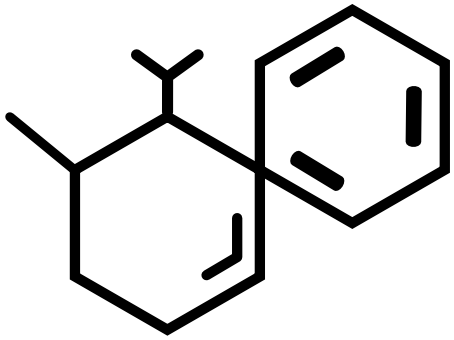
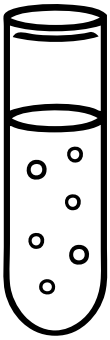
Colour me in and take some mindfulness time

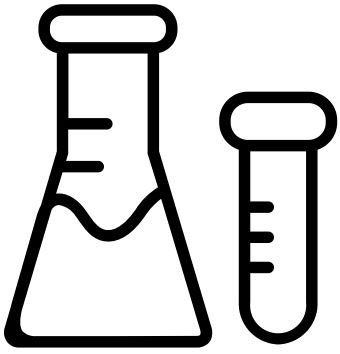
Name:

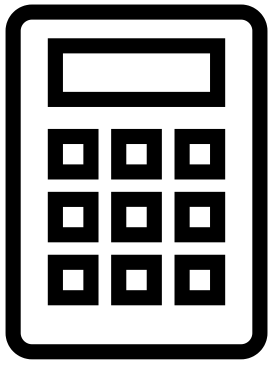


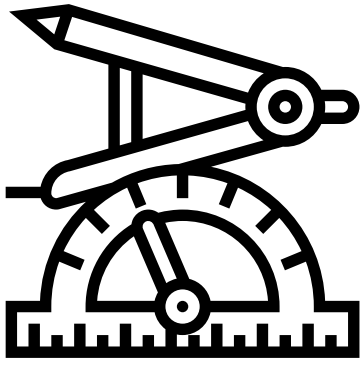


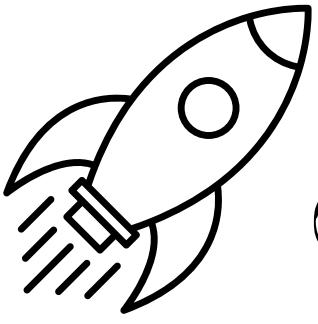


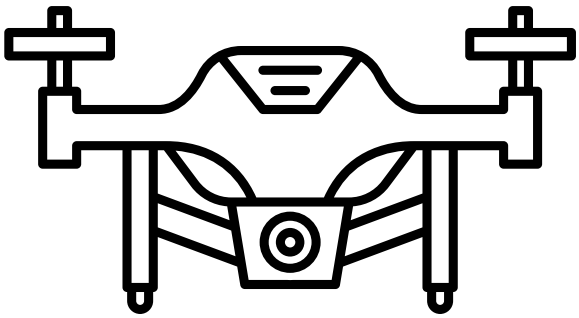
Finding the ME in STEM











Phoebe's student activity pack

FUTUREYOU

www.futureyouaustralia.com.au

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 Phoebe's film.

SCAN ME

Name FOUR things Phoebe can do.

1.

2.

3.

4.

Name TWO things Phoebe can't do.

1.

2.

What species did Phoebe help reintroduce into the wild?

What TWO school subjects was Phoebe NOT good at?

1.

2.

What did Phoebe really want to understand when she was younger?

Who in Phoebe's family was an important influence on her growing up? How and why?

Why did Phoebe think 'science wasn't for me'?

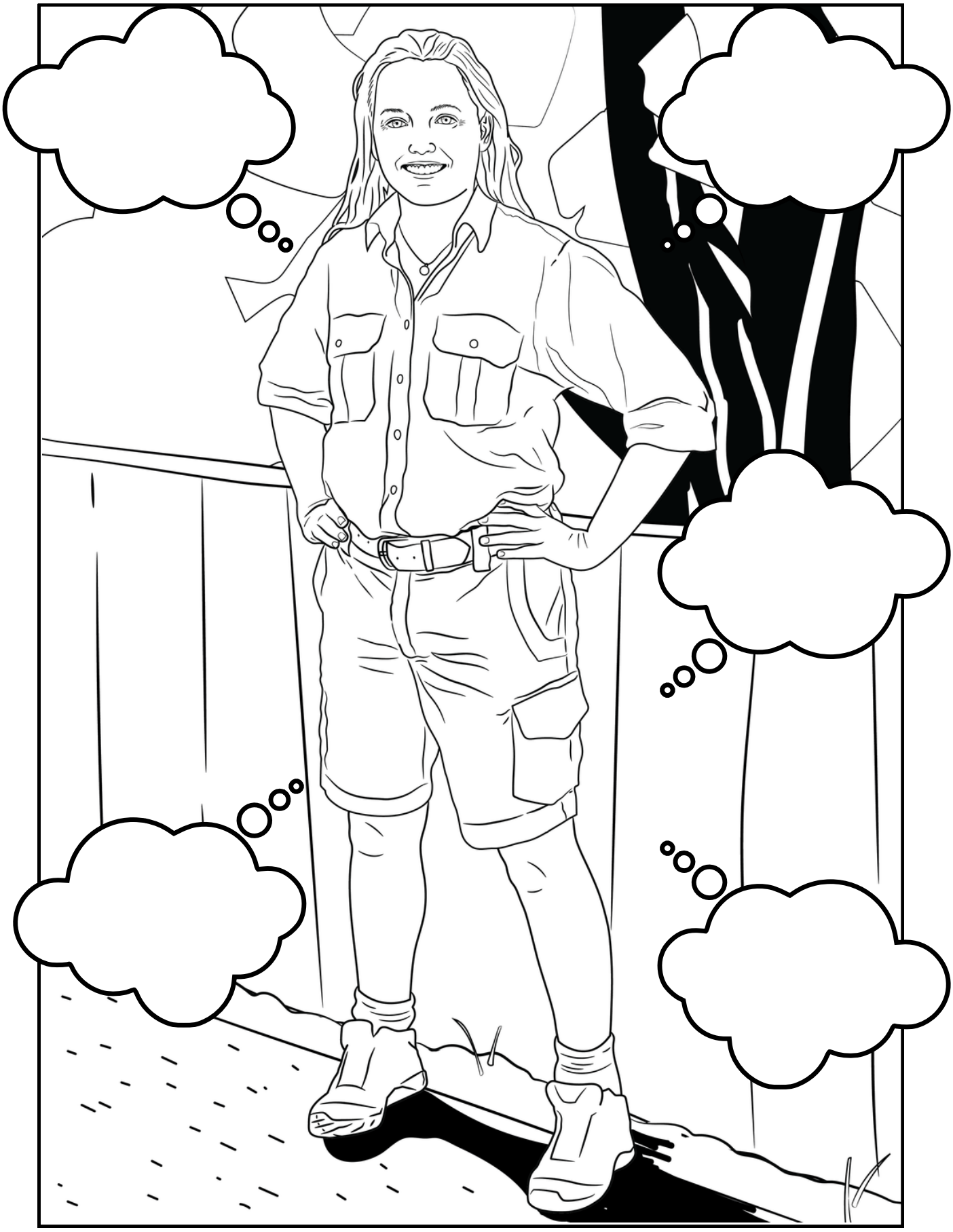
What did Phoebe study at university?

What does Phoebe say 'forensic science' (the study of dead animals) can help us with?

How many different types of animals do you see in the film? Name them.

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

Meet Phoebe. She's a wildlife conservation officer. 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

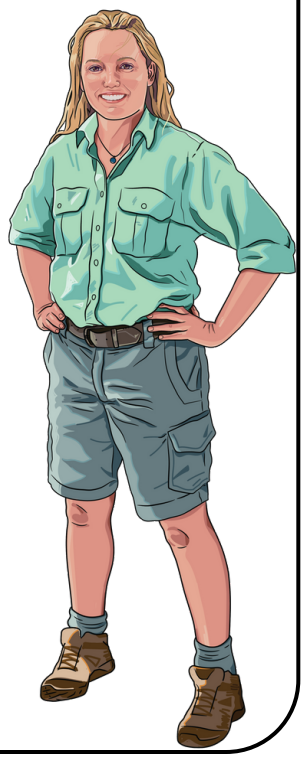
Wildlife Conservation Officer

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

Find 20 words Phoebe needs to her do her job.

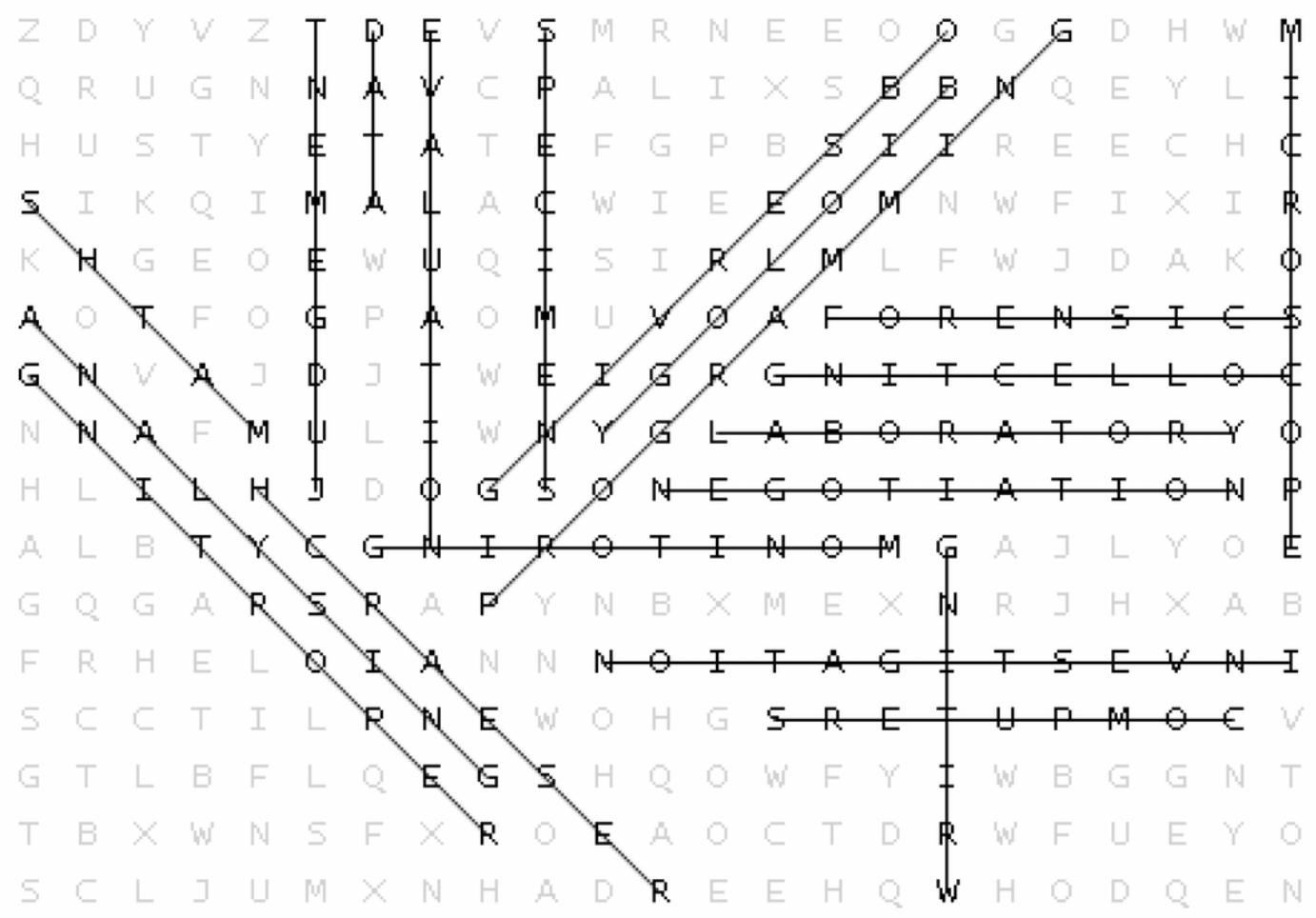
1. SPECIMENS
2. OBSERVING
3. MONITORING
4. RESEARCH
5. JUDGEMENT
6. PROGRAMMING
7. NEGOTIATION
8. ANALYSING
9. DATA
10. COLLECTING
11. REPORTING
12. WRITING
13. FORENSICS
14. EVALUATION
15. BIOLOGY
16. COMPUTERS
17. MATHS
18. LABORATORY
19. MICROSCOPE
20. INVESTIGATION

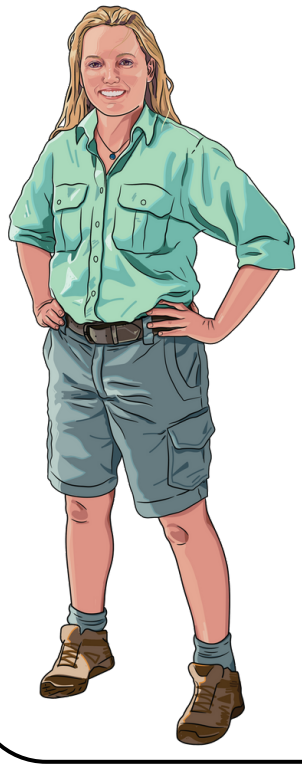
SCAN ME



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 Phoebe might need to do her job?

_____

An example of a day in the life of a wildlife conservation officer

This is what a typical day could look like if you became a wildlife conservation officer.

4.00am I am up VERY early today because I have field work scheduled. I am monitoring some sharks I have been tracking, and sharks are always very active at dawn. I drive down to the beach and send my drone up to capture footage of their movements. I love watching animals in their natural habitat – there is something very soothing about it.

7.30am I am starving. I head back home to shower and have breakfast after spending far longer than I expected watching the sharks. Worth it, though.

8.30am With my field work out of the way, I head into the office to start my desk-based work. I stop by my colleagues' desks before heading to my own to show them some of the shark footage. We are all a bit obsessed with wildlife here. It's great!

9.00am Socialising out of the way, it's time to work. My work with the sharks is part of a larger recovery planning project. Numbers of this species of shark have been dropping considerably, so we are working on a plan to rebuild the numbers to restore balance to the ecosystem. To support this, I am drafting a recovery planning document that involves various stakeholders (stakeholders are people or businesses or organisations that have an interest or concern in what we are doing). Today I am going to be adding the data about the shark numbers, so I am doing some serious spreadsheet analysing and creating lots of informative graphs and infographics to ensure people can clearly see the issue we are trying to solve.

10.30am My brain is mush. So many numbers running through my head! I need a break. I grab my drone and upload the footage to the shared drive so I can analyse the behaviour later and write a report on it. This report will be included in the recovery planning document as evidence of the impact of the decrease in the shark species numbers.

11.00am It's my manager's birthday, so we all stop for a break (and a chat) to enjoy fruit platters and cupcakes. I head downstairs to grab a coffee as well, because I was up at 4am and I am tired!

11.30am Back to my desk to check on the footage. It has uploaded! Yay. No tech issues for me today, so I start the process of taking detailed notes about the behaviour of the sharks. This takes AGES, but I love it because I get to watch animals in their natural habitat for the second time today.

1.30pm I lost track of time. I am hungry. I grab my colleague and we head outside to enjoy some sunshine and some food. Today I am having a lentil dahl. It's delicious. I also saved my cupcake from earlier and have a nice post-lunch treat. Yum.

2.30pm I have a webinar to attend about the role forensics can play in addressing conservation challenges. This is of particular interest to me as I am very curious about what we can learn through forensic science to improve conservation efforts. I have my notepad at the ready.

4.30pm WOW! So much information. So much valuable learning. But I am well and truly spent for the day now and need to head home. It was a very early start and I meant to finish early, but I really wanted to attend that webinar so I could ask some questions at the end.

5.00pm I get home, slip on my slippers, and sit down with the family to ask them about their day. We are all feeling a bit drained, so my partner suggests we get pizza for dinner. I do not object.

7.00pm Dinner was great. The kids are doing their homework. I am going to make a cup of tea and sit down in my favourite chair and do some reading – fiction – because I think I've done enough learning for today.

8.30pm I am going to bed. I was up early and am exhausted. I say goodnight to the fam and head off to probably dream about sharks.

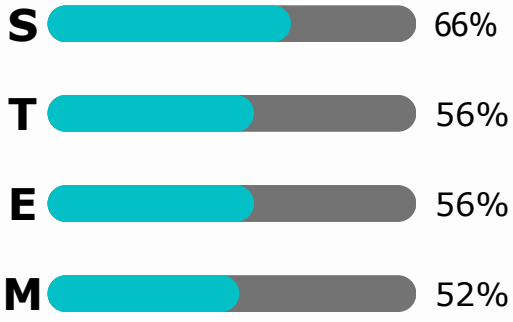
Wildlife Conservation Officer

Phoebe is a wildlife conservation officer. She protects animals and natural environments, stops wildlife criminals, and knows a lot about sharks and stingrays. Find out more at:

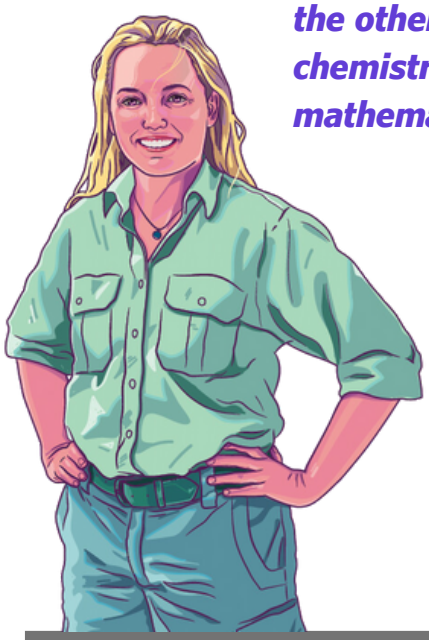
futureyouaustralia.com.au/pathfinders/phoebe

STEM Meter

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



Source: jobsandskills.gov.au



'I wasn't very good at the other sciences, like chemistry or even mathematics.'

5 reasons why you should do this job

1. Protect endangered species
2. Preserve our oceans
3. Discover new sources of medicine
4. Save the bees to secure food production
5. Protect the ecological balance

3 STEM skills required for this job	Subjects to develop these skills
Research	Science, HASS
Data management	Science, Mathematics
Problem-solving	Design and Technologies, Digital Technology