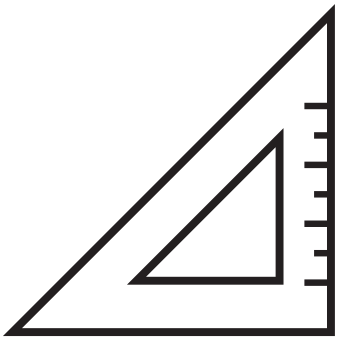
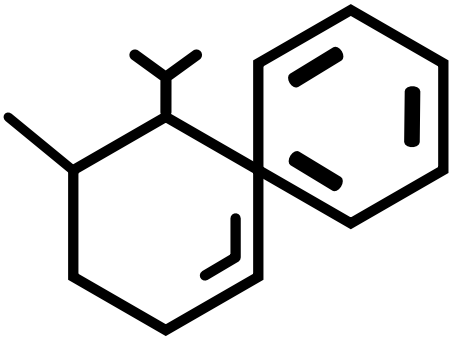
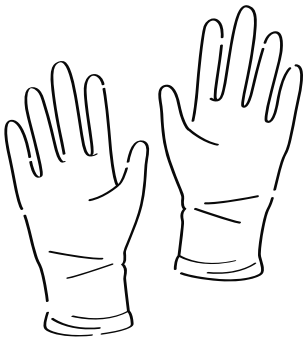
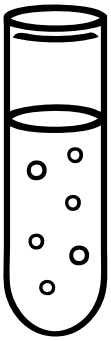
Colour me in and take some mindfulness time

Name:

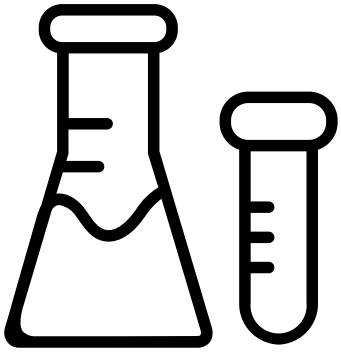


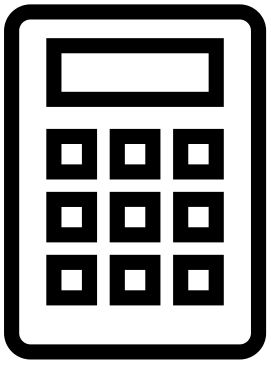


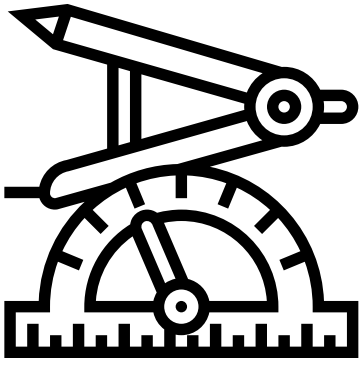


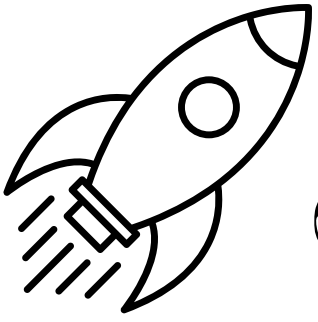


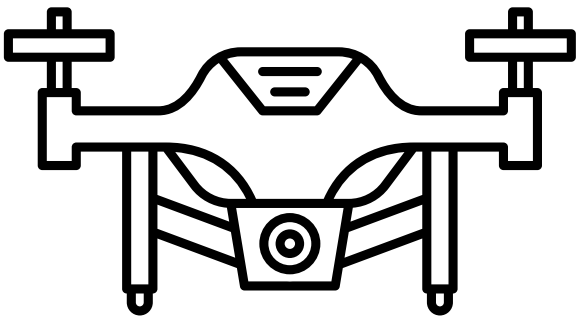
Finding the ME in STEM











Bardie'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

Bardie

Student name:

Comprehension Questions

Name three things Bardie is good at.

1.

2.

3.

What work did Bardie do when she first started her university degree?

What made Bardie switch from a Fine Arts degree to an apprenticeship?

Name TWO things Bardie can't do.

1.

2.

How does Bardie's job help people at an advanced level?

What qualifications does Bardie have?

What four things does Bardie love about her job?

1.

2.

3.

4.

What is Bardie passionate about for her future?

Meet Bardie. She's a carpenter who loves bringing people's visions to life. 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

Carpenter

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

Find 20 words Bardie needs to do her job.

1. PRECISION
2. HAMMER
3. NAILS
4. DRILL
5. MEASUREMENT
6. GEOMETRY
7. SANDING
8. CHISEL
9. CLAMPS
10. CALCULATION
11. DESIGN
12. PLANNING
13. LEVEL
14. RULER
15. JOINERY
16. PROBLEM-SOLVING
17. INNOVATION
18. FABRICATION
19. SAFETY
20. SCALE

Scan this QR code to find out more about Bardiei

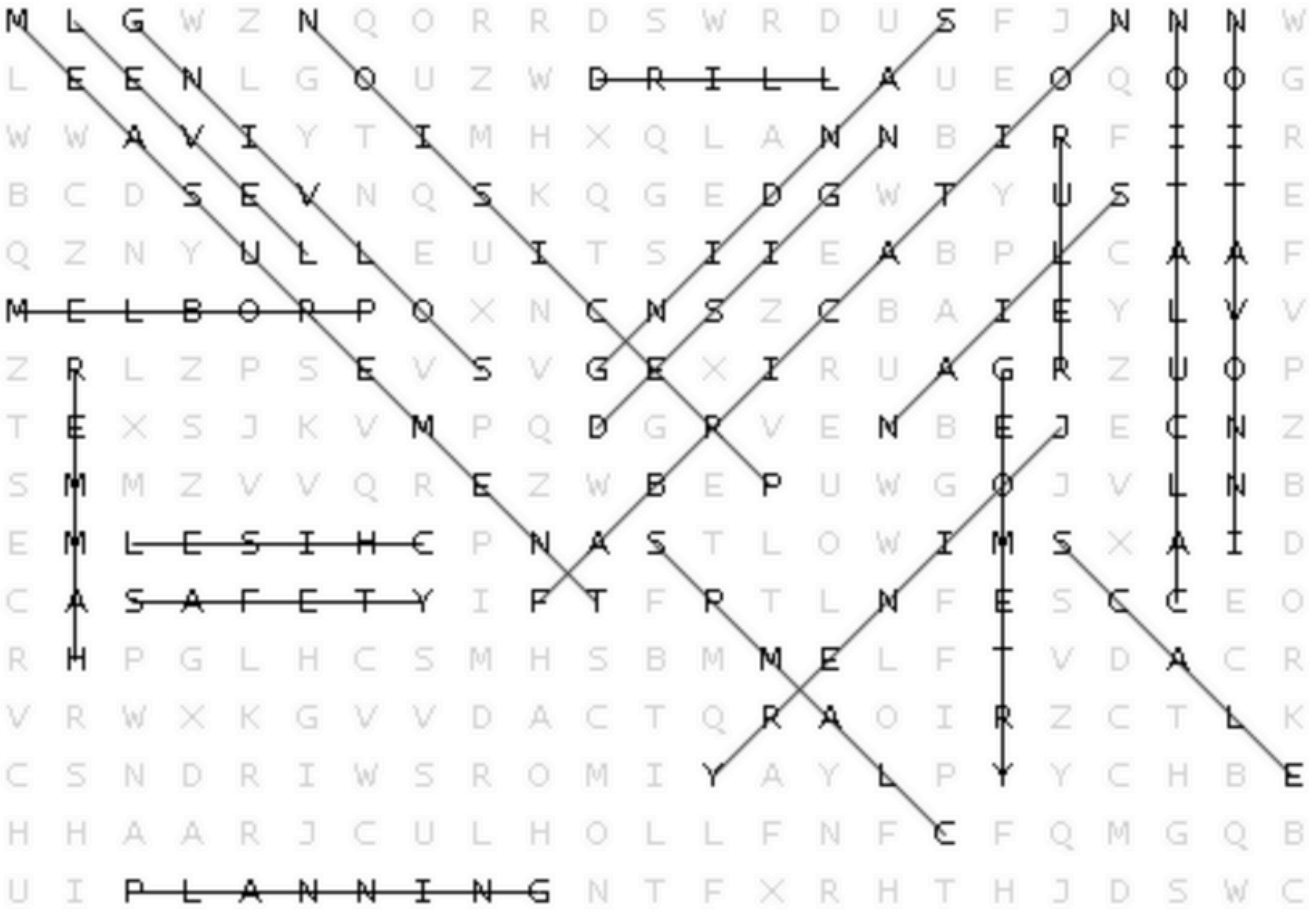
SCAN ME

FUTUREYOU

www.futureyouaustralia.com.au/pathfinders/bardie

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 Bardie might need to do her job?

_____

An example of a day in the life of a carpenter

5.00am I greet the morning sun with a sense of purpose, a habit formed from my years as a carpenter. Before I start my day I make a strong cup of coffee and check the weather forecast knowing that even a hint of rain could disrupt our progress at the build site.

5.15am Time for breakfast before I get dressed in my work pants and work shirt – these are long to protect me from splinters and the sun. I grab my steel-capped work boots so my toes are protected if I drop something heavy, and my toolbelt. I LOVE my toolbelt. It carries all my essentials, such as my hammer, tape measure, pencils and more.

5.45am With another coffee in my hand I set off for the build site where I'm part of an exciting project: constructing environmentally friendly duplexes. It's a job that goes beyond carpentry. It's about helping people build their homes in a sustainable way.

6.30am The day begins with the whole team reviewing our project plan and consulting the architectural blueprints. Here, STEM skills come into play. We calculate load-bearing capacities, analyse structural integrity and ensure that the eco-friendly materials we use are both durable and energy-efficient. Carpentry, in this context, is a blend of art and science.

10.00am As the morning progresses, I'm in my element. Once I grab my safety goggles, dust mask and knee pads I get to work measuring, cutting, and assembling wood with precision. Each piece I work on is a contribution to these sustainable homes so I ask some of the more experienced carpenters to check my work. They're always happy to lend a hand and offer some guidance.

Midday Tools down on the site and we all take a break. Lunch is fun on the work site. We all get to have a laugh and recharge. I enjoy some leftovers from last night. It's important I eat food that gives me enough energy for the afternoon ahead.

1.00pm It's time to focus on the fine details that make these duplexes environmentally friendly. I support the team with the installation of the energy-efficient windows and use this opportunity to learn more about sustainable materials all while maintaining a keen eye for precision and quality.

3.00pm I help clean up the build site and secure the tools. Safety and organisation are important in construction to minimise waste and maximise efficiency.

5.00pm Time to switch gears. I head to the gym for a workout because being fit is important in my job. A workout routine keeps me fit and also sharpens my problem-solving skills which I apply at work.

6.30pm I meet up with friends for dinner. We share stories, laughter, and I talk about all the incredible things I have been learning about sustainable living. My friends are all ears – the environment is really important to all of us.

8.00pm I get home and do some sketching of design ideas for future sustainable projects. I apply all the knowledge I learnt today at work to help me design innovative and eco-friendly housing solutions. One day I want to have my own business, building sustainable, beautiful homes.

9.00pm I collapse into bed. My body and my mind are both happy, but exhausted and they need some serious rest.

Qualified Carpenter

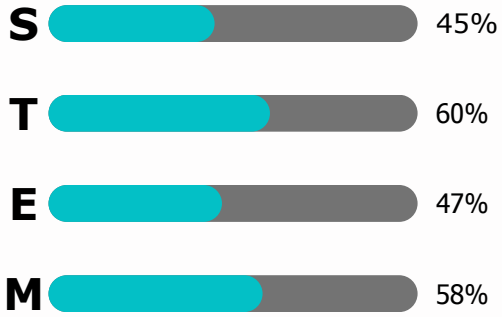
Bardie is a qualified carpenter and site manager who loves problem-solving and working with her hands. After becoming a labourer while studying for a Bachelor of Fine Arts, Bardie discovered a flair for carpentry and decided to pursue an apprenticeship. Find out more:

futureyouaustralia.com.au/pathfinders/bardie

'I want my career to continue to help me work with purpose and intent for those in the industry now, and in the generation to come.'

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. You get to build really cool stuff
2. Work with all sorts of tools and gadgets
3. Solve puzzles
4. You get to work outside
5. Help others

3 STEM skills required for this job	Subjects to develop these skills
Critical thinking	Science, Mathematics, Digital Technology
Mathematics	Mathematics
Problem solving	Design and Technologies, Digital Technology