

Welcome to Future You



Future You is an initiative from the Australian Government's Women in STEM Ambassador, funded and supported by the Commonwealth Department of Industry, Science and Resources.

Future You addresses stereotypes, misconceptions and biases about science, technology, engineering and mathematics (STEM). It's a free program designed to increase participation in STEM by inspiring children aged 8 to 12 to explore STEM themes.

What do we offer?

- Free classroom resources aligned with the Australian Curriculum V9.0.
- Five STEM-fiction stories to excite imaginations and inspire exploration.
- First-hand accounts from people using their STEM skills to make the world a better place.
- Information and practical tools for parents and kids about STEM skills and careers.

Here are two sets of resources we think you'll love using in your classroom:

Pathfinders

Introduce your students to interesting people working with STEM skills to make the world a better place. We know how important role models are for inspiring young people's career choices, and you can't be what you can't see, which is why we have interviewed fascinating people who come from various backgrounds to ensure every child can see themselves working in STEM.

Imagining the Future

Take your class on an incredible journey into the world of space exploration with Imagining the Future. Set in the vastness of space, these five stories delve into different sectors of STEM, offering a captivating exploration of robotics, AI, climate change, resource management and more. These stories will inspire your students to envision their own STEM space careers.

Classroom activities

We've developed practical activities you can use in your lessons to make learning experiences socially relevant. Did we mention they're aligned to the Australian Curriculum V9.0?

See you in the future

We have developed a wide range of free resources to support teachers, parents and kids to discover the amazing world of STEM. Discover them all at www.futureyouaustralia.com.au

FUTUREyou

What's in this pack

This pack includes activities that are all related to Lisa's career. Each Pathfinder has its own Teacher's Pack. You can find them on their individual pages or on the resources page under the *Pathfinders* or *Teach* tabs.

Our Imagining the Future short-fiction series also includes fantastic resources you can use in the classroom. The Bloom's Taxonomy and Gardner's Multiples Intelligences activity matrix includes a wide range of activities for your lesson plans that cover multiple areas and year levels in the Australian Curriculum V9.0.



Capability Convos

A short starter activity that can be adapted to other uses to get students thinking about the General Capabilities statements in the National Curriculum V9.0

Comprehension questions

Read about Lisa's career journey as a class or individually, and then your students can practise their comprehension skills by answering these questions (answers included).

Career information sheet - for adults

This document provides practical advice for adults who are looking for ways to support students in understanding the different pathways they can take into specific career roles. This information sheet can also be passed on to parents if a student demonstrates an interest in a particular career area.

Classroom wall poster

An attractive poster that can be printed out and placed on a wall to highlight some of the skills required in Lisa's career so students can see themselves reflected in those skills.

Student skills brain break

Students can undertake this activity for mindfulness while thinking about their own skills and talents.

Word-search answers

The student's pack includes a word search with words relevant to Lisa's career. Find the answers here.

Capability Convos

Australian Curriculum V9.0 links for
Years 3 to 7

English

- Language
- Literacy

General Capabilities:

- Critical and Creative Thinking
- Personal and Social Capability
- Ethical Understanding
- Literacy

Learning outcomes:

All students will be able to:

- identify some likes, dislikes, strengths, abilities and/or interests when showing a personal preference
- acknowledge that people have different needs, emotions and abilities

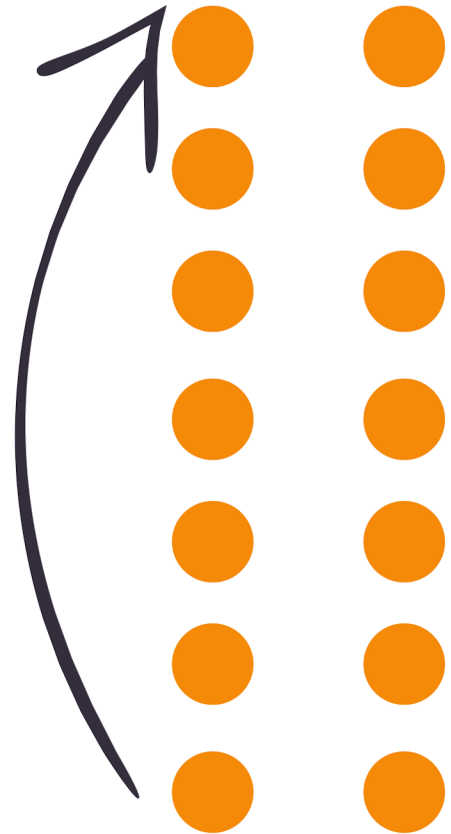
In addition, some students will be able to:

- describe the ways they are connected and can contribute to their community groups

Format

- Interactive game with 10 questions
- Easy to play
- Read Meet Lisa to learn more about Lisa's job and journey with the class
- Print the questions
- Play the game
- Modify or include new questions based on students' needs

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out more about me.



Instructions for students

Line the class up in two lines facing each other to form pairs. Ask the first question. Once each pair has discussed it, get one line to move one person to their right. The person at the end runs around to the other end of the line. Then you ask the next question and repeat the process until all the questions have been asked.

Lisa Astrophysicist

Question 1

What do you think is interesting about Lisa's career?

Question 2

What skills does Lisa have that you also have, and does she have any skills you don't have that you would like to have?

Question 3

Why do you think it's important to find a career that suits your skills and personality?

Question 4

How are your interests and hobbies similar or different to Lisa's career?

Question 5

How do you think Lisa's career contributes to society?

Question 6

What sort of benefits do you think Lisa might have doing this job in a rural or remote location?

Question 7

How important are mathematics and engineering in Lisa's job? Can you think of some examples?

Question 8

What tools or technology do you think Lisa needs to do her job?

Question 9

How do you think AI might change Lisa's job in the future? Can you think of some examples?

Question 10

What do you think would be the biggest challenge in pursuing a career as an astrophysicist?

Comprehension Questions

Australian Curriculum V9.0 links for Years 3 to 7

English

- Literacy

General Capabilities:

- Literacy

Learning outcomes:

All students will be able to:

- Identify that all people have strengths and weaknesses
- Actively think about what is happening in various texts as they read them
- Apply comprehension strategies to different media formats

In addition, some students will be able to:

- Identify different reasons for doing different jobs

Instructions:

- Format/print the students' question sheets (or load them onto school LMS) and direct students to a copy.
- Read the questions as a class to start, discussing any meanings
- Discuss with the class strategies for being able to answer the questions as they read about Lisa
- Read about Lisa as a class, encouraging students to answer questions as you go

Adaptation note: Questions can be modified on the PDF to meet students' needs or learning focus areas in your classroom

Comprehension questions

1. What three job titles does Lisa give herself?
2. What does Lisa love about her job?
3. What inventions are astronomy responsible for?
4. What does Lisa want to do?
5. What two things is Lisa not good at?
6. What two things Lisa is good at?
7. What does astronomy help us to understand?
8. What big decision did Lisa make when she was 11?

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Answers:

1. She's an astrophysicist, astronomer or stargazer
2. She loves seeing galaxies whose light has taken more than a billion years to reach Earth.
3. Medical scanners and wifi
4. Help people fall in love with the night sky, no matter their background
5. Throwing a frisbee and doing sums in her head
6. Writing books and stand-up paddleboarding
7. Where we came from
8. She didn't want to go to regular school anymore.

Comprehension Questions

What three job titles does Lisa give herself?

1.

2.

3.

What two things is Lisa not good at?

1.

2.

What does Lisa love about her job?

Name two things Lisa is good at.

1.

2.

What inventions are astronomy responsible for?

1.

2.

What does astronomy help us to understand?

What does Lisa want to do?

What big decision did Lisa make when she was 11?

Astrophysicist

Lisa is an astrophysicist who loves seeing galaxies whose light has taken more than a billion years to reach Earth. Lisa was homeschooled from the age of 11 and has worked on exciting projects like the Australian Square Kilometre Array Pathfinder telescope at CSIRO. Find out more:

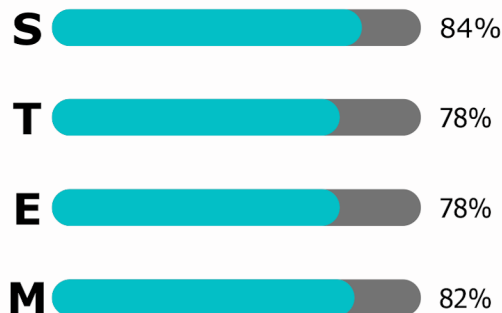
futureyouaustralia.com.au/pathfinders/lisa



“Astronomy helps us to understand where we came from, connect with the universe, and develop awesome inventions like medical scanners and wifi.”

STEM Meter

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



Source: jobsandskills.gov.au

Job stats and facts

Future job growth: Over the next five years jobs in this field are expected to grow moderately.

Location: Astrophysicists can work from anywhere.

Employment pathways: A bachelor degree in a related field is required.

3 STEM skills required for this job	Subjects to develop these skills	3 other jobs that value this skill
Reading comprehension	English	Data Scientist, Lawyer, Radiologist
Critical thinking	Science, Mathematics, Digital Technology	Human Resources Manager, Software Engineer, Veterinarian
Complex problem solving	Design and Technologies, Digital Technology	Video Game Developer, Air Traffic Controller, Social Worker

Other careers related to this line of work



Economy

Human Resources Specialist
Social Worker
Psychologist
Market Researcher
Criminal Investigator



Education

Physics Teacher
Planetarium Educator
Science Communicator
STEM Outreach Coordinator
Curriculum Developer



Leadership

Project Administrator
Research Director
Chief Science Officer
Space Program Manager
Chief Technology Officer



People

Science Journalist
Science Policy Analyst
Science Museums Director
Astronomy Outreach Coordinator
Science Librarian



Environment

Environmental Scientist
Atmospheric Scientist
Geophysicist
Space Weather Forecaster
Astrobiologist

The world is changing rapidly, and this means the career possibilities available to our kids are wide-ranging and exciting (and probably, don't exist yet!).

From traditional vocations to emerging fields, there are countless pathways to be explored.

Parents and teachers can create environments that encourage kids to discover and investigate possible careers that match their skills and interests.

We've included some links to other valuable resources that can help guide career conversations and explorations. Find out more at:

www.futureyouaustralia.com.au/resources/other

Lisa is an astrophysicist

NOT GOOD AT

throwing a frisbee and
doing sums in my head

LOVES

seeing galaxies whose light
has taken more than a
billion years to reach Earth

CAREER

Astrophysicist, astronomer,
stargazer

STUDIED

Master of Physics and has a
Ph.D. in Radio Astronomy

EXPERT ON

helping people connect
with the universe and
improving equity in STEM

WANTS TO

help people fall in love
with the night sky

GOOD AT

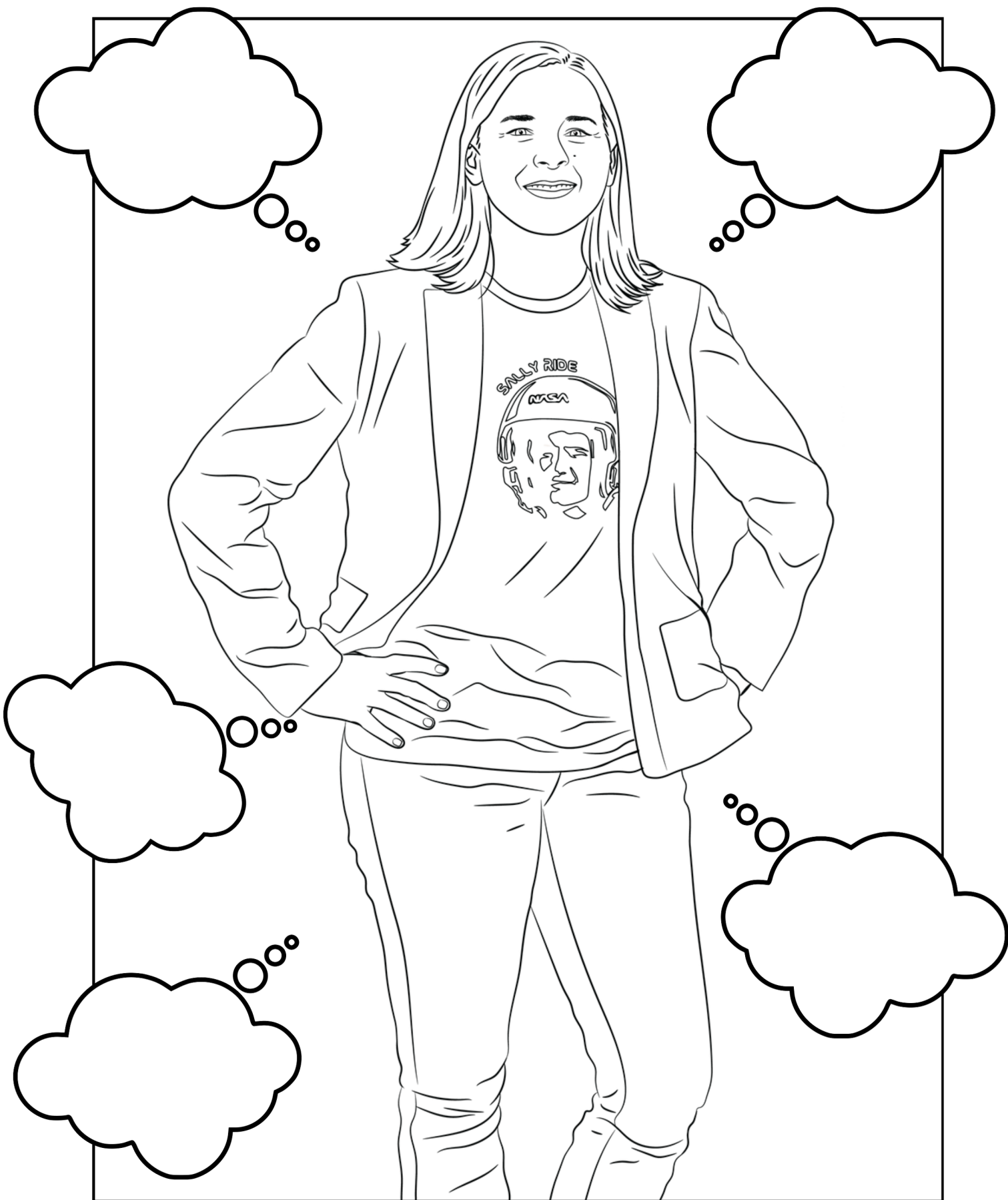
writing books and
stand-up paddleboarding

HAPPIEST WHEN

walking up mountains or
cuddling dogs

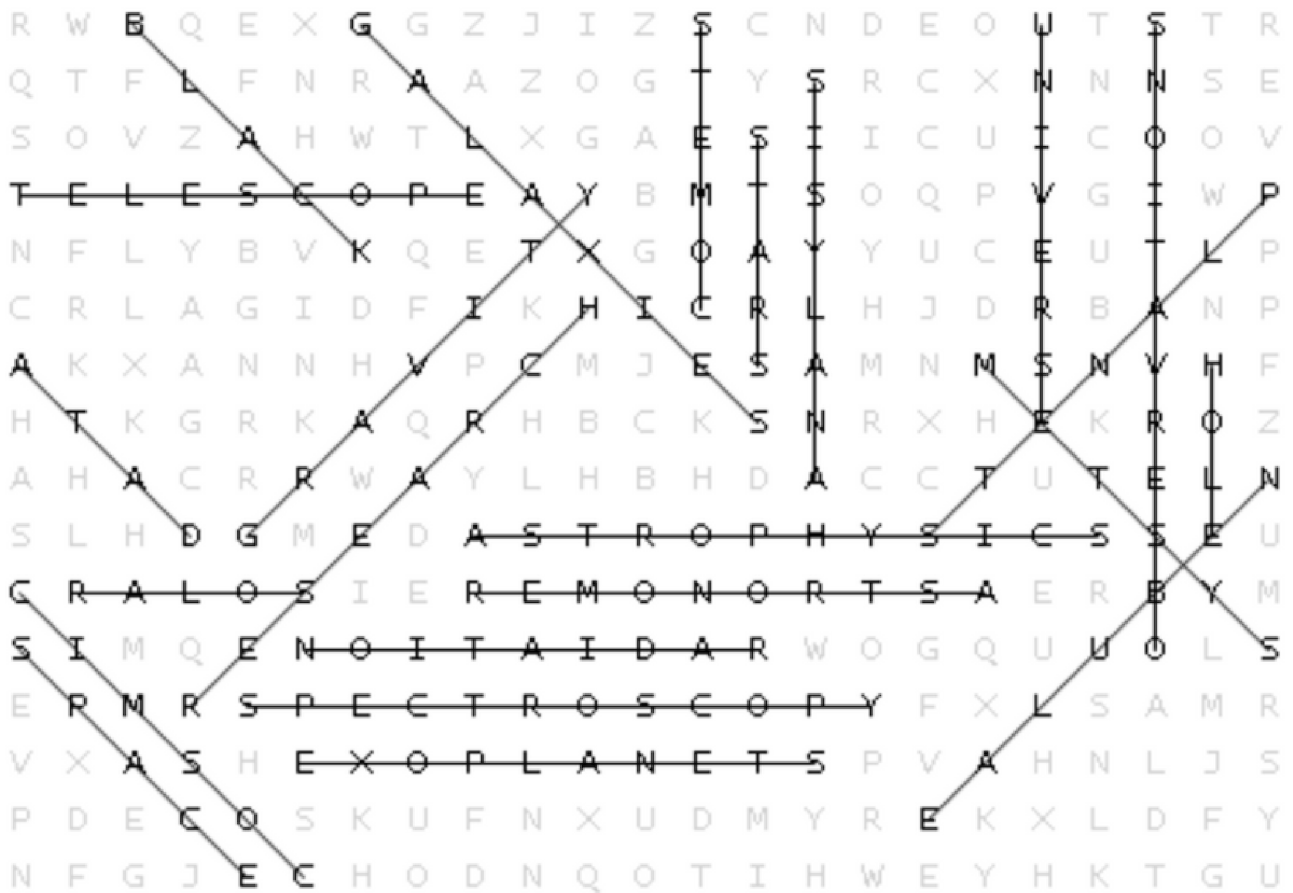


Meet Lisa. She's an astrophysicist who loves seeing galaxies whose light has taken more than a billion years to reach Earth. Fill in the bubbles with 5 STEM (Science, Technology, Engineering and Mathematics) skills she uses in her job. Which of these skills do you think is most important? Which do you think would be the hardest to develop? When you've thought of the skills, colour in the rest of the image.



Pathfinder Workwords

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 Lisa might need to do her job?
