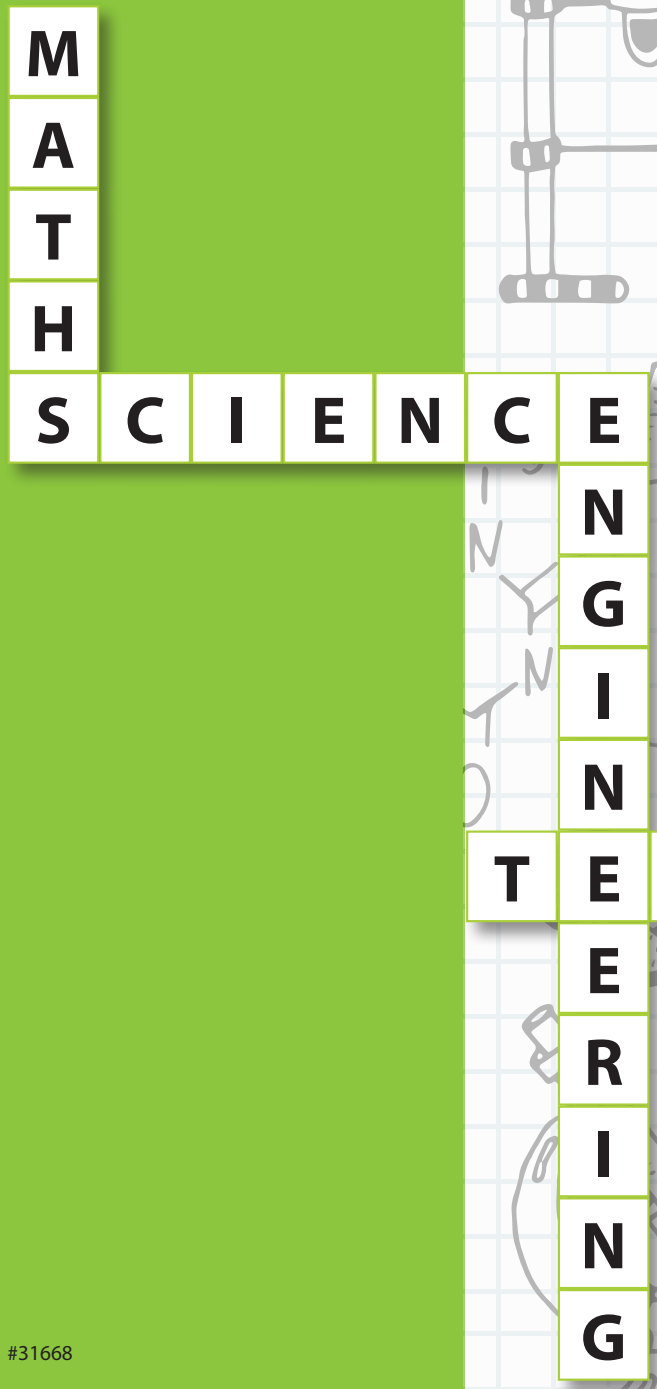

AWESOME ACTIVITIES

#31668

Dr Ali Zaid

Ali is an immunologist. He studies the cells that protect the body against viruses, and finds ways to help them fight better.

When he's not finding new things, Ali will be outside or rock climbing.

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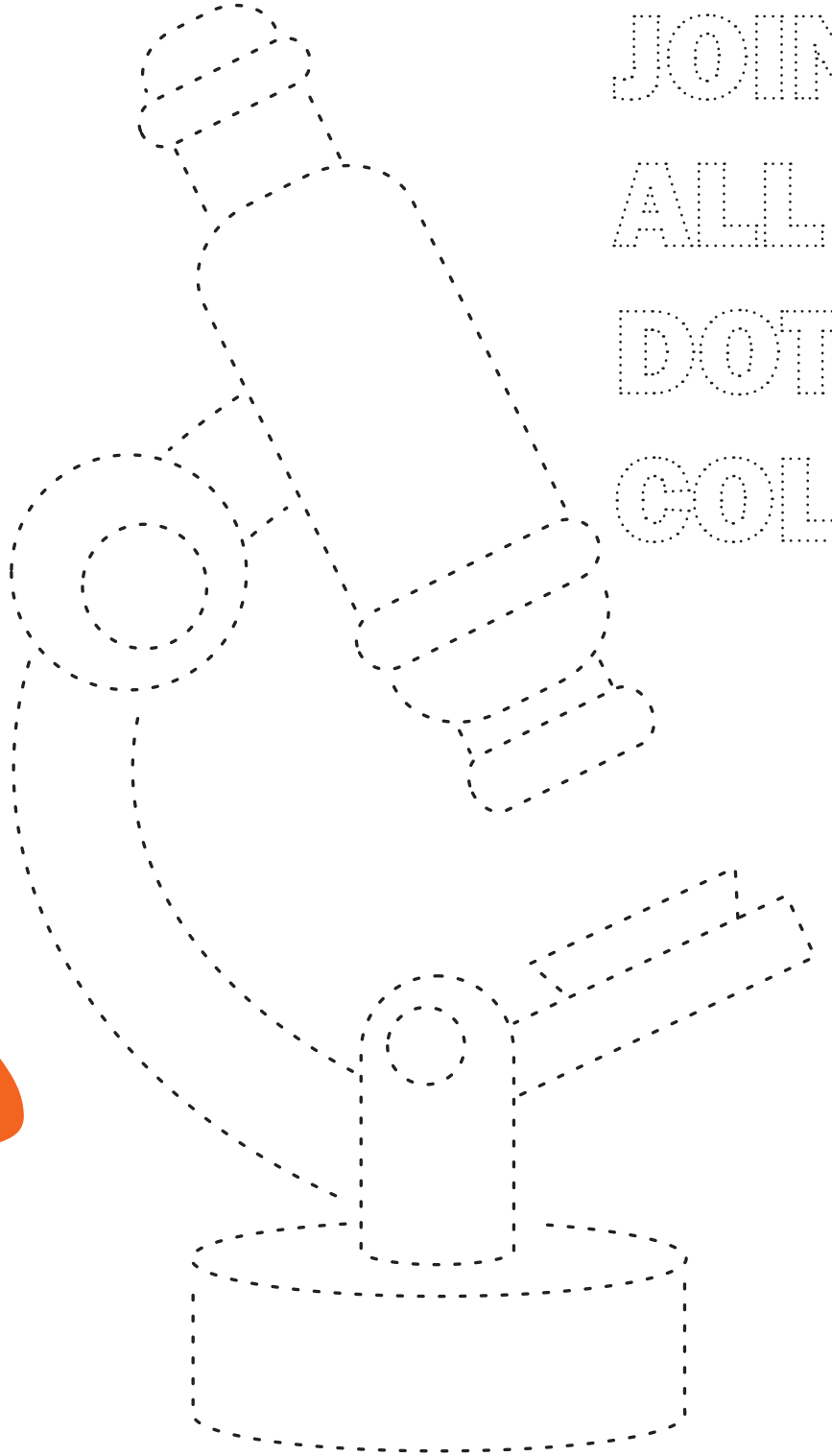
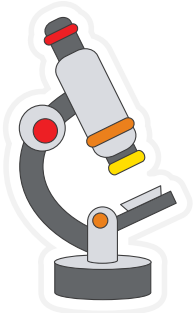
JOIN ALL THE DOTS AND COLOUR IN





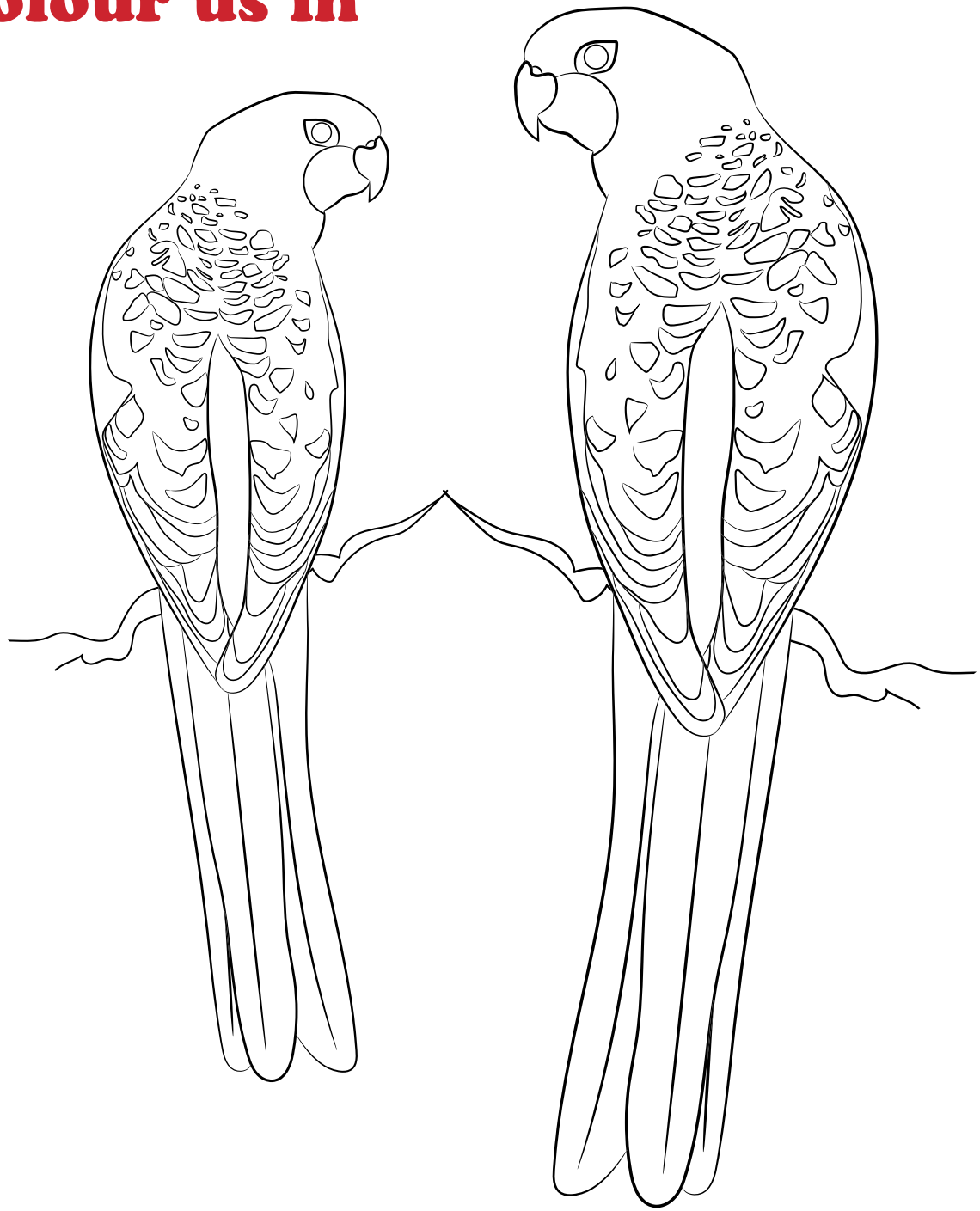
Dr Alienor Chauvenet

Alienor's research is about finding ways to protect the environment and save Australian species from extinction.

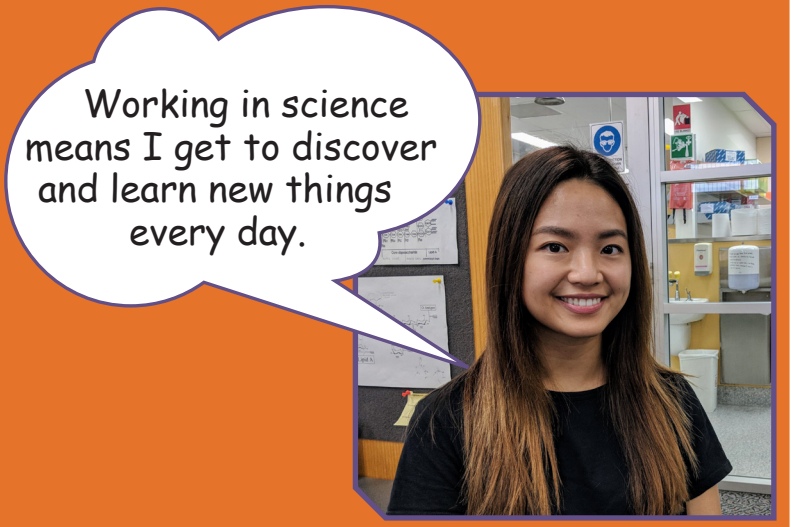
She owns two cats, which she brought with her from the United Kingdom. They live inside to protect our native wildlife.

Shutterstock.com

Colour us in



Amy Chan



Amy studies how our immune system keeps us healthy and fights off bad bacteria.

Amy has always loved science. As a child, she would mix different coloured dyes in glass jars and pretend to perform chemical experiments. Now she gets to do real science and work with real chemicals.

istock.com

Play SNAKES AND LADDERS

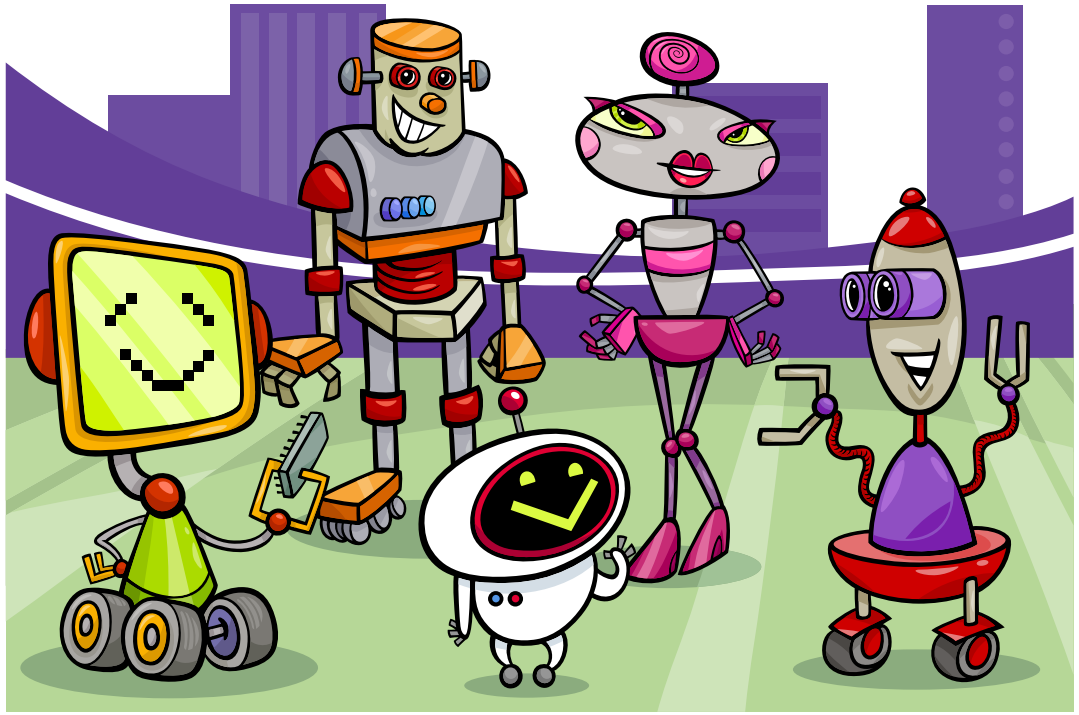
Climb up the ladder and slide down the snake. (You will need dice to play.)

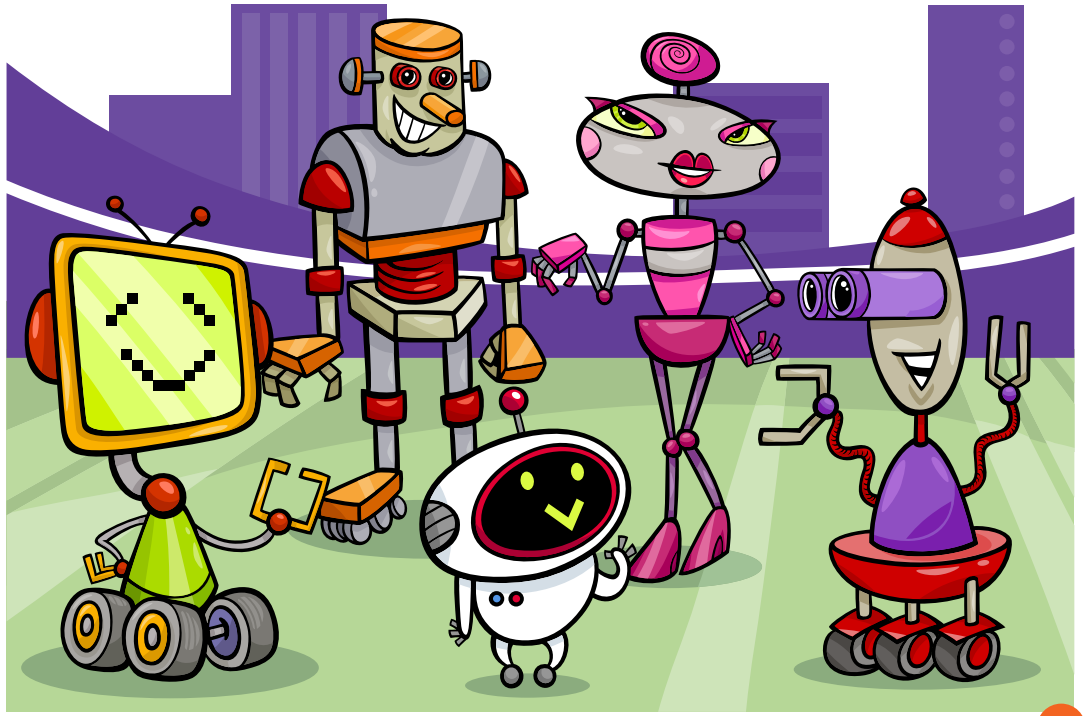
Dr Anjali Jaiprakash

Anjali builds robot tools that help doctors to make patients better.

Anjali loves art and always wanted to be an artist. She thinks art and design can work well with science and technology to come up with new solutions to our problems.

? FIND 10 DIFFERENCES





Shutterstock.com

Dr Anna Hatton

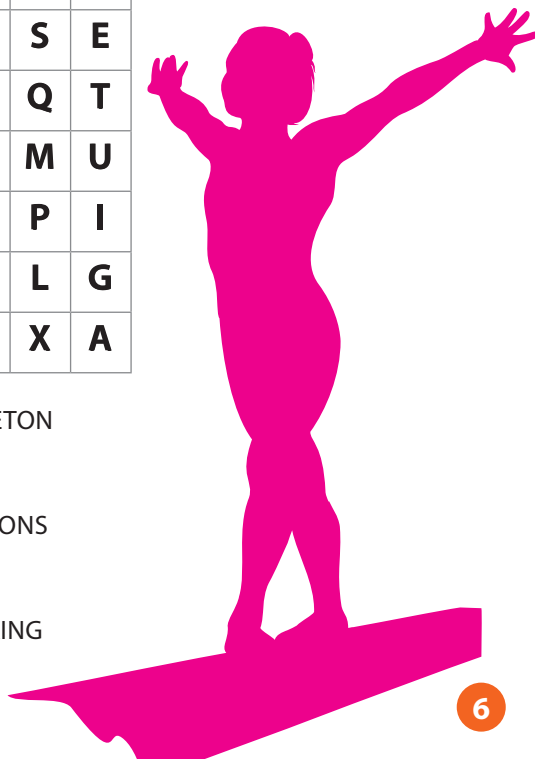
Anna explores how the body moves and develops new treatments for people with diseases that cause them to lose balance.

She is very talented. She appeared on television with her high school biology teacher, performing a dance that showed how cells divide.

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

Can you find all 20 words about the human body and health science?

ACTIVITY
BALANCE
BONES
DISEASE
EARS
EYES
FALLS
FEET
HEALTH
HOSPITAL
HUMAN
JOINTS
MUSCLE
NERVES
SENSES
SKELETON
SKIN
TENDONS
TOES
WALKING



Word search created by Puzzlemaker at DiscoveryEducation.com

Dr Barnaby Dixson

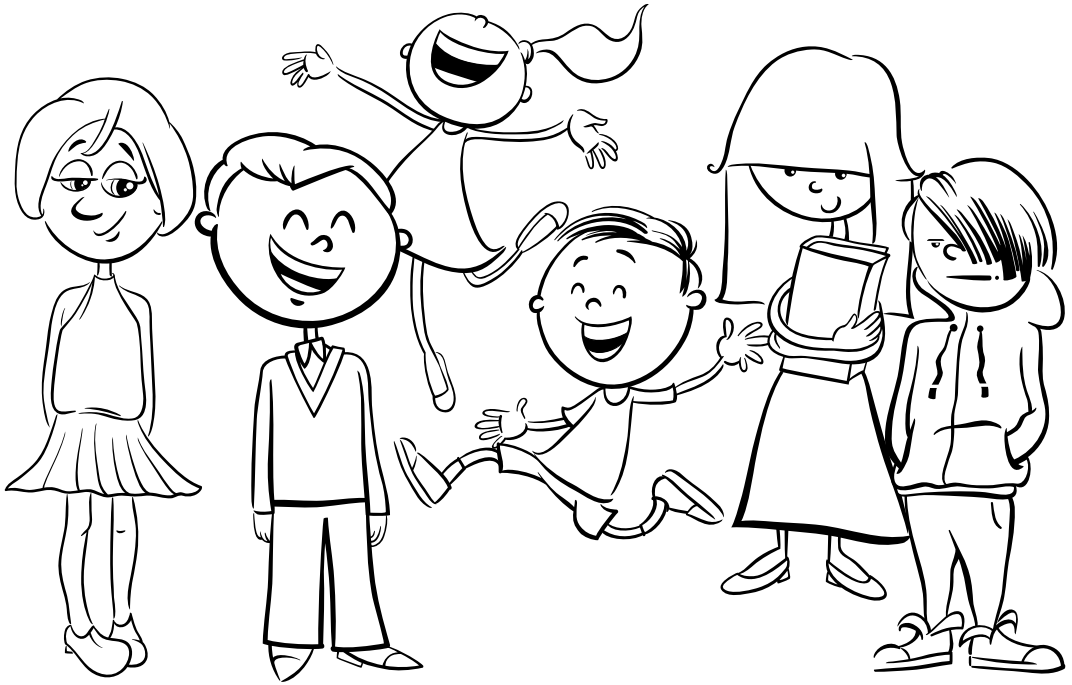
Barnaby studies what people from different parts of the world think about faces and bodies.

He really loves music and has collected thousands of vinyl records. When he was younger he wanted to be an explorer and travel to far away places to find out what makes them special.

Shutterstock.com

SPOT 6

differences and then colour in!

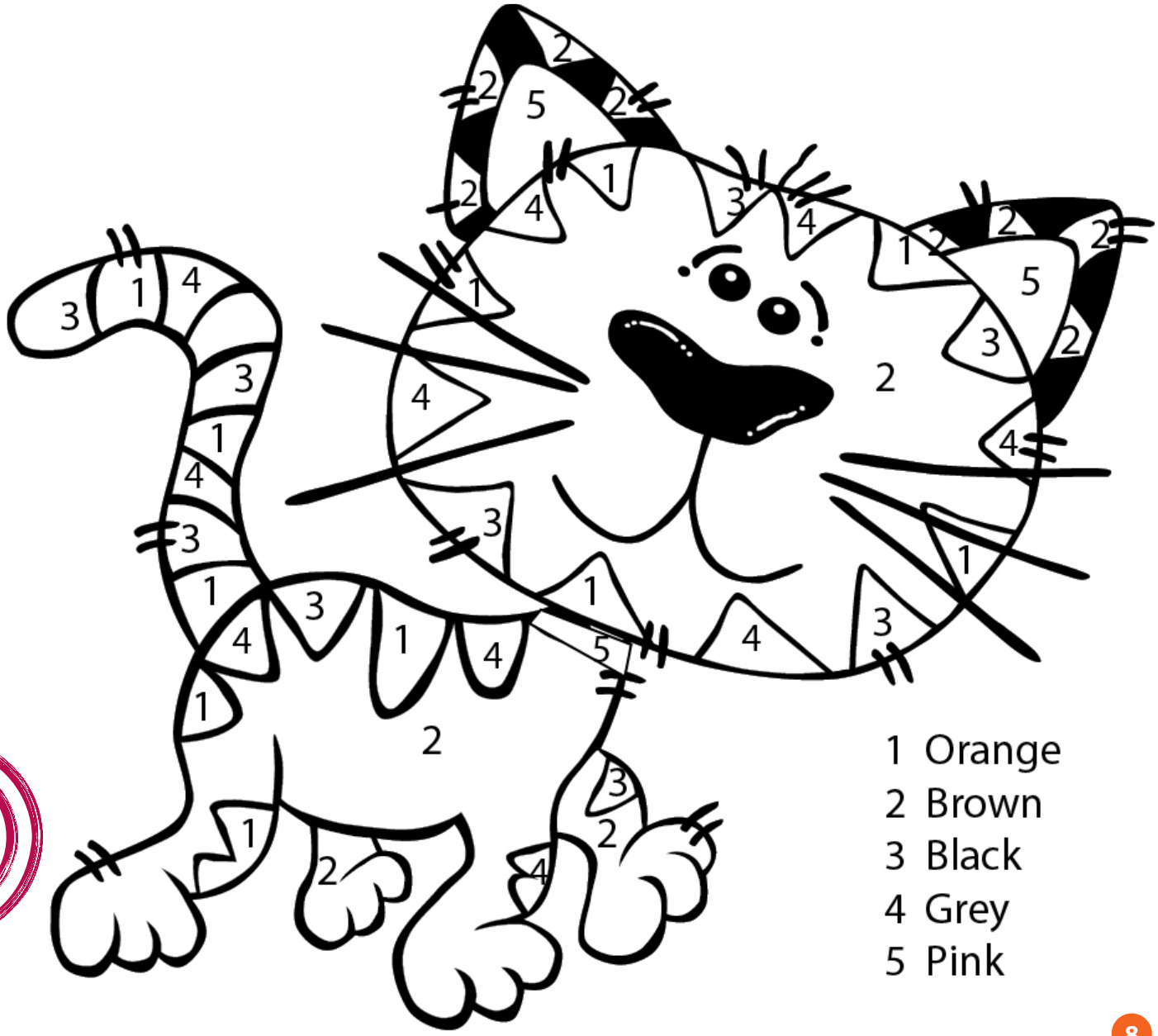


Belinda Spratt

Belinda uses numbers and computers to help make sure people have their operations on time.

When she was younger Belinda wanted to be a vet so she could work with cats and dogs. Today, she has her own cat named Darwin who plays fetch!

Colour by numbers ...



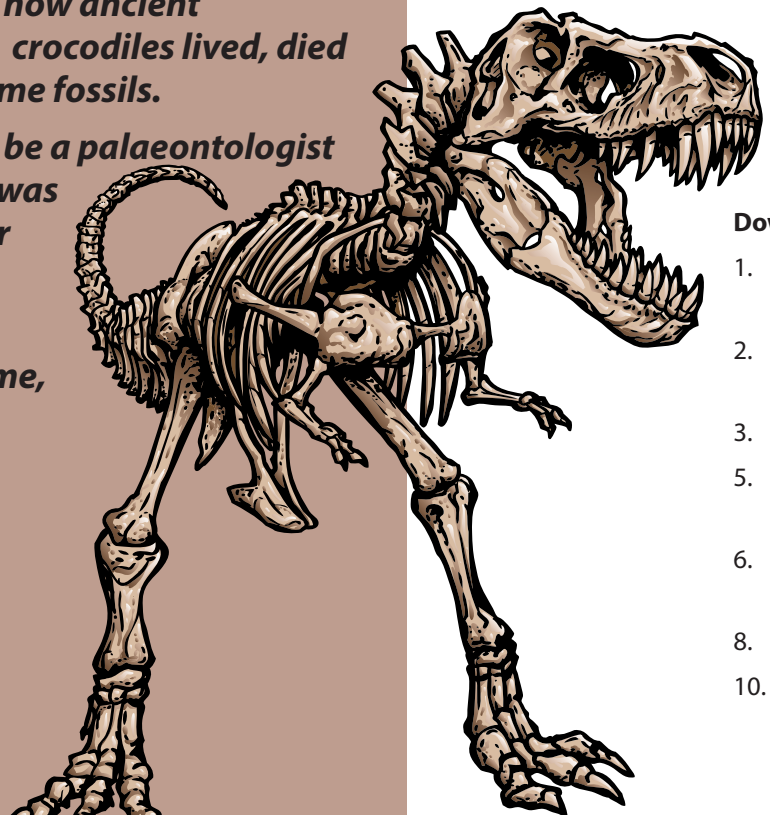
1 Orange
2 Brown
3 Black
4 Grey
5 Pink

Dr Caitlin Syme

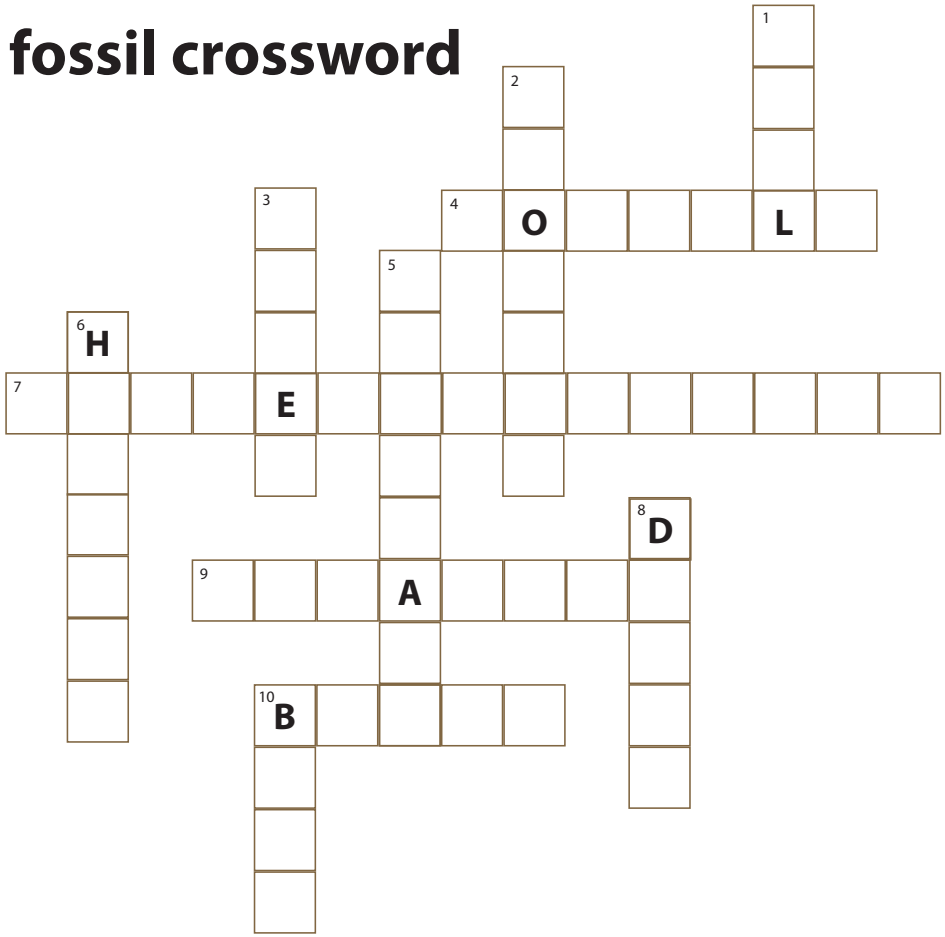
Caitlin studies how ancient dinosaurs and crocodiles lived, died and then became fossils.

She wanted to be a palaeontologist ever since she was young, and her dreams have come true.

In her spare time, Caitlin enjoys playing video games.



Complete the fossil crossword



Down

1. Some Australian fossils are preserved in this gem stone
2. Process by which soil is worn away by natural forces
3. Makes up your skeleton
5. *Stegosaurus* and *Tyrannosaurus* are a type of ...?
6. The natural environment in which an animal or plant lives
8. To rot or decompose
10. To cover a dead animal in soil

Across

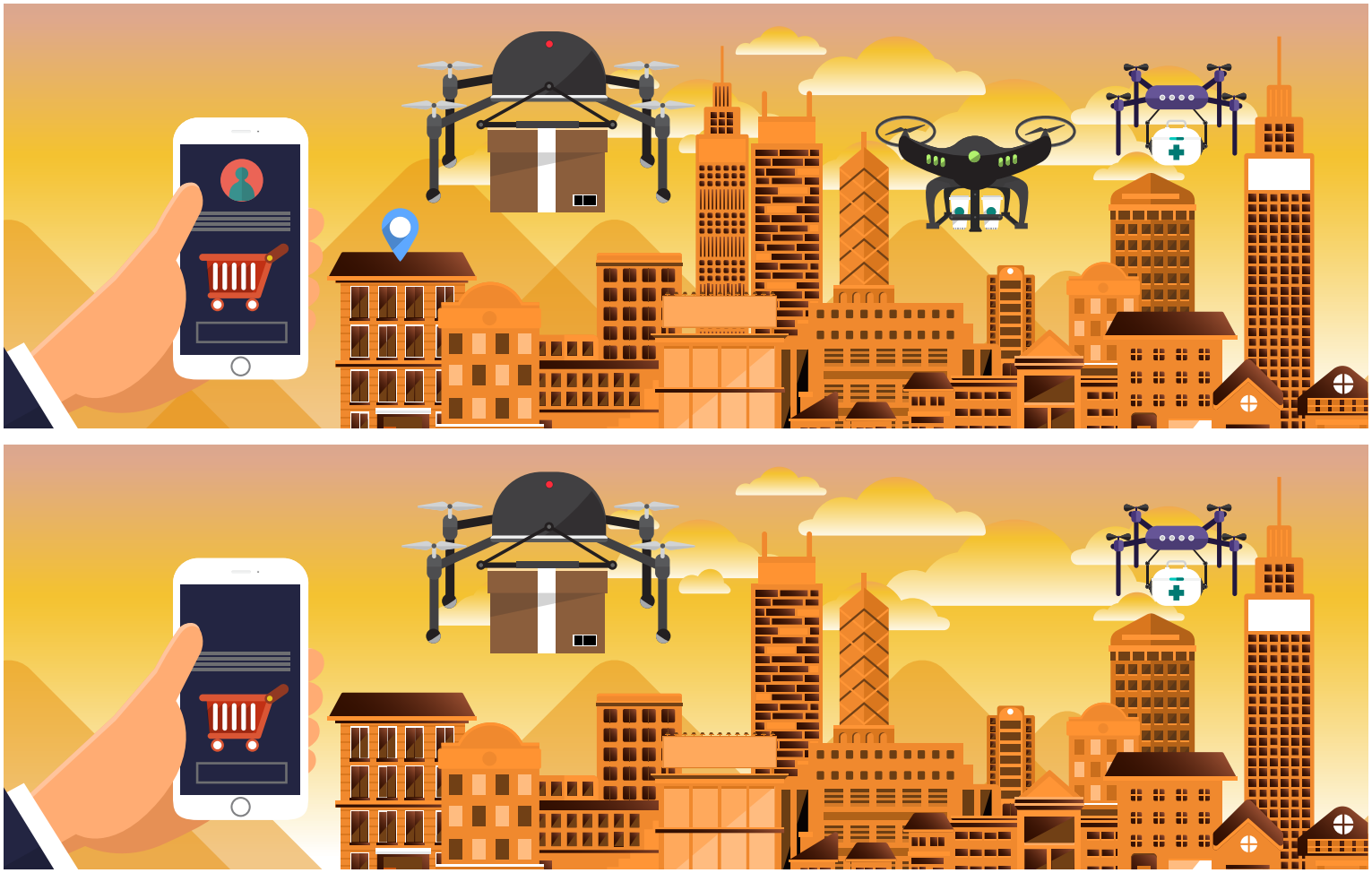
4. Remains preserved in rock
7. A scientist who studies fossils
9. To dig up buried things
10. The only group of dinosaurs alive today (hint: flying animals)

Dr Catherine Ball

SPOT 5 *differences*

Catherine uses drones for good—saving lives and protecting the environment.

As a little girl, Catherine wanted to help people who were in trouble. Her dream has come true.



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Cecile Godde

I love meeting new people and travelling around the world.

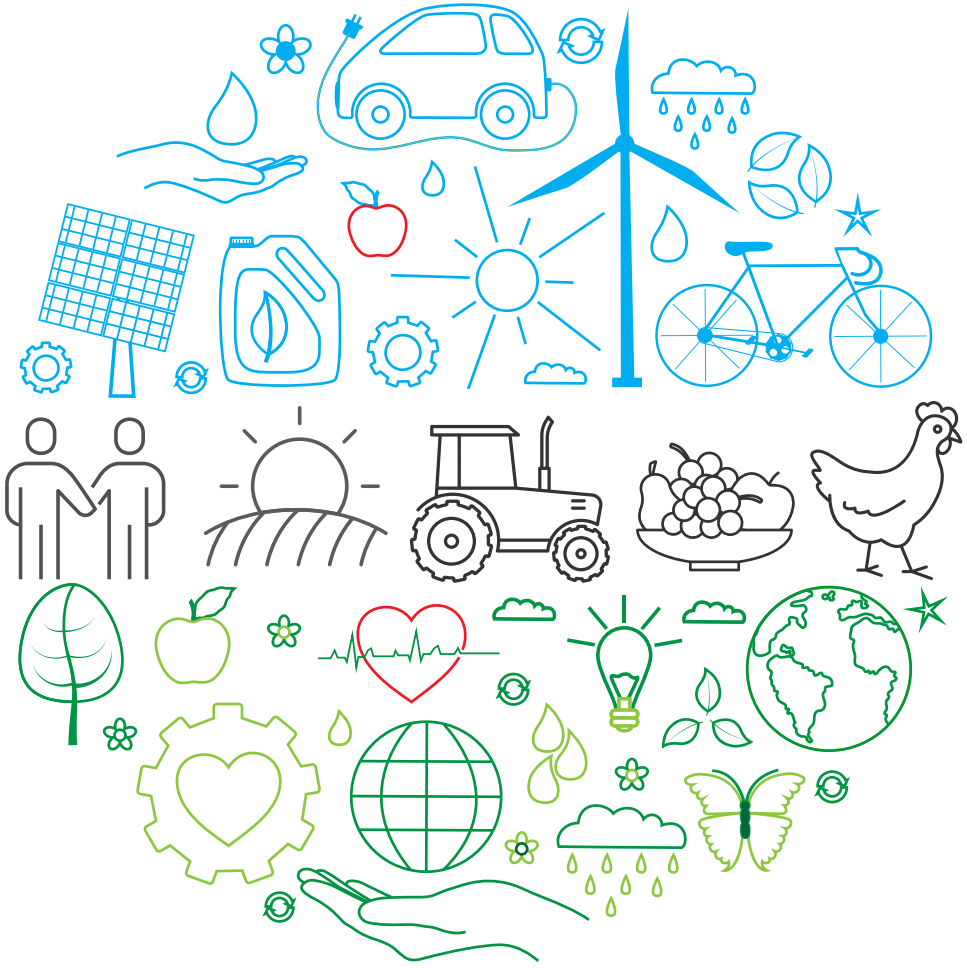
Cecile uses computers and maths to find ways to feed the world without harm to our planet.

In 2018, Cecile spent one month in Antarctica, where she and 78 other women learnt about science and leadership … and saw penguins!

Let's work together for a healthier planet!

Here are some ideas you can champion at home:

- ☑ **Use a re-usable water bottle instead of a single-use plastic bottle.**
- ☑ **Turn off the lights when you leave the room.**
- ☑ **Unplug phone chargers and turn off your computer monitor when you're not using it.**
- ☑ **If the airconditioning is on, shut the windows. If it's off—open them.**
- ☑ **Reduce food waste.**
- ☑ **Recycle whenever possible.**
- ☑ **Take shorter showers to save water.**

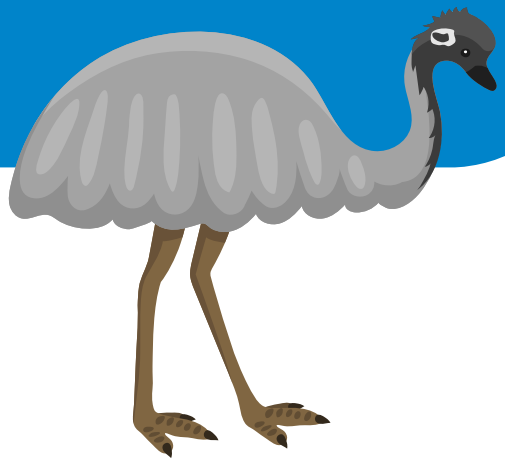


Dr Celine Frere

I love studying native animals and helping to conserve endangered species.

Celine looks at animal behaviour to discover how different species adapt to changes in the environment.

Celine spends a lot of time looking for animal scat (poo). Scat can tell us how healthy animals are.



Unscramble the letters to find 20 native animals

ADHECIN

KRAKOUROAB

OAGNKARO

OLLQU

PUSMOS

COOKCOAT

PTYLAUSP

WARYCASSO

LAKOA

BACREDK PERISD

DIONG

BYBIL

ALBYLAW

LABCK SNWA

BAWMOT

ANGONA

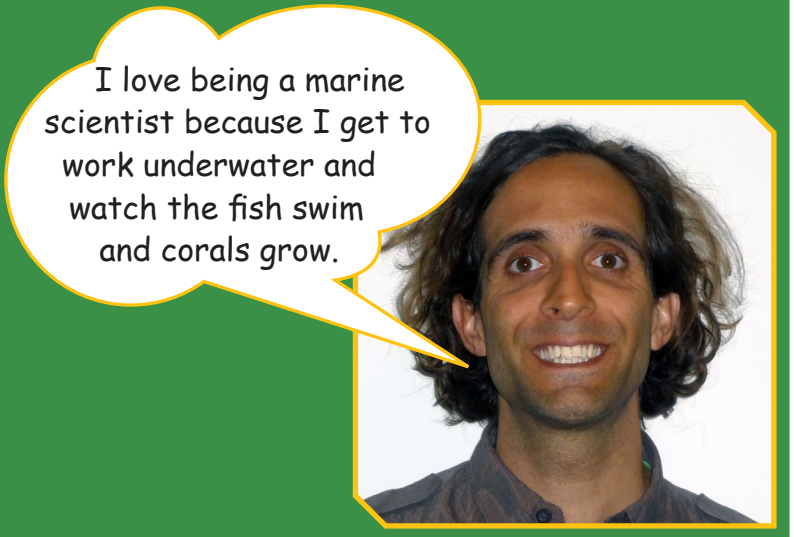
EUM

FICOWLNSH

BIRERDLY

LNEFUN EWB SERPID

Dr Christopher Doropoulos



Chris works with baby corals to see how they grow big and strong to build reefs for all the other animals.

Before Chris was a scientist he was a drummer for three different bands and played music in Australia and England.

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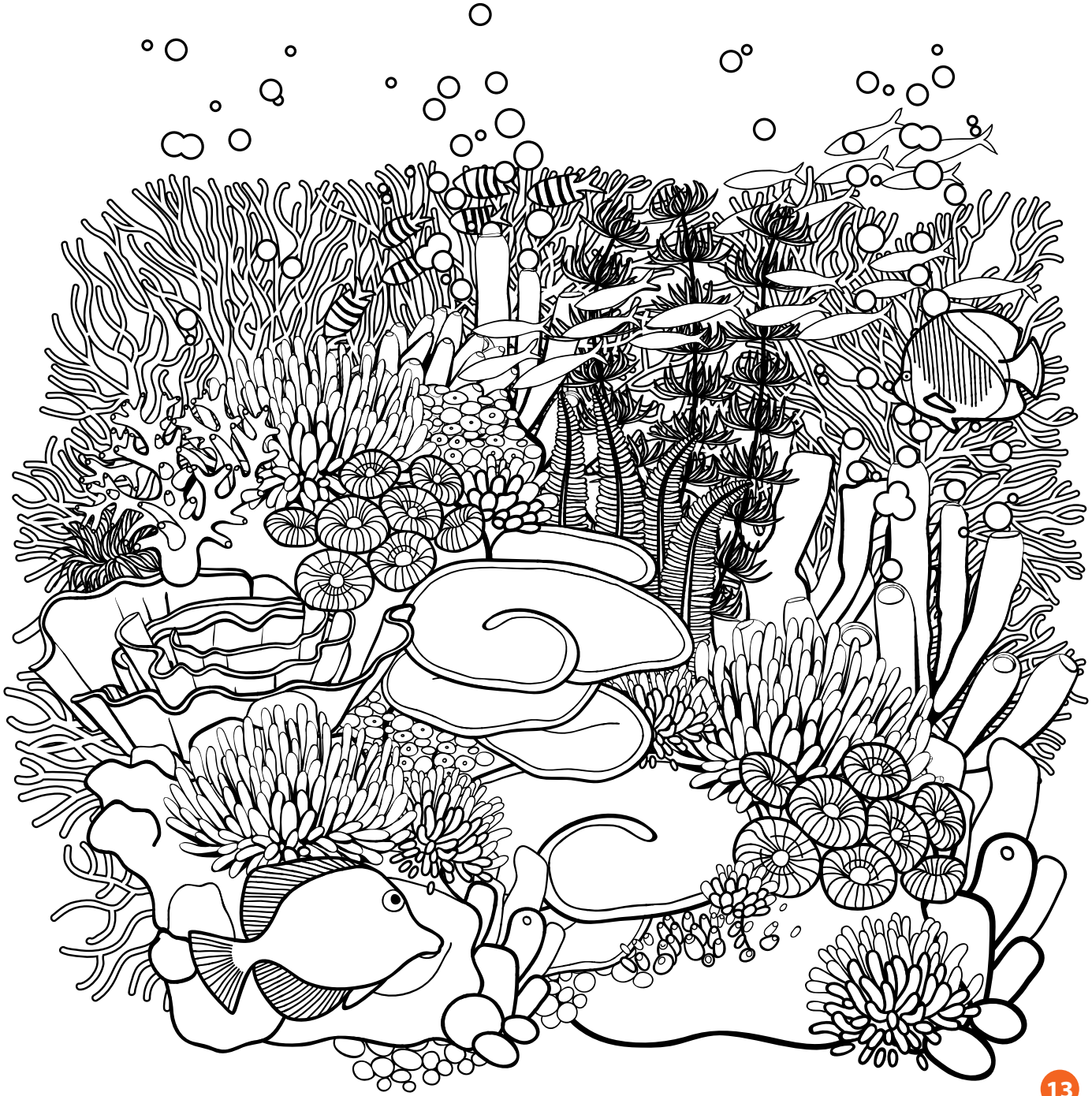
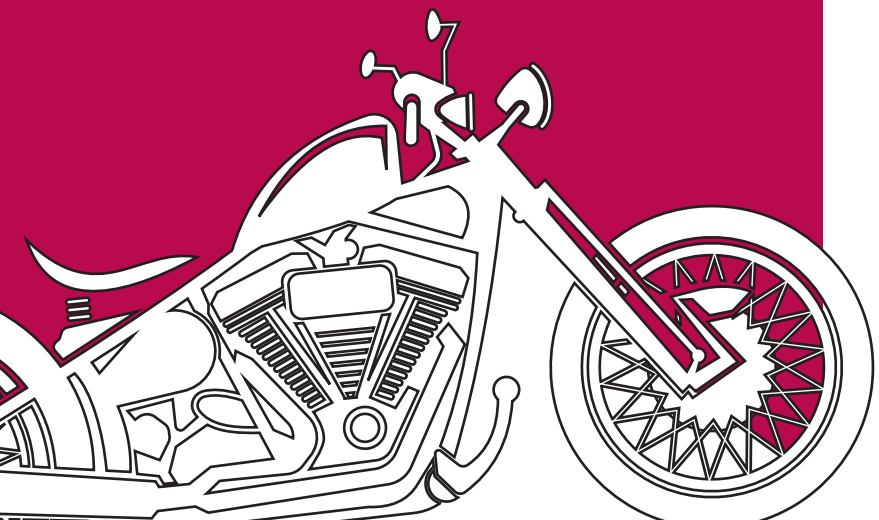
COLOUR IN THE CORAL



Dr Dana Bradford

Dana has two jobs. She looks at brains and she talks to people about how technology can help them.

Dana rides a Harley Davidson motor bike.



LEFT

Language
Speaking
Logic
Music (pitch)
Listening
Rationality

RIGHT

Curiosity
Creativity
Intuition
Music (rhythm)
Art
Spatial navigation

The left side of the brain is responsible for control of the right side of the body, and is the more academic and logical side of the brain.

The right side of the brain is responsible for control of the left side of the body, and is the more artistic and creative side of the brain.

Which part of your brain might be most active in these tasks?

1 Drawing a picture of an imaginary castle.
2 Doing your maths homework.
3 Singing and dancing to your favourite song.
4 Talking to a friend.
5 Listening to a parent or teacher.

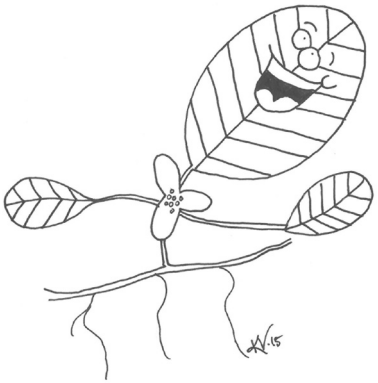
Dr Emma Jackson

Emma studies ways to grow seagrass, which is an important food for turtles, and a place for fish to live.

Emma is really lucky as she has snorkelled in seagrass meadows in 21 different countries.

Choose which seagrass plants to use for your restoration …

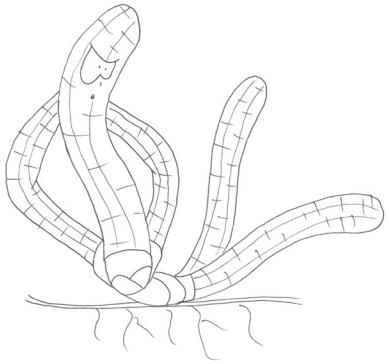
Paddle pal



This fast growing gutsy seagrass spreads quickly and recovers fast. So lose one and it bounces straight back! Don't plant this one in deep water as it likes the light.

Halophila ovalis

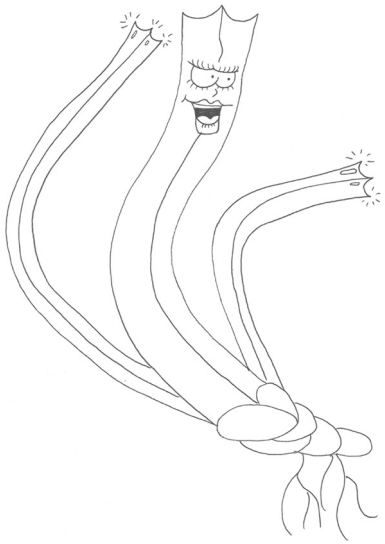
Eelgrass energy



This bold seagrass has strong thick roots to store energy. This allows it to cope with ongoing attacks, but lose those roots and it takes a long time to grow back.

Zostera muelleri

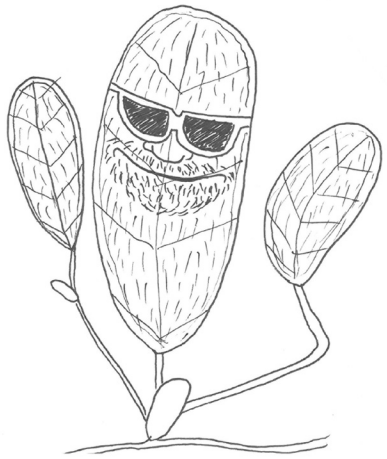
Duelling dude



The three-pronged leaves of this seagrass show us that it is Neptune's friend and it likes being wet. The long stems and deep roots of this plucky seagrass help it survive being buried.

Halodule uninervis

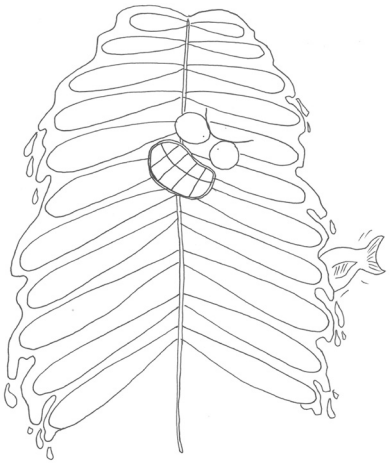
Hairy hero



This small but resourcefull seagrass can grow in the deeper turbid waters and cover large areas. Its leaves are covered in fine hairs.

Halophila decipiens

Fearsome fern



This rare beauty has lots of luscious leaves for catching the sun and protecting other marine creatures. But, be warned, its very fussy and doesn't like being out of the water or being in too deep.

Halophila spinulosa

Artwork courtesy Krista Verlis.

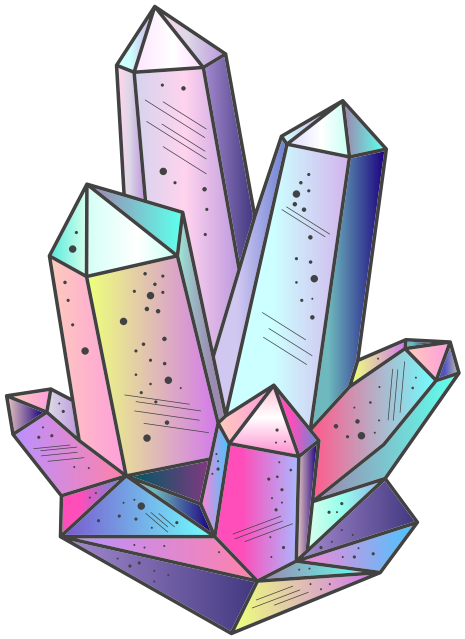
Emma Livingstone

Emma studies tiny machines that make cells work. They are too small to see with your eyes so she uses x-rays.

She enjoys running and hiking and is very keen to get more women working in science.

Crystal growing experiment

—a fun, simple experiment for kids of all ages



Materials

- 13 tablespoons (200 g) salt
- 500 mL water
- jars or vases (preferably glass)
- iceblock sticks
- pipe cleaners
- string

SAFETY

Be careful handling boiling water.
PARENTAL GUIDANCE IS RECOMMENDED.

Method

1. Boil the water
2. Measure the salt using a spoon and put it into a heat-safe bowl
3. Add the boiling water to the salt and stir to dissolve
4. There should be some powder still floating in the water, if not then add more salt until no more dissolves (this means it is saturated)
5. Choose a pipe cleaner, you can get creative with the colour and shape—perhaps try making a heart or a star
6. Tie one end of the string to the pipe cleaner and the other end to the iceblock stick. Balance the iceblock stick across the top of the jar so the pipe cleaner dangles into the jar
7. Add the salt solution to the jar until it covers the pipe cleaner
8. Leave to sit undisturbed while the salt solution cools
9. After 24 hours you can remove the pipe cleaner with the crystals on it and dry on a paper towel

Extras for experts

- Once you have mastered the basics of crystal growing, why not see what else you could grow crystals on instead of pipe cleaners (shells or rocks are a good place to start)
- You could also test to see if the speed that the solution cools changes the way the crystals grow by putting one batch in the fridge

How it works

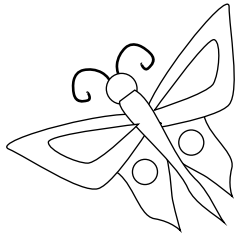
When the saturated solution of salt cools, the water molecules come together and force the salt particles out of the solution. The particles land on the nearest surface and continually build up to form crystals. The slower the solution cools, the more uniformly shaped the crystals are.

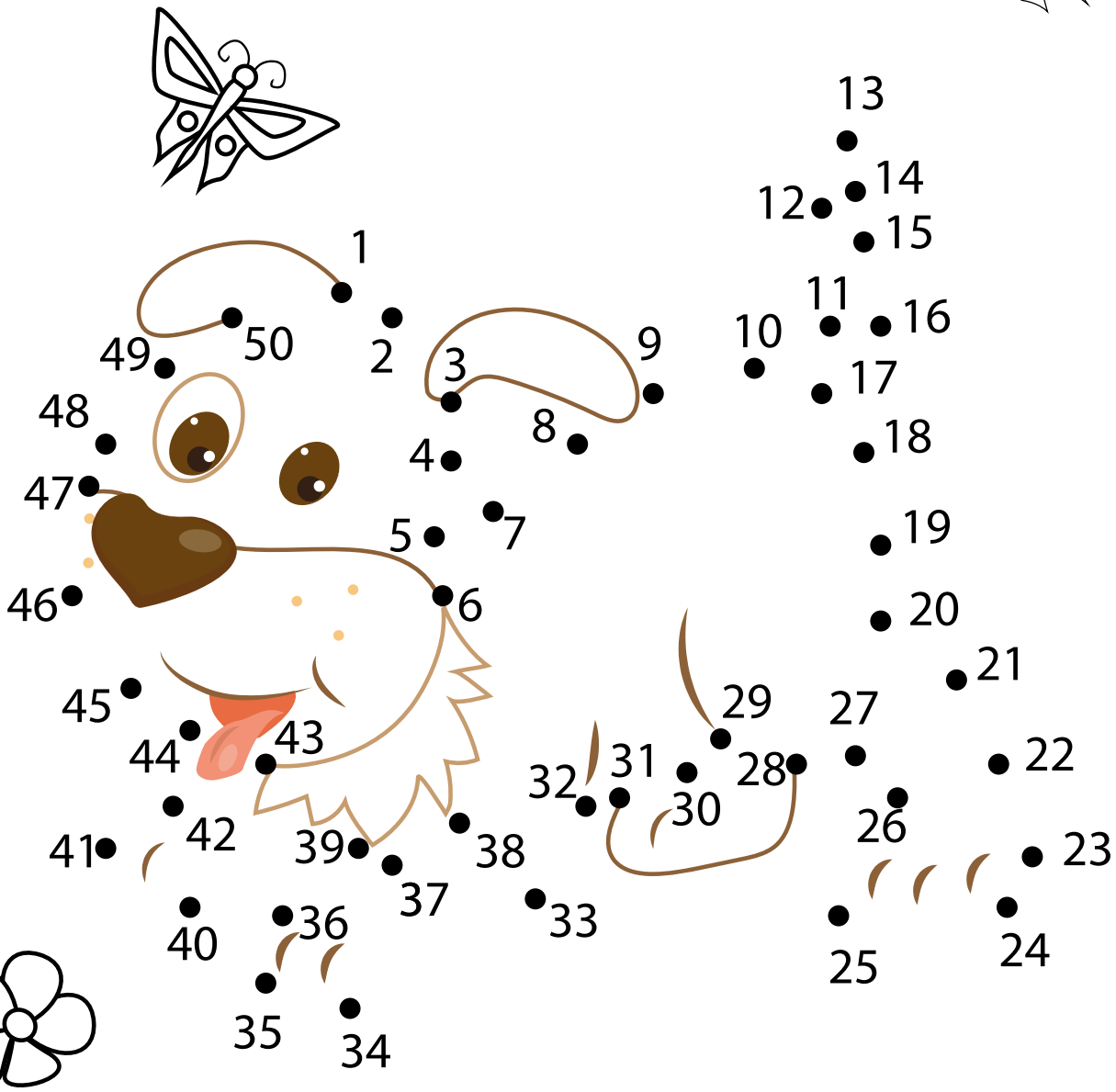
Emmaline Monteith
Jessica Miller
Robyn Conradie
Georgia Brown

We created an app that connects dog owners to dog walkers.

We are all great friends!

Join the dots, then colour in





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Dr Ian McLeod

Ian is working to bring back Australia's lost shellfish reefs.

Ian once got to work in Antarctica, bore holes in the ice and describe the animals that live in the Antarctic Sea. As a child he really wanted to be a marine biologist, but he was really good at talking to people … so now he's a marine biologist and science communicator!

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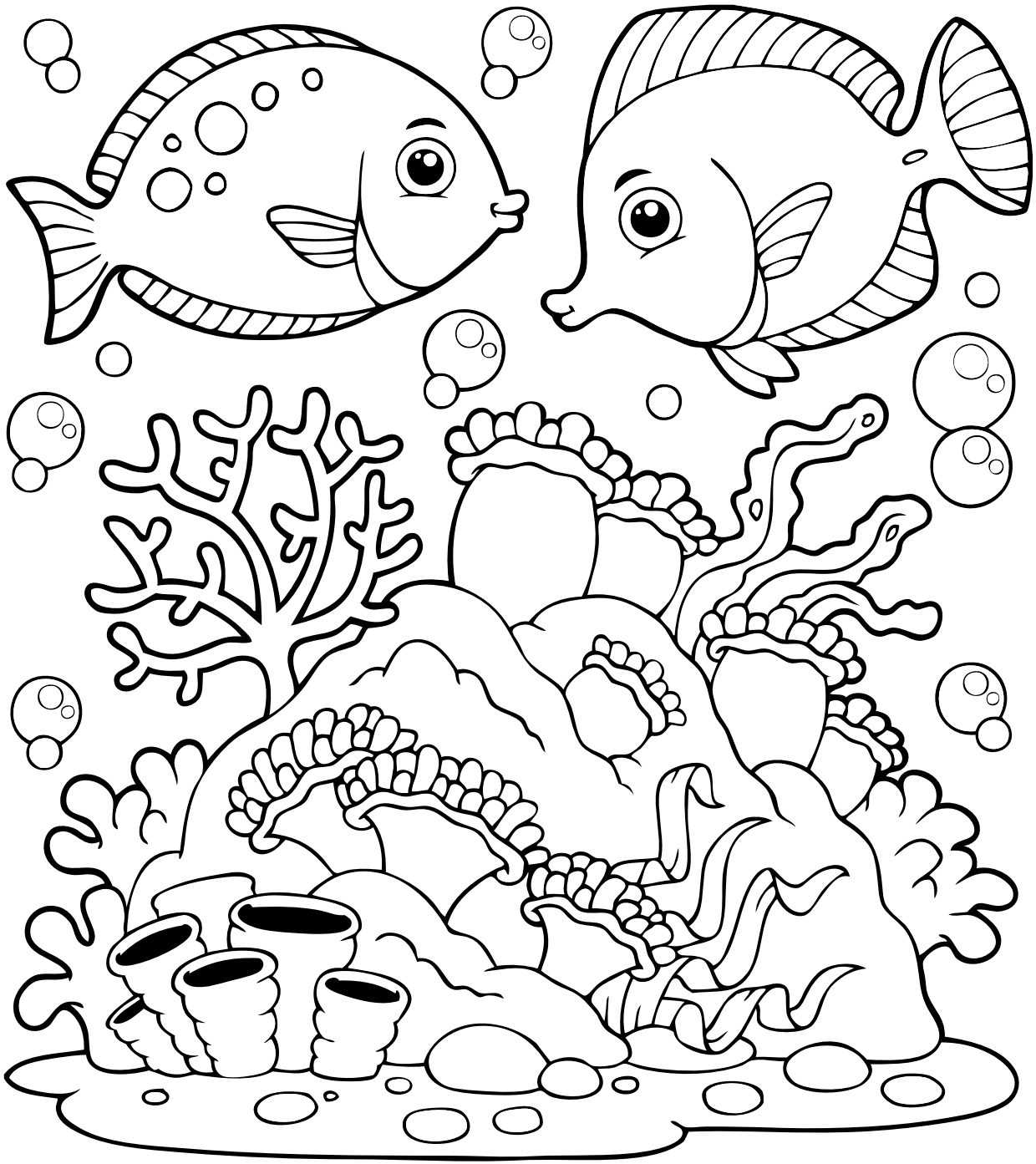
COLOUR IN THE REEF



Dr Jenine Beekhuyzen

Jenine teaches girls how to build mobile phone apps to solve problems in their local community.

Jenine wears a superhero cape any chance she can. She says it gives her the strength she needs.

Artwork supplied by Jenine.

Associate Professor Joanne Blanchfield

Joanne looks for safe new medicines from herbs.

She is lucky! First she wanted to be a teacher, then she wanted to be a scientist and cure diseases. Now, working at a university, she gets to do both.

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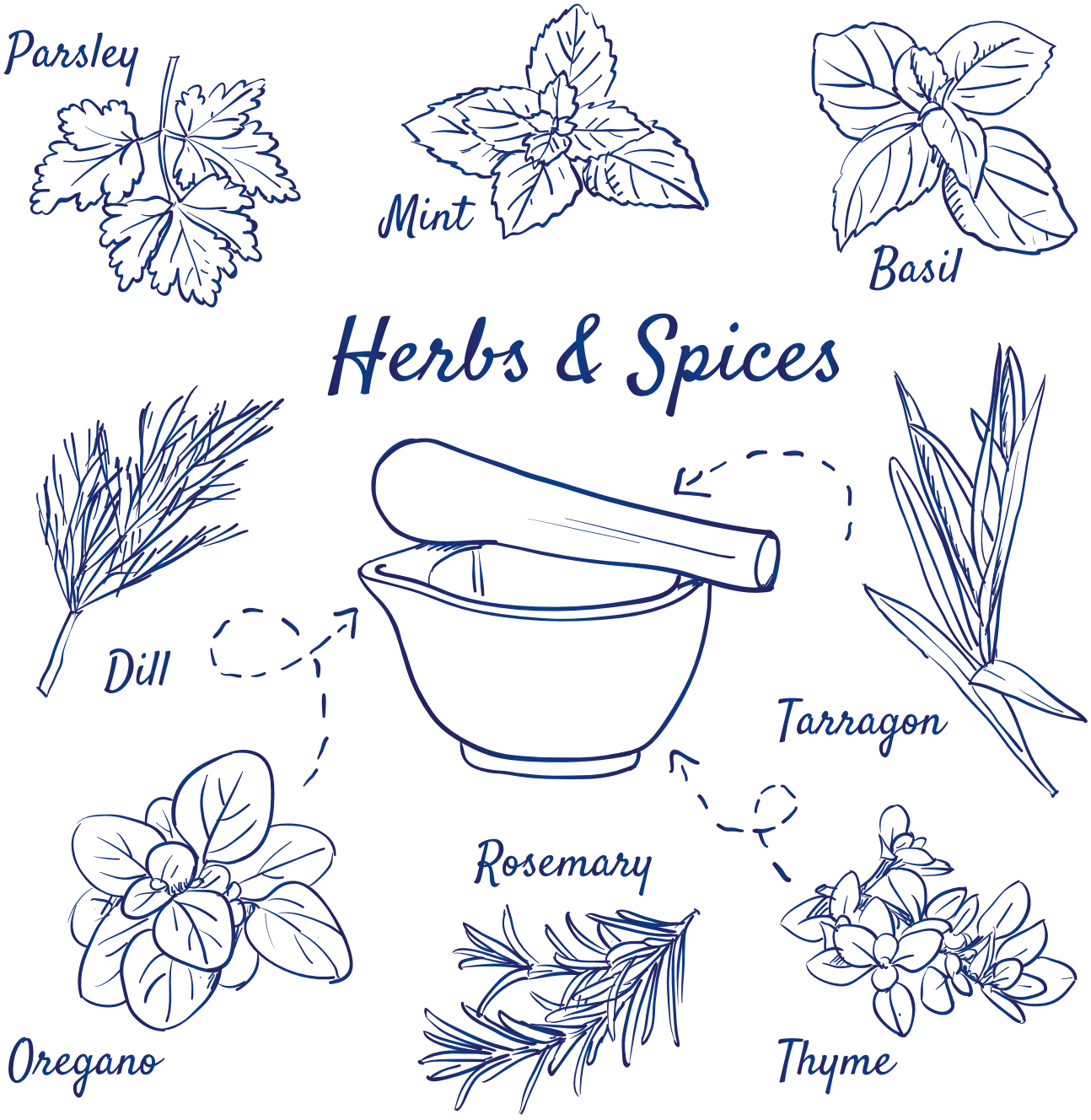
Many herbs and spices have health benefits



Jordan Debono

In my job, I get to meet new and interesting people from all walks of life.

Jordan studies the effect that snake venom has on our blood for new medicines.

Her other job is a pool lifeguard, and when she was younger, she wanted to be an Olympic swimmer!

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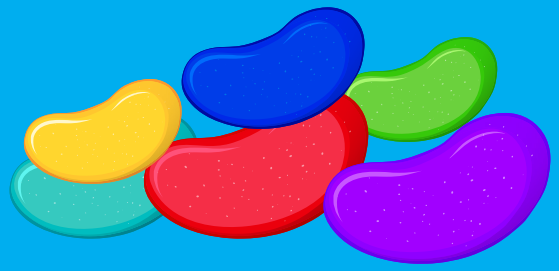
Professor Josephine Forbes

Josephine is looking for a cure for diabetes. She enjoys working in science where there's a chance she could improve people's lives.

Josephine has a black belt in karate.



Shutterstock.com

Word search created by Puzzlemaker at DiscoveryEducation.com

FIND THE WORDS

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

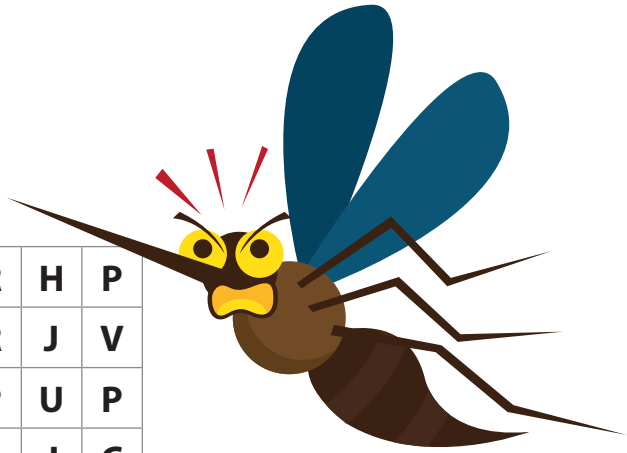
BLOOD
GENE
LIFETIME
PUMP
CARBOHYDRATE
INSULIN
NEEDLE
SUGAR
FINGER PRICK
JELLY BEAN
PANCREAS

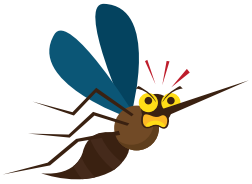
Professor Katherine Andrews

Katherine's job is to find new medicines to help people who are sick with a disease called malaria.

She has always wanted to study science and loves watching her 11 year-old daughter Emma play netball on weekends.

Can you find all 20 words?



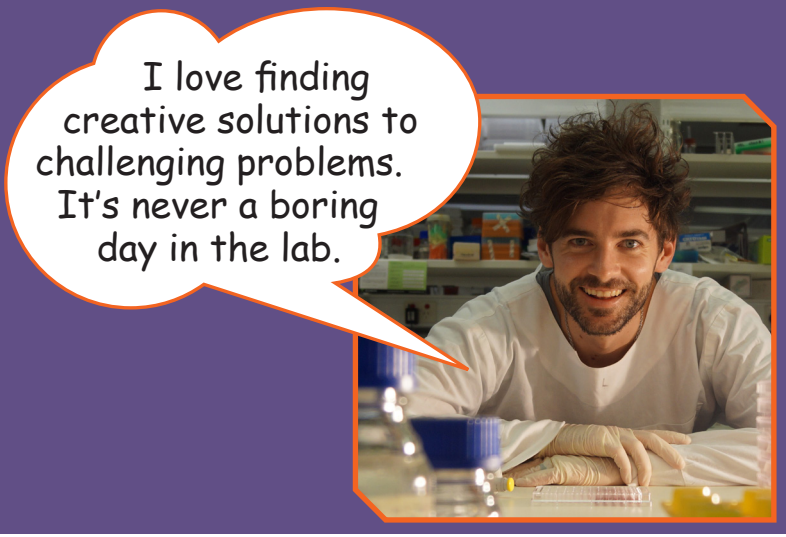


C	H	Y	M	V	E	E	E	P	X	G	E	R	H	P
E	E	X	P	E	R	I	M	E	N	T	E	R	J	V
Z	S	F	X	E	D	A	D	I	E	S	A	P	U	P
L	P	A	K	O	I	I	T	U	E	E	D	A	J	C
G	K	L	E	R	D	S	C	A	D	F	I	R	W	T
Z	F	N	A	S	E	V	R	I	P	U	L	A	U	K
X	A	L	W	R	I	C	X	J	N	B	E	S	T	O
C	A	C	E	E	H	D	Y	E	N	E	A	I	H	V
M	C	T	Y	G	O	L	O	I	B	C	R	T	K	C
G	N	R	E	S	U	L	T	S	H	N	N	E	M	G
I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

BIOLOGY
CELL
CURE
DRUG
DISEASE
EXPERIMENT
HEALTH
IDEA
INTERESTING
LAB
LEARN
MALARIA
MEDICINE
PARASITE
RESEARCH
RESULTS
SCIENCE
SICK
TEACH
TEST

Word search created by Puzzlemaker at DiscoveryEducation.com

Dr Ken Dutton-Regester



Ken finds out how skin cancer occurs so we can improve the way we treat it.

Ken was born with a natural mohawk hairstyle and loves animals, movies and music.

DO YOU KNOW HOW TO SPOT SKIN CANCER?

Did you know Queensland has the highest rates of skin cancer in the world? ***Fortunately, we can see these cancers on our skin when they first develop. It's important to detect them as early as possible as this is when they are easiest to treat.***

Do you or your family have any moles on your body? ***Use the following guide to see if any of them have the warning signs of a skin cancer. If you happen to find any, organise a quick skin check-up with your doctor.***

Asymmetry: Moles that, if divided in half are not the same on both sides.

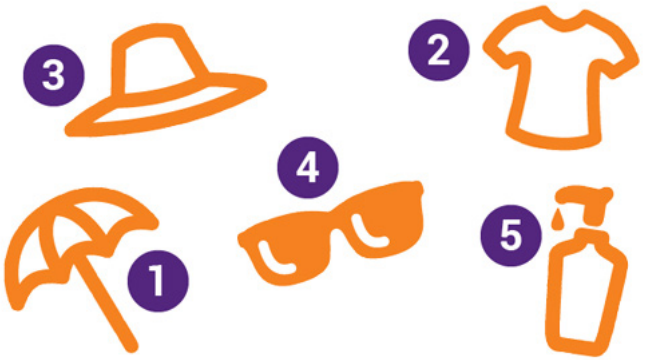
Border: Moles with edges that are jagged like a coastline.

Colour: Moles gaining or losing colour, or are multi-coloured.

Diameter: Moles more than 1/2 cm in diameter (especially if an uneven colour).

Evolution: Moles that have changed size, shape, colour or have risen.

Protect your skin 5 ways



Source © State of New South Wales (Cancer Institute NSW)
www.cancerinstitute.org.au

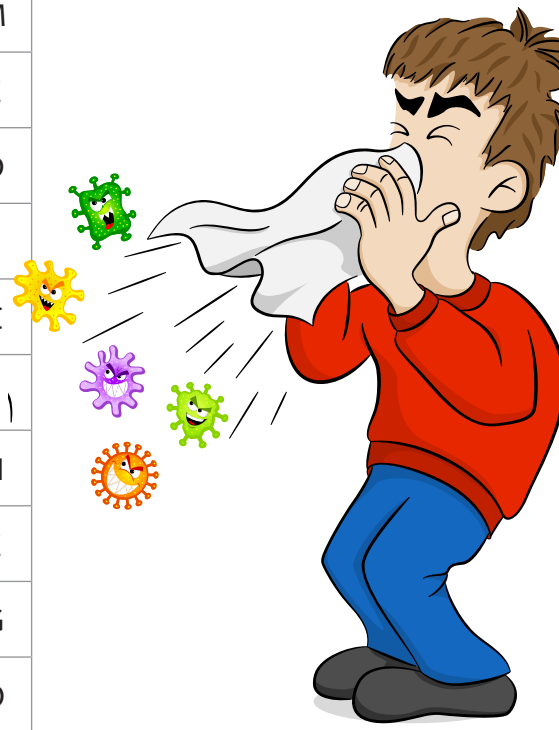
Dr Kirsty Short

Kirsty studies the flu virus. In particular she aims to understand why people with diabetes, obesity and asthma can get so sick when they get the flu and how we can prevent this.

She speaks English, French, Dutch and a little bit of Chinese.

Can you find all 20 words about the winter chills?

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



ALLERGY
ANTIBODY
BLOOD CELLS
COLD
DOCTOR
FEVER
FLU
GERMS
HYGIENE
MEDICINE
NURSE
RASH
RUNNY NOSE
SNEEZE
SORE THROAT
TABLETS
TISSUES
VACCINES
VIRUS
WINTER

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Word search created by Puzzlemaker at DiscoveryEducation.com

Dr Lee Hickey

Lee uses science to help make crops that have better protection against diseases and grow better during droughts.

As a child Lee wanted to be a professional tennis player—instead he is a pasta loving scientist.

COLOUR IN THE WHEAT

Leon McBride

Leon uses the latest technology to help athletes run faster, jump higher and throw further.

Leon goes to the gym every day. It's important to exercise both the mind and the body. He has always been interested in creating things with computers. This led to his first job—making video games in Brisbane.

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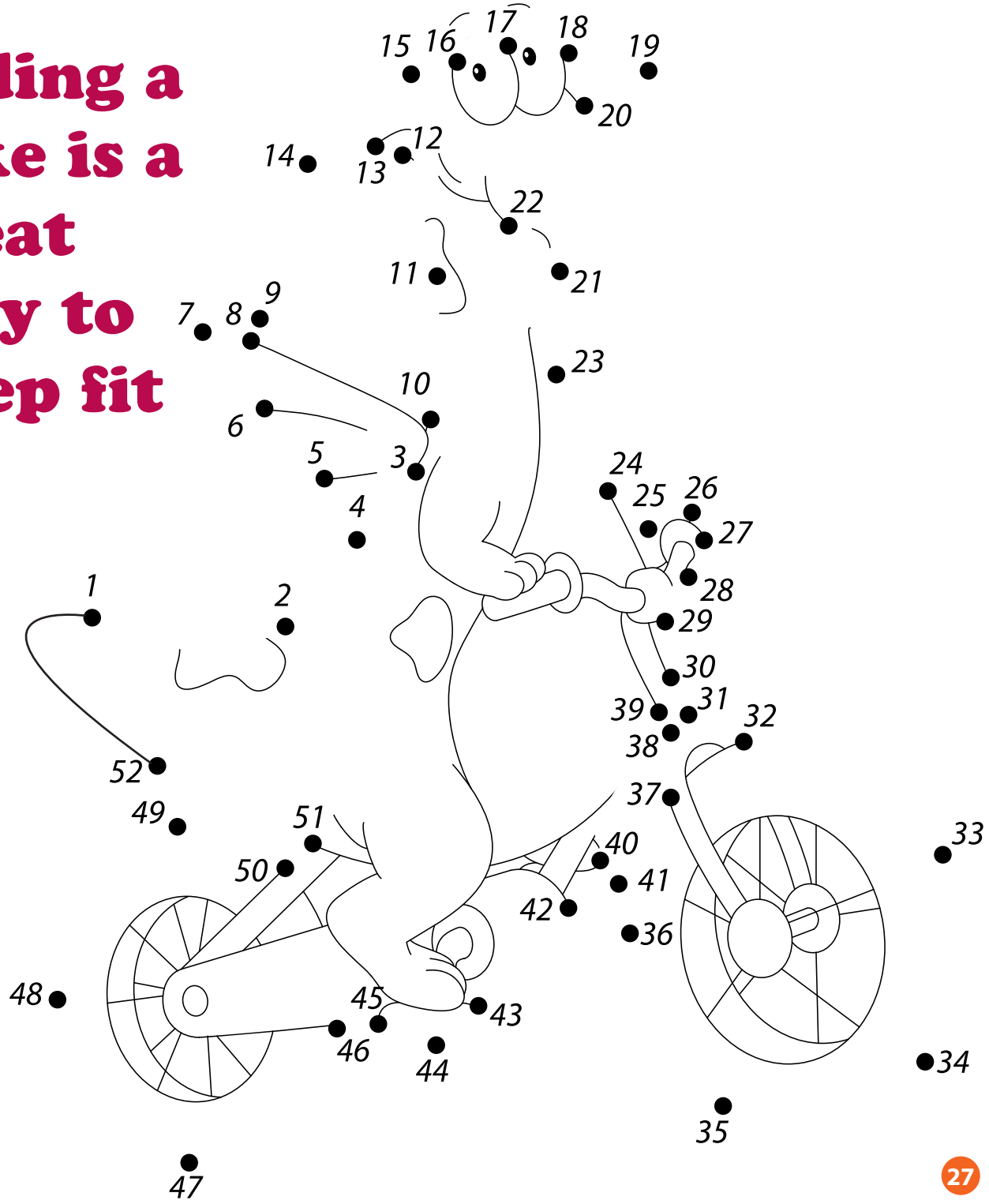
Riding a bike is a great way to keep fit

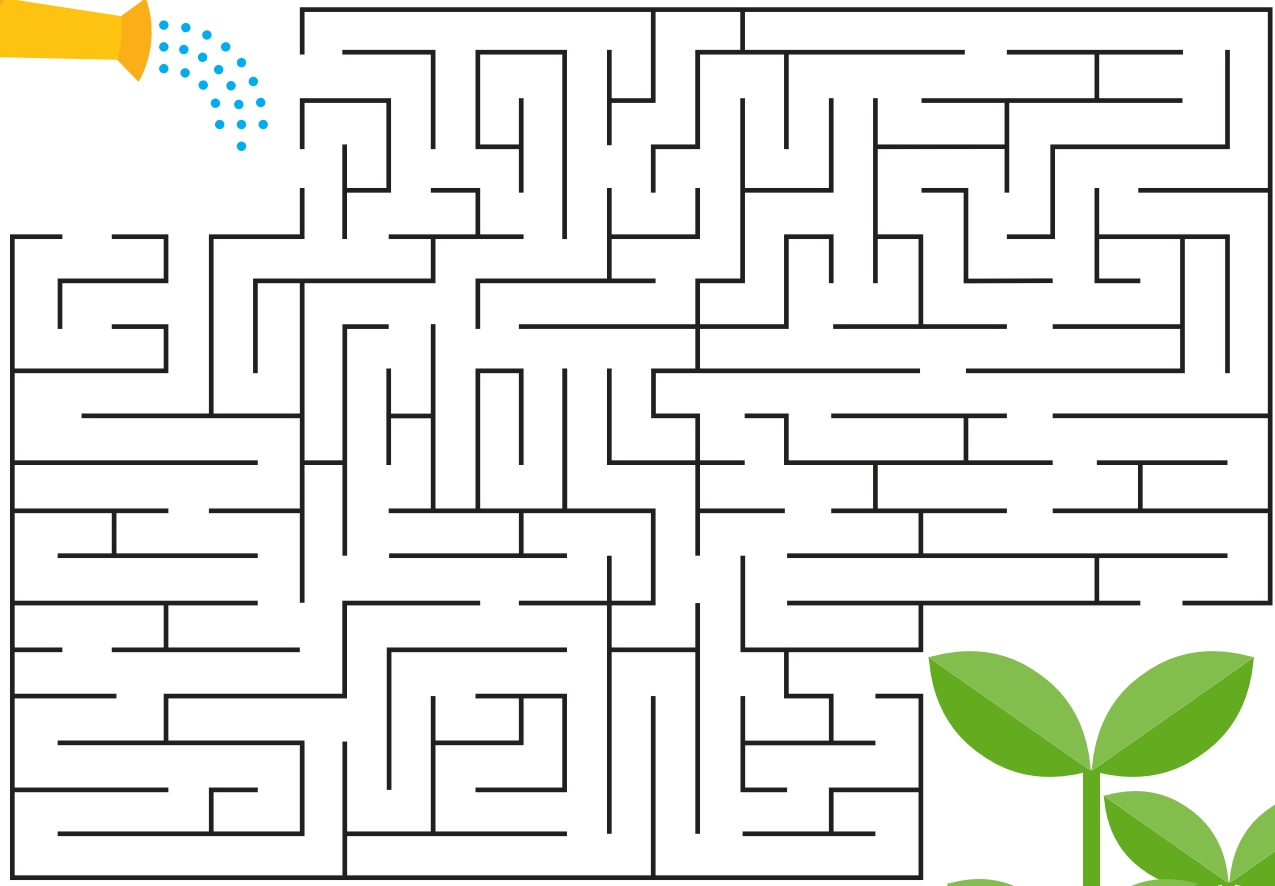


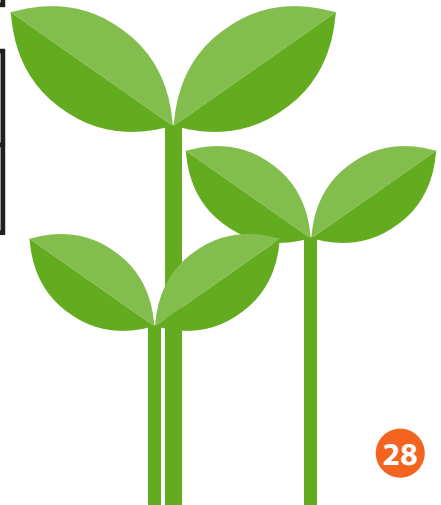
Dr Malcolm Gillies

Malcolm uses science and computers to help farmers use the right amount of water at the right time to make their crops grow.

Malcolm plays the trombone in a concert band in his spare time.

Water the plants and watch them grow





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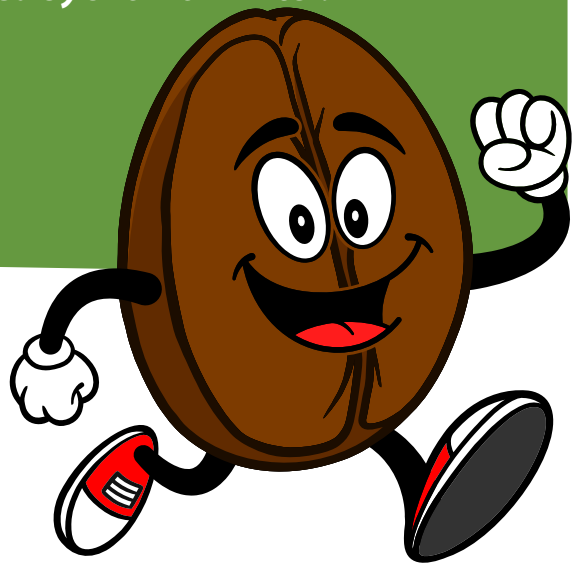
Dr Mariam Darestani

Mariam makes new products for cleaning water for drinking and growing plants.

When she was little she played with mud and built small cities that were ruined by snow of winter.



Why can't plants grow in salty water? EXPERIMENT

❶ Soak 6 beans in water for 8 to 12 hours.

No longer than 24 hours—we're not going to cook the beans.

❷ Prepare the beans for growing in plastic cups and using paper towel.

Put crumpled up paper towel in the middle of the plastic cup → Put a bean on top of the paper towel in each cup

❸ Mark the cups with numbers 1 to 6.

❹ Dissolve half a tablespoon of salt in one cup of water.

About 7 grams salt. About 200mL water.

❺ Water down the crumpled paper towel. Use salty water for three cups (1, 2 and 3) and tap water for the remaining 3 cups (4, 5 and 6).

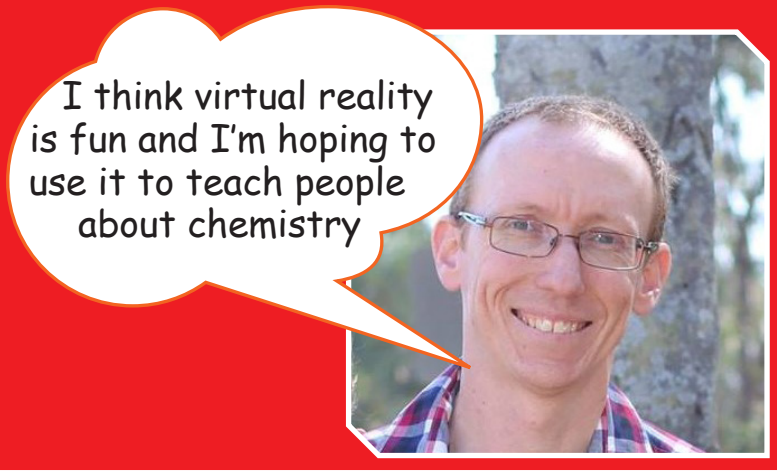
❻ Cover each cup with two paper bags—seeds germinate better in the dark.

❼ Check the size of the beans twice a day for one week and record what happens to the beans.

Why do you think the beans didn't grow in the salty water?

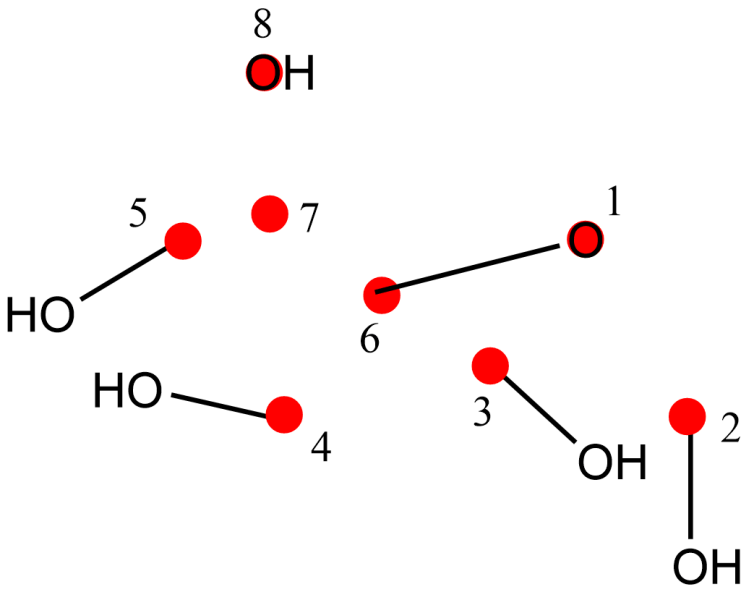
What impact do you think salty water would have on farms?

Associate Professor Mark Coster

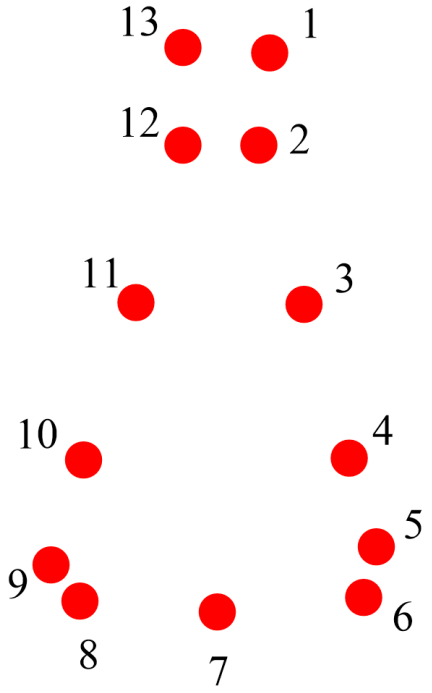


Mark works in organic and medicinal chemistry. He builds complete molecules from simpler building blocks—just like LEGO. And there's no instructions for his molecular LEGO—he's able to put things together any way he likes.

A sweet molecule—glucose



A conical flask (Erlenmeyer flask)



Dr Mary Tom

Mary teaches university students about making computer programs, websites and all sorts of things related to computers.

Mary has a daughter who is also an environmental engineer. They both love painting and playing the piano.

Make these crazy sentences make sense

science maths and **I** subjects love

challenging and fun subjects are maths **Learning** and science

jumped **A** boy car a from

from **A** girl Beethoven music played

food for the cat and raced **A** dog

won race **The** dog the

computer dream about scientist becoming a **I**

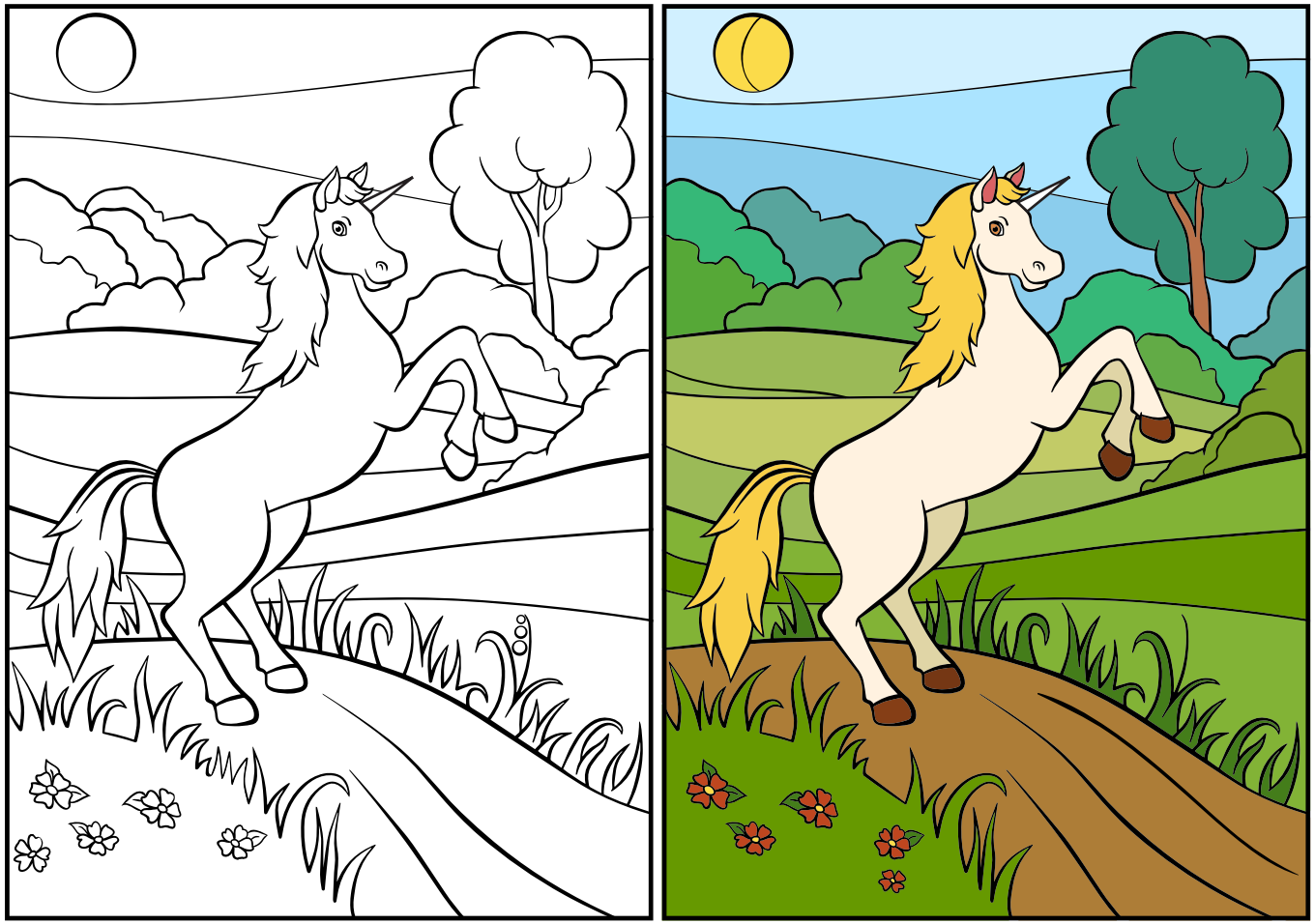
develop household work a robot want to do to **I**

Mathilde Desselle

Mathilde is looking at how we can print 3D body parts in the hospital of the future. She loves to talk about science on the radio.

Mathilde's favourite animals are horses. She rides horses in competitions like barrel racing.

SPOT 12 differences *and colour in*



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Dr Megan Saunders

Megan studies plants and animals that live in the ocean like corals, mangroves and seagrass. She finds ways to help them.

Megan learned to scuba dive in really, really cold water in Canada where she grew up!

Muddy waters EXPERIMENT

Can the light pass through?

Explore how adding substances to water, like mud, affects how much light can pass through the water.

What you need

- 2–6 clear glass or plastic bottles
- Water
- Milk
- Flashlight

What to do

1. Fill the bottles with water. Fill one to the top, one half way, and the others to various heights between half and completely full.
2. Top up the bottles with milk until full.
3. Gently shake the bottles to mix the milk and water.
4. Shine the flashlight through the liquid in each bottle.
5. Observe how bright the light is that is passing through each bottle.

What's happening?

Adding substances to liquid changes the optical properties of the liquid. That changes how much light is absorbed by the liquid and how much is transmitted through the liquid. In this experiment we used milk, but you could also try adding different amounts of sand or mud to the water and observe how that changes the water clarity and light transmission.

We did our experiment in jars, but there is much more water out there in the world … think of the ocean! Sea water in the ocean is much clearer in some places than in others. For example, you may have noticed that sea water far from shore is often clearer than nearby to shore. One of the reasons for this is because sand, mud, silt (sediment) erode off land and are delivered to the oceans in streams and rivers. This occurs naturally. However, some of the things we do on land change how much sediment is eroded off land and arrives in the ocean. For example, cutting down forests and replacing them with agriculture or urban areas may cause more sediment to go into the ocean.

Did you know?

In shallow coastal seas there are vast underwater meadows, made up of plants and animals like seagrass, corals, and algae. These organisms grow by photosynthesising—that is, by turning the energy from sunlight into food. What do you think happens to these plants and animals when more sediments are added to the ocean because of the things that we do on land?

Dr Melanie Hayman

Melanie uses science and technology to help pregnant women be healthy through physical activity.

Before turning to science, she wanted to be a teacher like her mother. She loves being physically active.

Healthy mum, healthy baby

ACROSS

1. moisture from skin, after excercise
4. the person who gave birth to you
7. gentle exercise to keep fit
8. time when a woman is having a baby
9. jokes, amusement or pleasure
11. free from sickness; not ill

DOWN

1. cricket, tennis, hockey, etc.
2. sport done in a pool
3. young child, when just born
5. activity to keep you healthy
6. the number of heart beats per minute
10. games and recreation

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Crossword created by Crossword Puzzle Generator at TheTeachersCorner.net

Dr Mostafa Rahimi Azghadi

Mostafa is a neuromorphic engineer. He builds electronics to copy the brain.

Mostafa enjoys travelling and has visited many countries and all the continents except South-America and Antarctica. He plans to travel there soon.

Word search created by Puzzlemaker at DiscoveryEducation.com

FIND THE 20 BRAIN WORDS

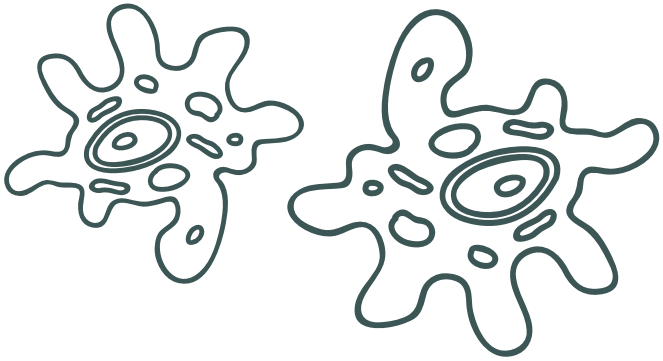
N	C	O	Y	V	M	I	A	L	S	S	W	A	K	I
O	N	O	O	T	R	E	E	A	S	R	Y	C	N	B
I	E	M	N	O	I	A	N	E	O	E	H	T	O	P
T	R	E	Z	S	R	L	N	T	S	L	E	I	I	H
P	V	F	G	N	C	E	I	P	A	L	E	V	T	B
E	E	I	I	Y	R	I	A	B	L	L	K	I	O	K
C	S	N	Z	A	T	N	O	I	A	C	I	T	M	Q
R	G	J	W	N	Y	I	G	U	N	X	P	Y	E	K
E	B	A	H	S	O	E	V	O	S	E	S	N	E	S
P	K	S	O	Z	N	X	T	I	Y	N	E	X	Y	D
T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

ABILITY
ACTIVITY
AWARENESS
BRAIN
COGNITION
CONSCIOUS
CREATIVITY
EMOTION
INTELLIGENCE
LEARNING
MEMORY
MENTAL
NERVES
NEURON
PERCEPTION
PHYSICAL
RECOGNITION
SENSES
SPIKE
SYNAPSE

Dr Nasim Amiralian

Nasim makes high-quality materials using an Australian native Spinifex grass.

Nasim always wanted to be a famous person who helps people. She loves fixing broken things and finding out how things work.

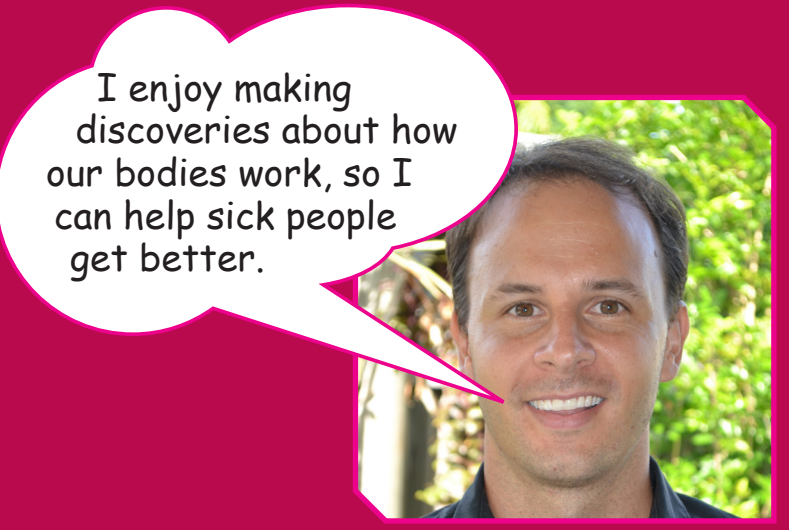


Scientific word scramble

MOLECULES	LABORATORY	EXAMINE	CURIOSITY	TALENT
READING	EXPERIMENT	INNOVATION	QUESTION	PROBLEM
INVENT	ENGINEER	MODEL	PASSION	TECHNOLOGY
DOCTOR	ATOM	ANALYSIS	METHOD	SCIENCE

NIONNTIVAO	I N N _ _ _ T _ O _	NTVINE	I _ V _ _ T
LABORYOTAR	L _ B _ _ _ T _ R Y	AOMT	_ T _ _
CICEENS	_ C _ E _ C _	EOMCUSLEL	M O L _ C U _ E S
ERNEGNEI	E _ G I _ E _ _	ASNOISP	P _ S _ _ _ N
TNTAEL	T A _ _ _ T	ODTCRO	_ _ C _ _ R
ITCORSUYI	C _ _ _ O _ I _ Y	AILASNSY	_ _ A _ Y _ I _
IADREGN	R _ A D _ N _	TODHME	_ _ T H _ _
EEMIPTRENX	E _ P E _ _ M _ N T	ELODM	_ O D _ _
SETUQNIO	_ U _ _ T _ _ N	OBLPERM	P _ _ B _ E M
CTGOYOHLEN	T E C _ _ _ L O _ Y	IENMAXE	_ X _ _ I N _

Dr Paul Giacomin

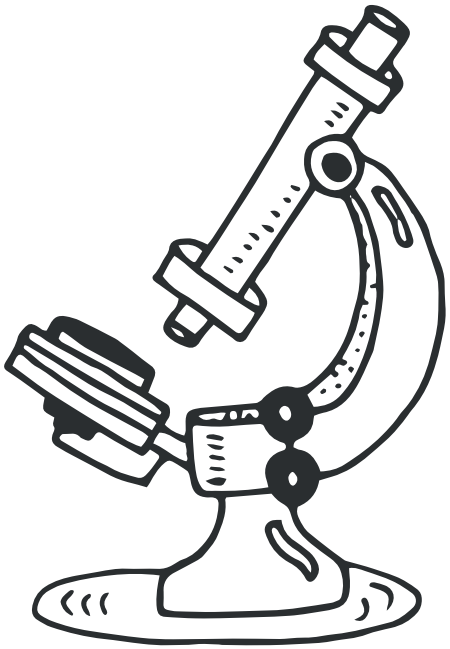


Paul is trying to make new medicines and cures for diseases.

He always wanted to be a basketball or soccer player, but he ended up living in America for four years where he played Australian football (AFL) for the Philadelphia Hawks.

Can you find all 25 words about getting well find-a-word?

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



ASTHMA
BODY
CARE
CURE
DISCOVERY
DRUGS
DUTY
EXERCISE
FUNCTION
GET WELL
HEALTHY
LAB
MEDICINES
PURE
RECOVERY
RUNNING
SICKNESS
SORETHROAT
SPRAY
TABLETS
TESTING
TREATMENT
TRIAL
WELLBEING

Word search created by Puzzlemaker at DiscoveryEducation.com

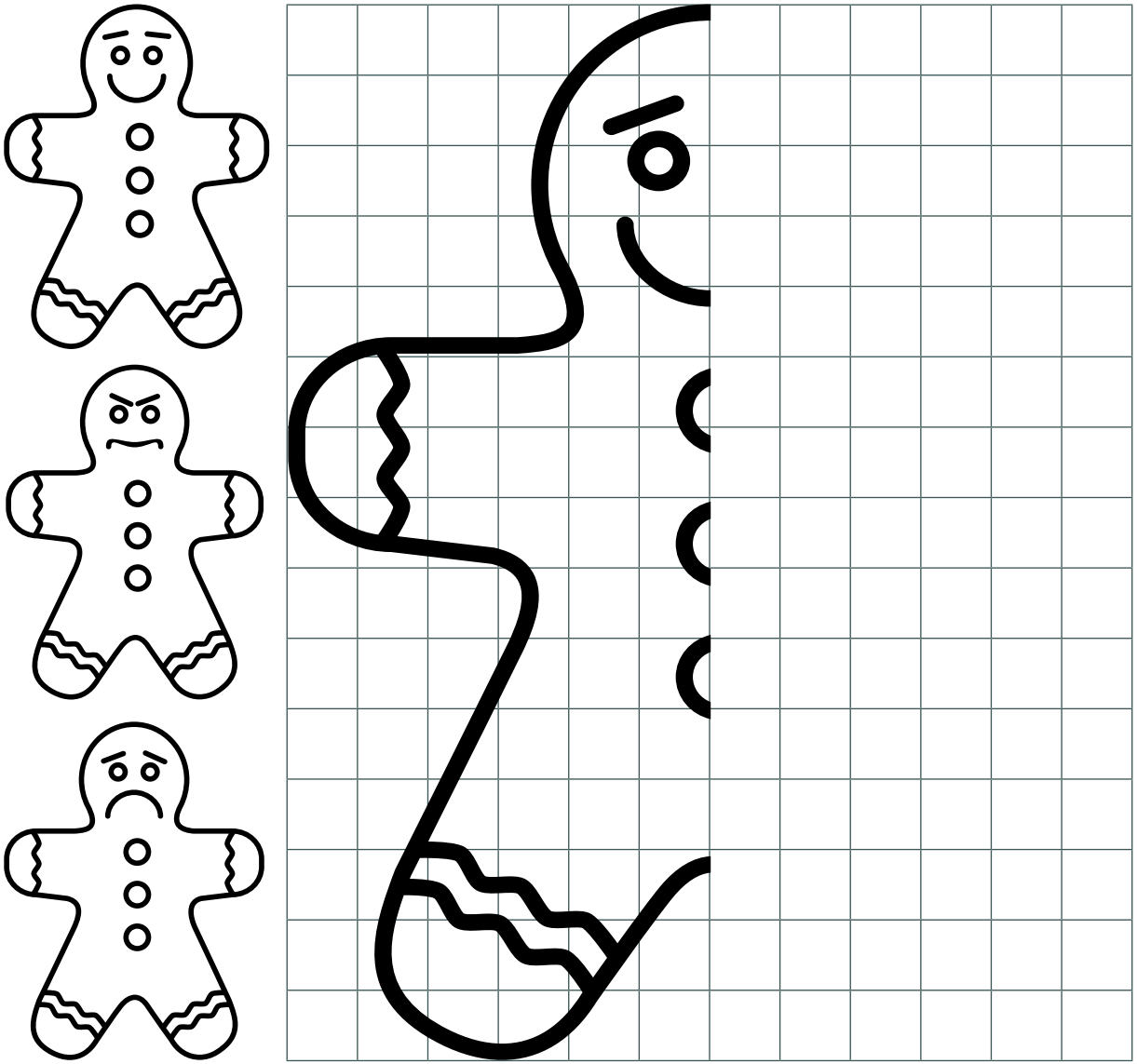
Dr Rajib Rana

Rajib is working to make your mobile phone understand your mood. He always wanted to become an inventor of cool technologies.

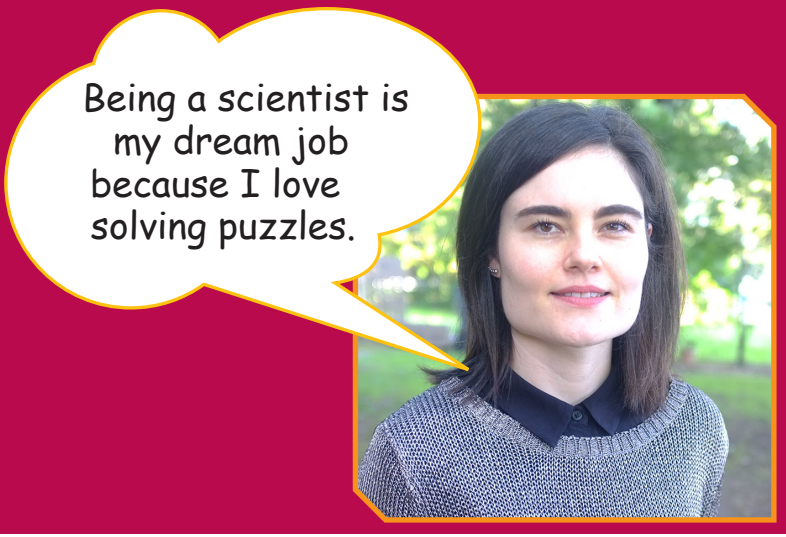
Rajib is good at computer science, but very bad at singing!

Gingerbread man symmetry

Complete the other side of the gingerbread man



Dr Roisin McMahon



Roisin studies the things in bacteria that cause disease.

She was so excited when she got a selfie with the famous nature lover and TV presenter, Sir David Attenborough.

SPOT 10 *differences*

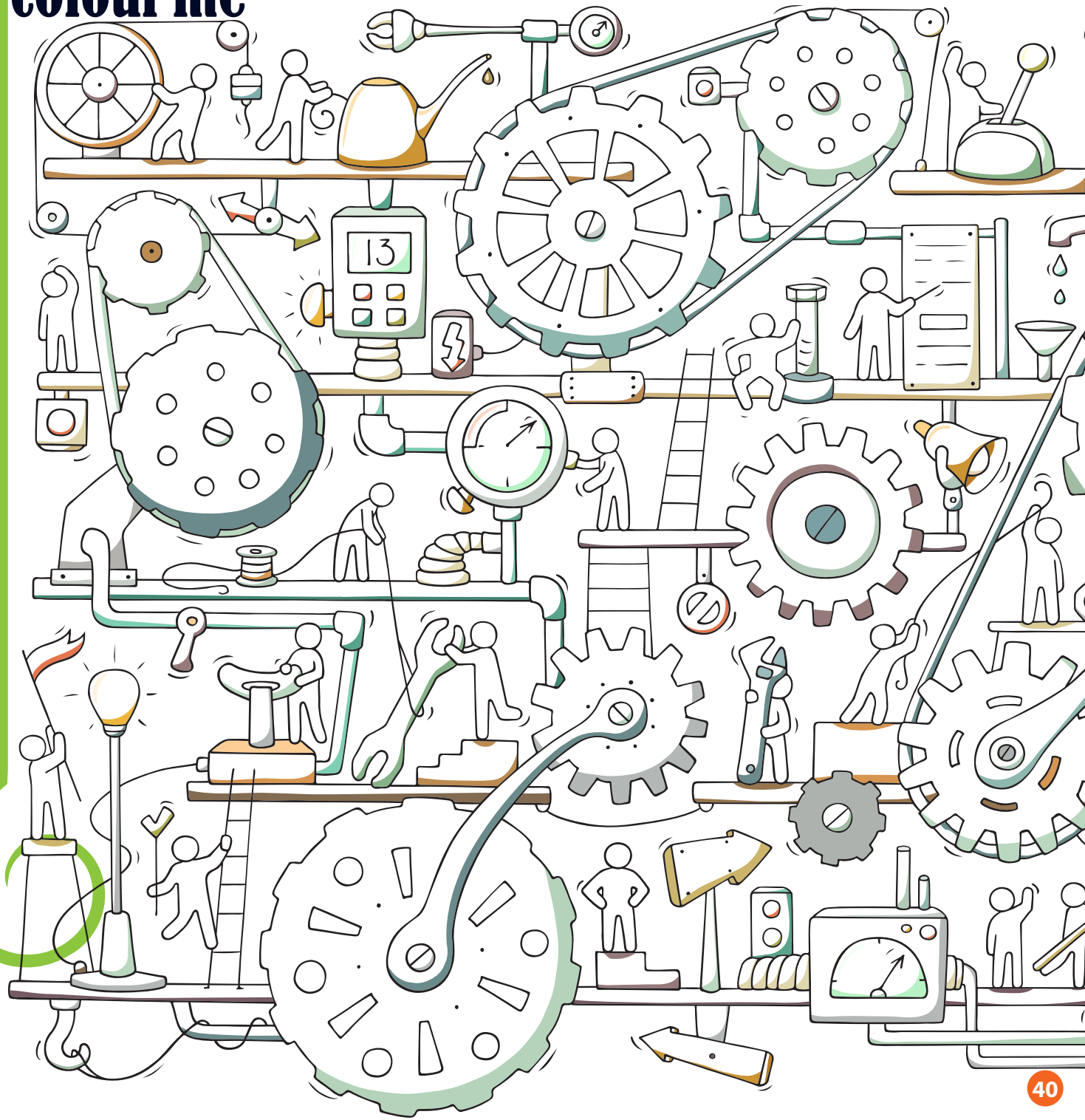
Sae Chi

Sae studies how transport projects like roads can help us. For example, how much time a road can save and how a road can impact the environment.

Although she is an engineer, she never gets to wear a hard hat at work.

Shutterstock.com

colour me



Dr Sally Staton

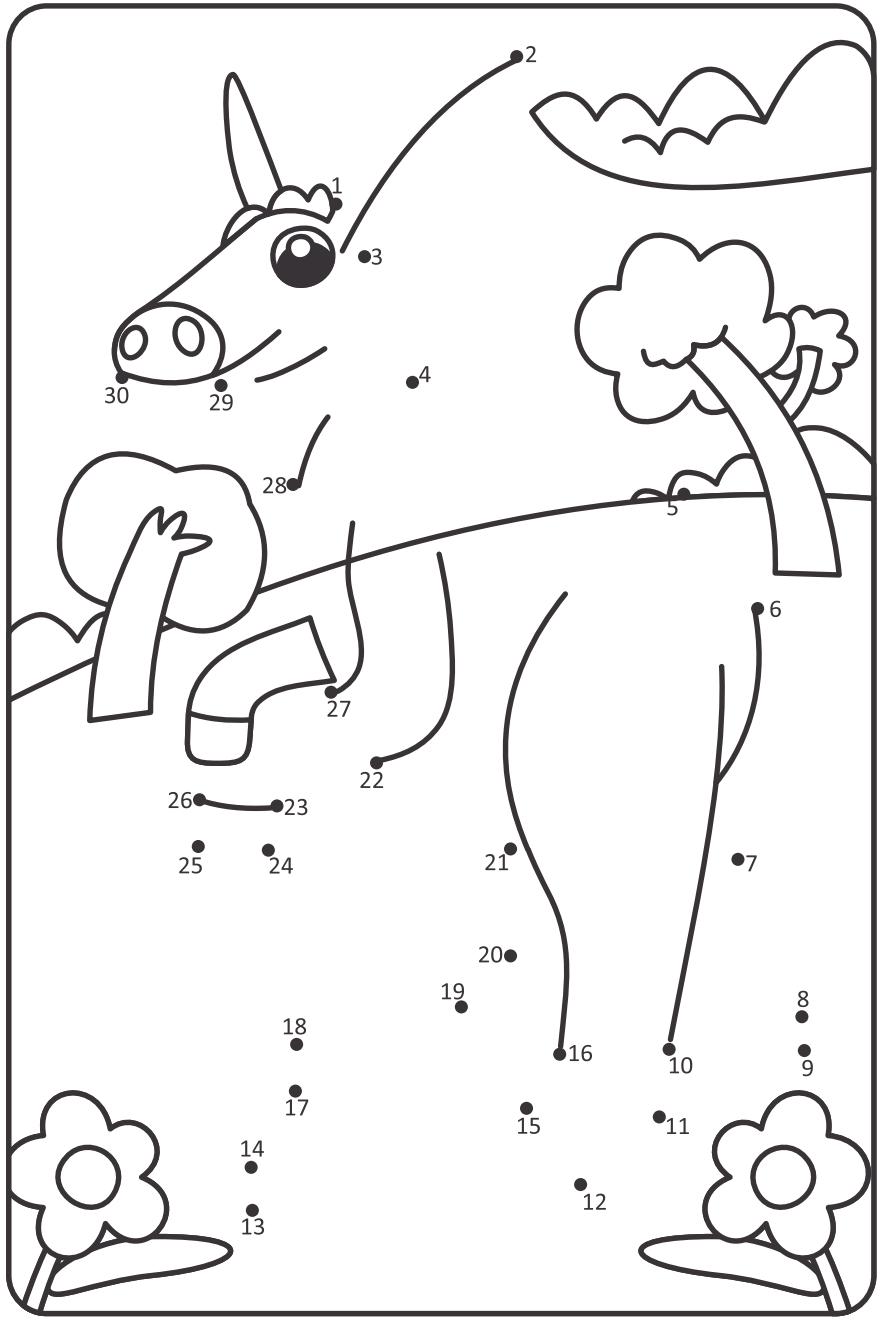
Sally studies children's sleep and how sleep can help us learn, feel good and stay healthy.

Sally has two pet turtles and their names are 'squishy pineapple' and 'little hare'.

Shutterstock.com

What am I?

Join the dots and find out and then colour me in.



Samantha Hood

Samantha uses computers to figure out how electricity works in plastic solar panels so we can have better, cheaper energy.

She is very passionate about getting more girls into STEM because they make brilliant scientists. Did you know as a kid, her favourite movie was Pocahontas? This made her want a job where she could help nature.

Can you find all 20 words?

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

CARBON
CLEAN
CODE
ELECTRON
ENERGY
EXCITON
FLEXIBLE
MOLECULE
ORGANIC
PHOTON
PHOTOSYNTHESIS
PHYSICS
POLYMER
QUANTUM
RENEWABLE
SCIENCE
SIMULATE
SOLAR
SPECTRUM
SUSTAINABLE

Word search created by Puzzlemaker at DiscoveryEducation.com

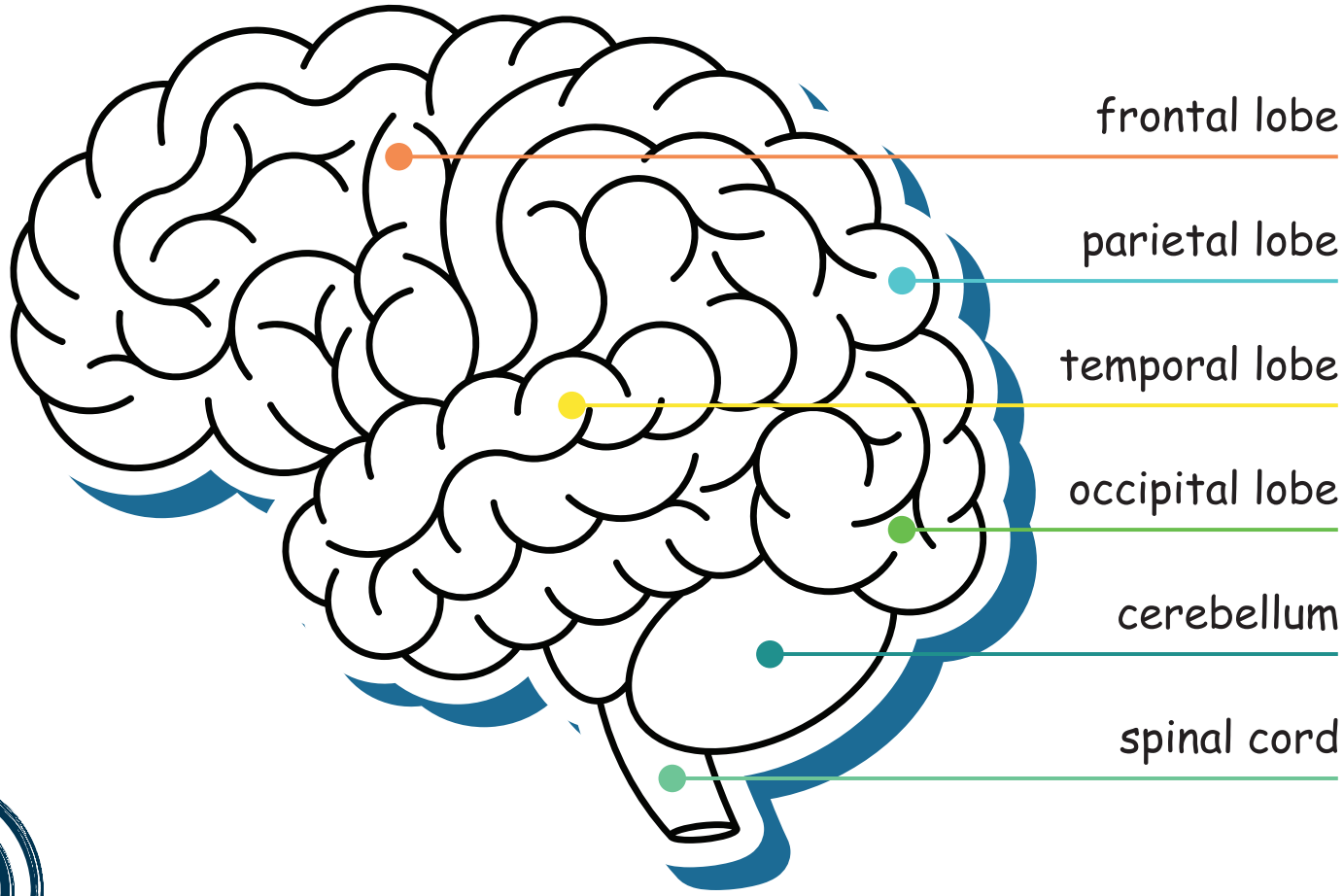
Dr Shyuan Ngo

I love my work because there's a chance I will make a discovery that will change people's lives.

Shyuan studies the way nerve cells in the brain use and make energy to understand diseases of the brain as it gets older.

She loves adventure and learning to ride a motorcycle.

Colour in the different parts of the brain



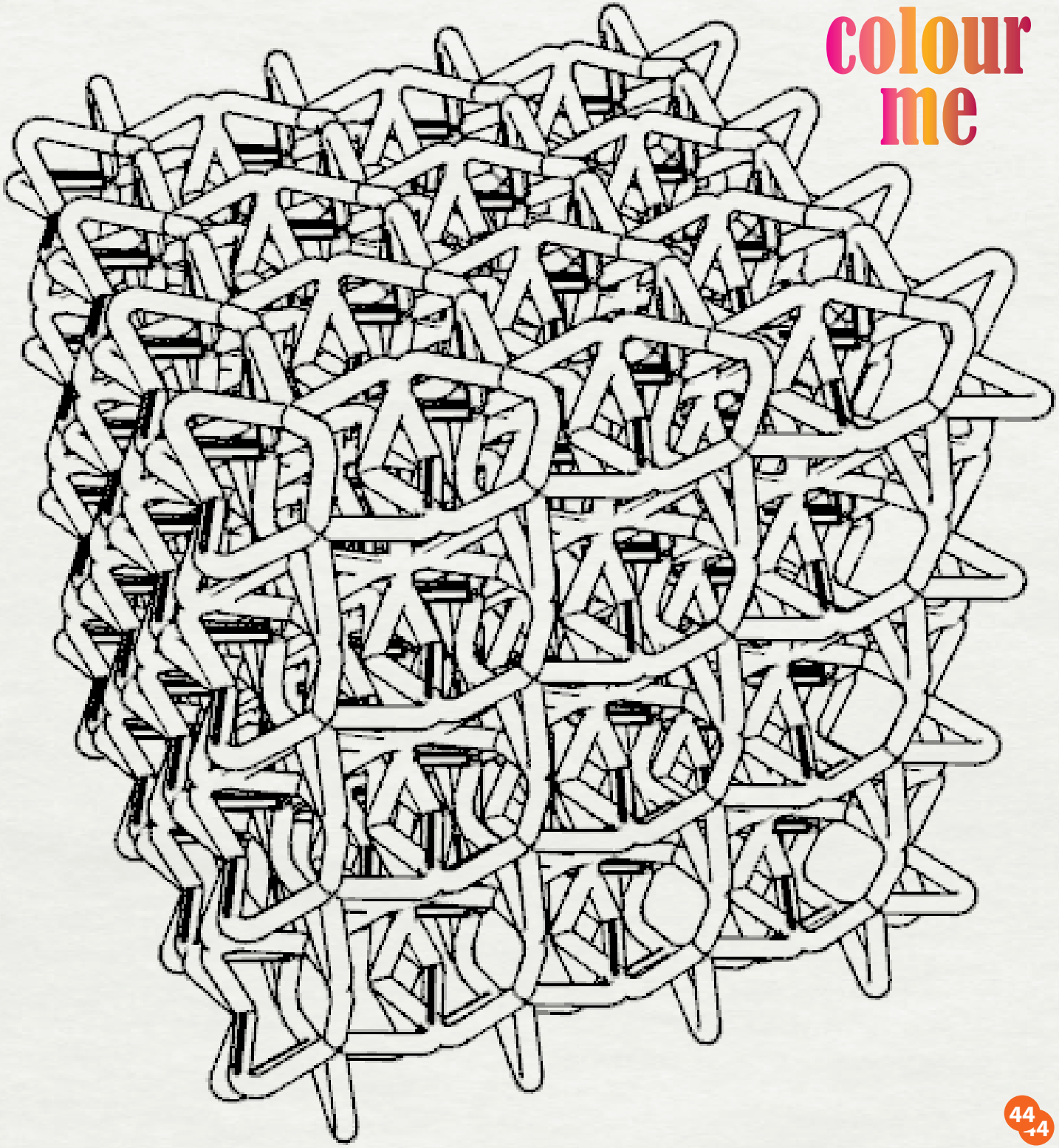
Stephanie Piper

Stephanie teaches people how to make things, like wallets, with 3D printers. She enjoys working with new technologies and teaching others how to make their own cool things.

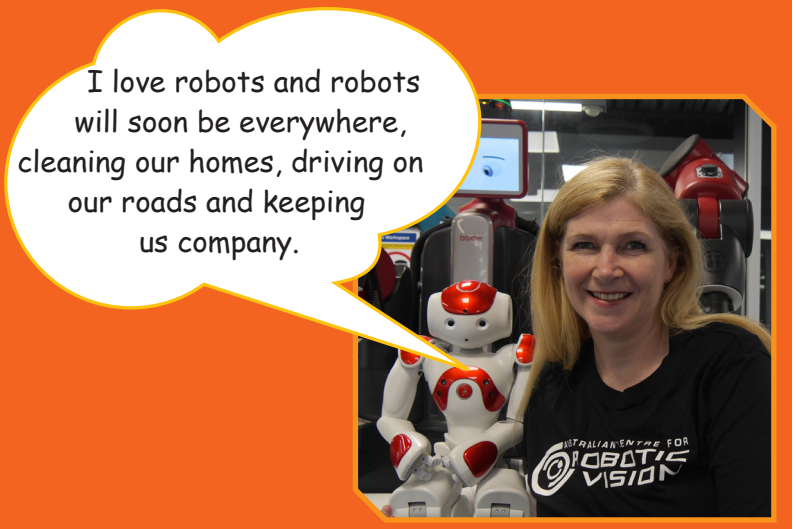
She always wanted to help people and is doing that right now.

This is a 'pen rendered' 3D model of Stephanie's own design of an Auxetic structure.

colour me



Dr Sue Keay



Sue runs a robotics laboratory to design and build robots that help people.

She loves rocks as well as robots. When she was little she wanted to do something interesting and important. That led her into science … but she never imagined working with robots!

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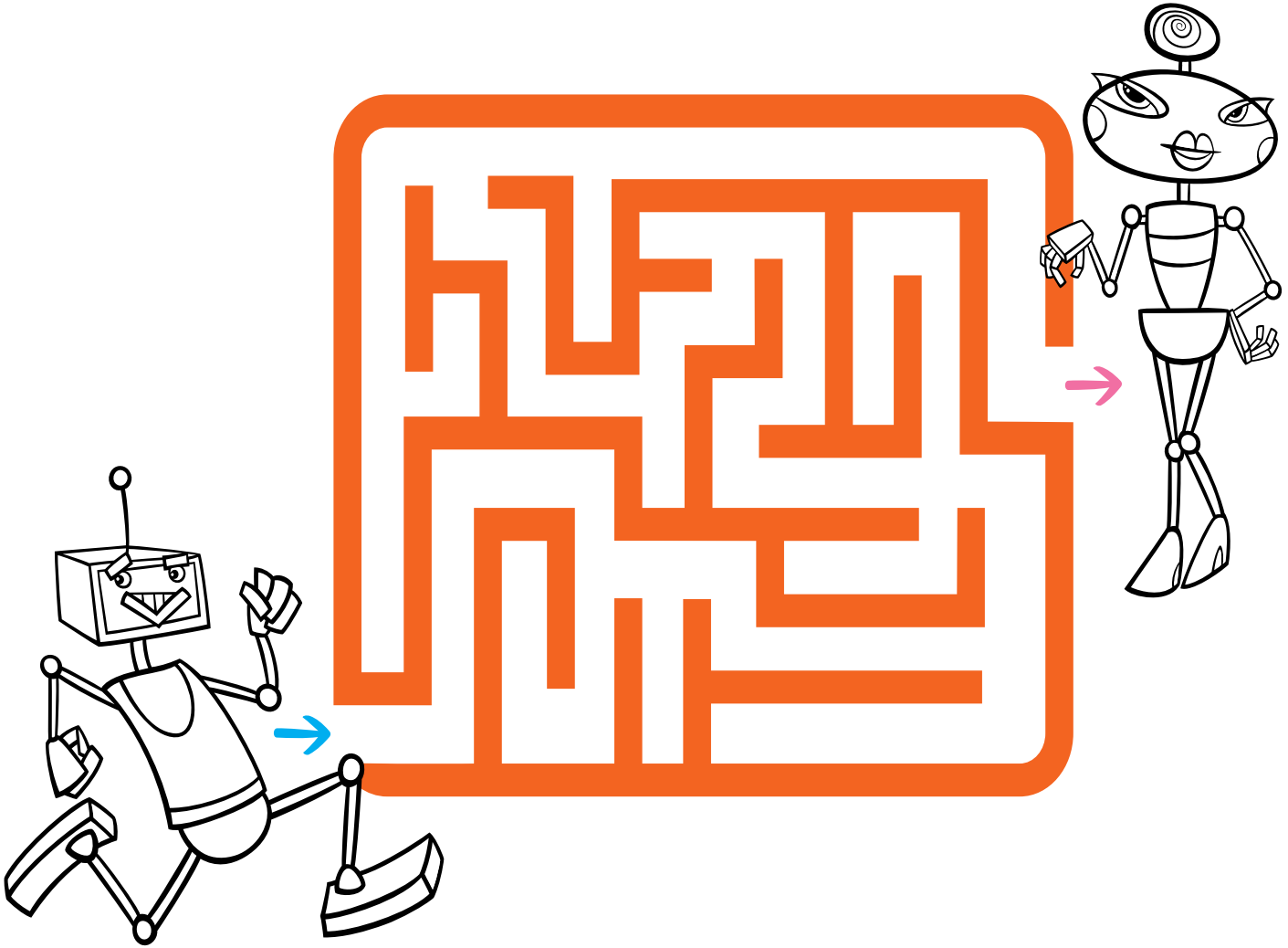
Help *keen Kevin* find his way to his girlfriend *sweet Susie*



Dr Susanna Mantovani

SPOT 5 differences

Susanna looks at the differences in the way people sleep. Why do different people sleep in different ways?

Susanna has two marvellous daughters and always dreamt to be a scientist to find ways to improve people's health.

Shutterstock.com

Dr Tamara Keeley

I love working with teams that help save endangered species and protect our wild outdoor spaces.

Tamara analyses animal poo to find out if an animal is pregnant.

She also helps animals have babies at the zoo.

As well as being a scientist, Tamara is a Salsa dancer and black belt in Taekwondo.

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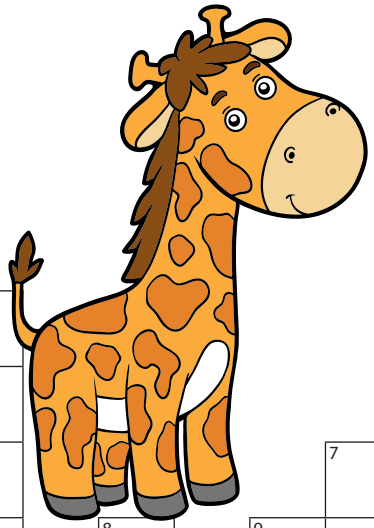
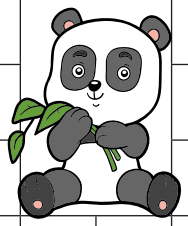
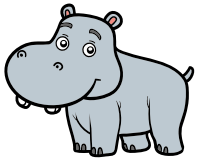
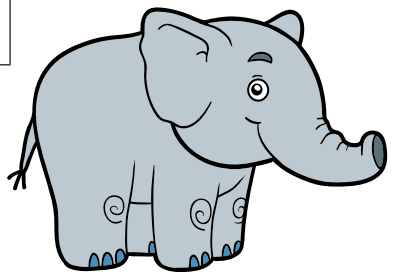
Who's who in the zoo crossword









ACROSS:

5. Australian jumping animals
9. Animals with a hump
10. Largest land animals

DOWN:

1. Cheeky monkeys
2. Striped horses
3. Large African animals with short legs and loves wallowing in the mud
4. Australian cuddly-bear like natives
6. Animals with a very long neck
7. Black and white bears found in China
8. Large striped cats

Dr Tasmin Rymer

Tasmin teaches people about animals and plants. She also studies mice.

Even from a young child Tasmin loved animals. As well as animals, she enjoys music, singing, dancing and playing the piano.

Word search created by Puzzlemaker at DiscoveryEducation.com

All about rodents ...

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R	O	D	E	N	T	I	A	R	L	R	O	Z	A	I	X	R
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ANOMALUROMORPHA
AMBERAT
CHIPMUNK
CHORDATE
DISPERSAL
EXTINCT
FRAGMENTATION
GERBIL
HOUSE MOUSE
HUDDLE
INCISORS
KANGAROO RAT
MARA
MURIDAE
NEW ENDEMICS
NOTOMYS
PEBBLE MOUSE
PLAGUE
POLLINATE
ROCK RAT
RODENTIA
RATTUS
TAIL
UROMYINI
XEROMYS

Dr Tatiana Komarova

Tatiana analyses different environmental objects and human hair, urine and blood for toxins.

Tatiana has always wanted to know how things were created.

Tatiana enjoys floor gymnastics and living a healthy and active lifestyle.

FLOWER experiment

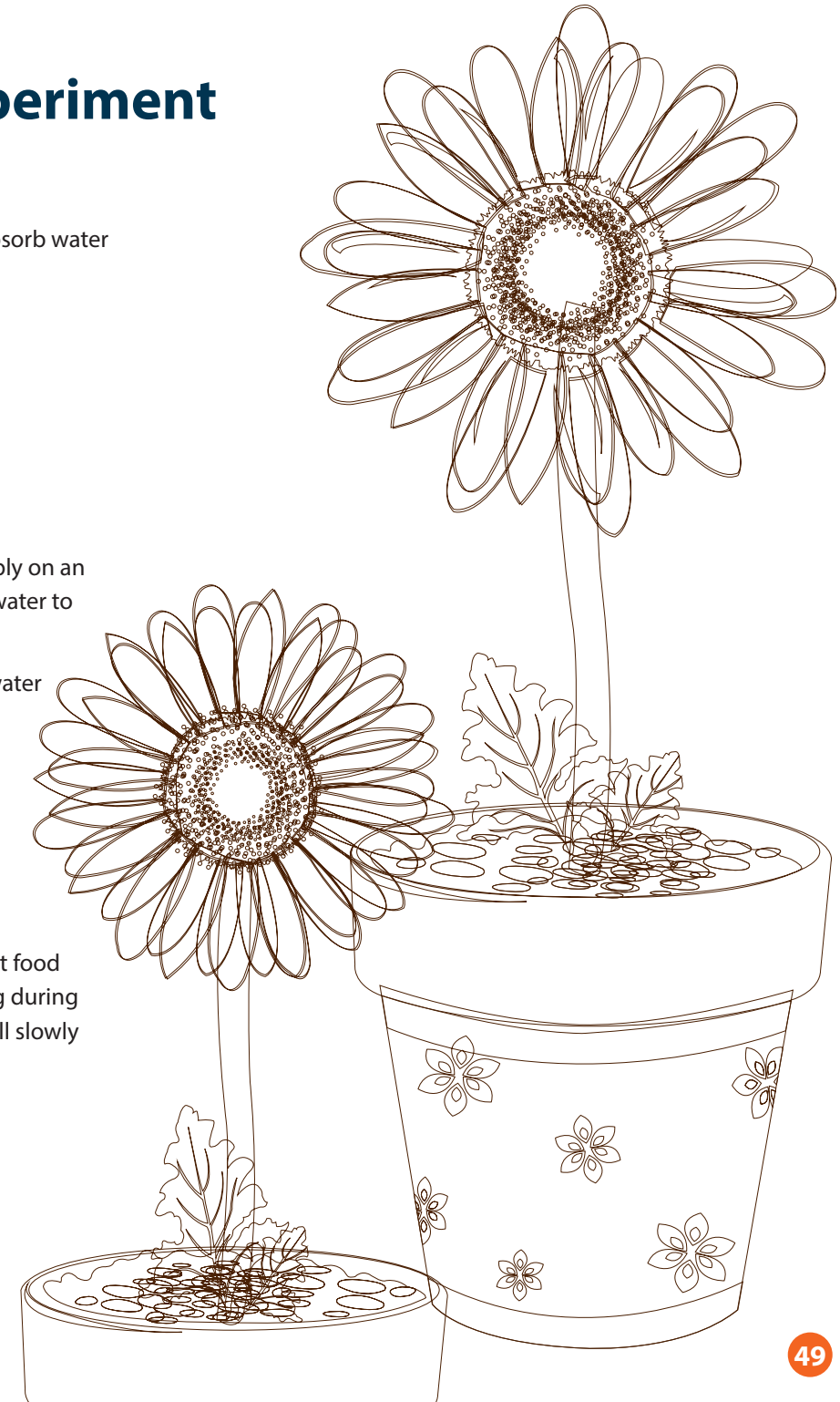
The experiment shows the way flowers absorb water into their petals.

Equipment/materials

- any white flowers
- small glasses with water
- food colouring

Stages of the experiment

1. Cut a flower with a short stem preferably on an angle to increase the surface area for water to move up.
2. Place the flower in a small glass with water and add a small amount of any food colouring.
3. Leave it for 20–30 minutes.
4. A flower will suck water up through its stem and colour its petals. This is called 'transpiration'.
5. Do this experiment with a few different food colourings. You can mix food colouring during the experiment to see how a flower will slowly change the colour of its petals.



Dr Tim O'Hare

Tim makes new fruit and vegetables to eat. His favourite colour is green—this might be why he loves plants so much!

When he was younger, he wanted to sell green soft drink in a green and white-striped shop.

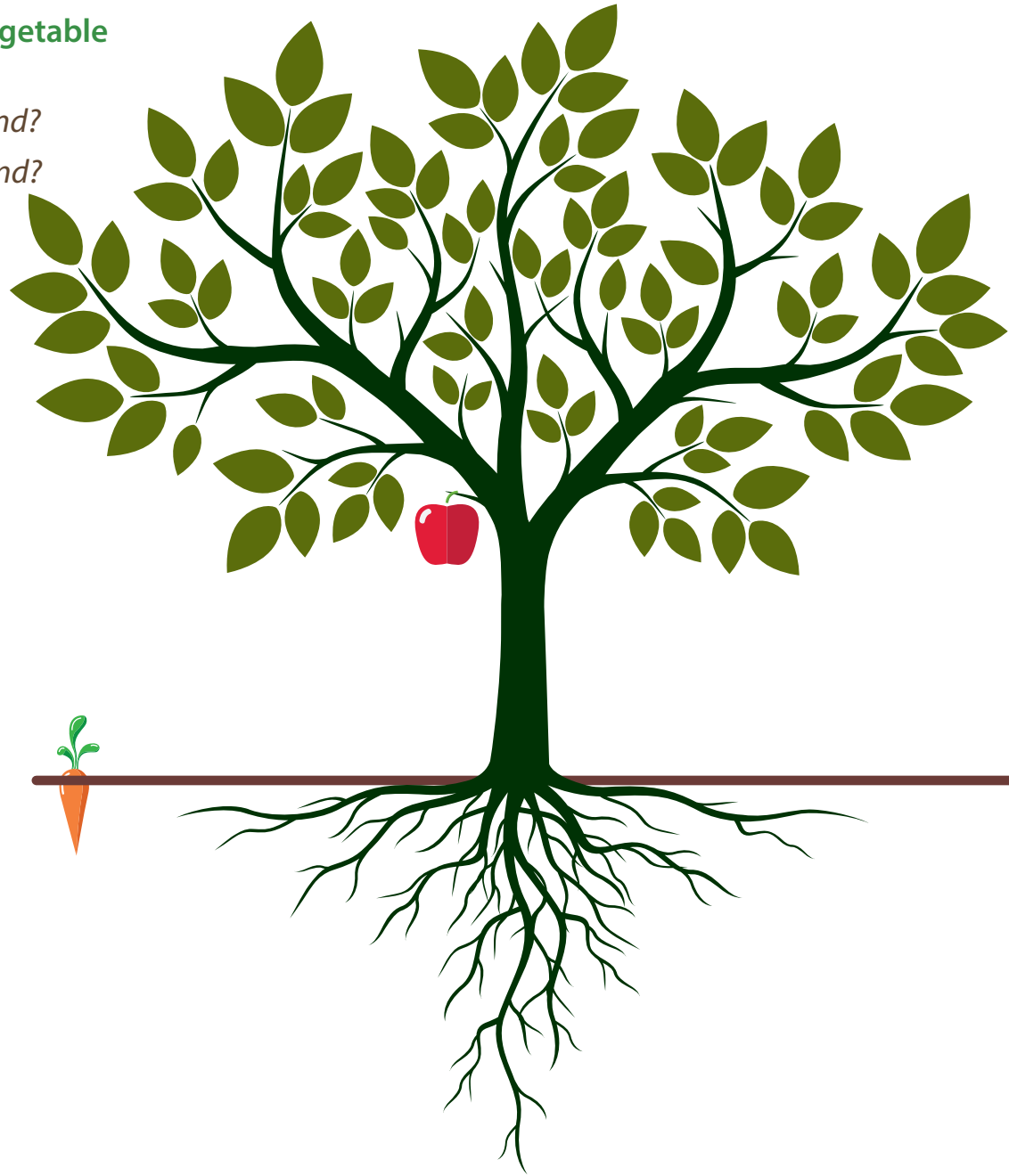
Where does it grow?

Draw the fruit/vegetable where it grows:

… below the ground?

… above the ground?

- apple
- beetroot
- mango
- carrot
- orange
- tomato
- banana
- pear
- pumpkin
- potato
- peas
- capsicum
- onion
- pineapple



Assoc. Professor Yvette Everingham

Yvette uses math to help farmers grow bigger crops and to help protect the Great Barrier Reef.

As a child Yvette wanted to be a teacher. She loves mountain biking.

Colour in this fractal mandela

A fractal is an abstract object used to describe and simulate naturally occurring objects.

Shutterstock.com

Dr Zsuzsa Banhalmi-Zakar

Zsuzsa studies how plants and animals respond to changes in the climate.

When she was younger, she wanted to be a doctor or an anthropologist—like Indiana Jones.

As well as environmental science, she likes riding her big, orange, three-wheeled bike.

Reduce your carbon footprint

1. Add a print of your foot using black paint on a large poster.
2. Discuss with your family what makes someone have a large footprint? (Driving a car, using electricity when it's not needed, etc.)
3. How can you shrink your carbon footprint? Write down some positive actions.

If you're stuck, here's some ideas:

- Use a refillable water bottle instead of buying bottled water
- Unplug phone chargers and turn off your computer monitor when not in use
- Open windows instead of using air-conditioning

ANSWERS:

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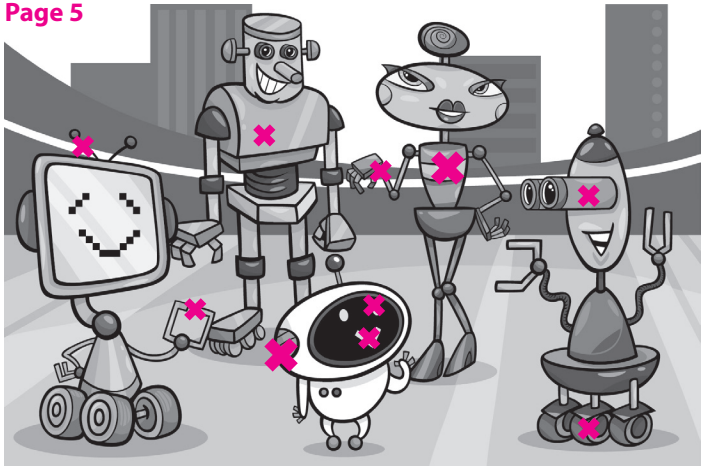

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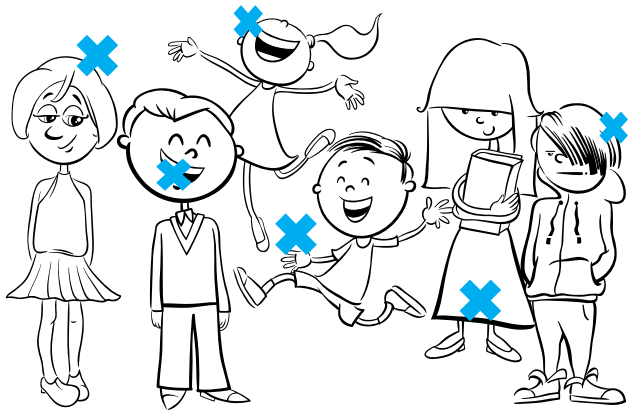

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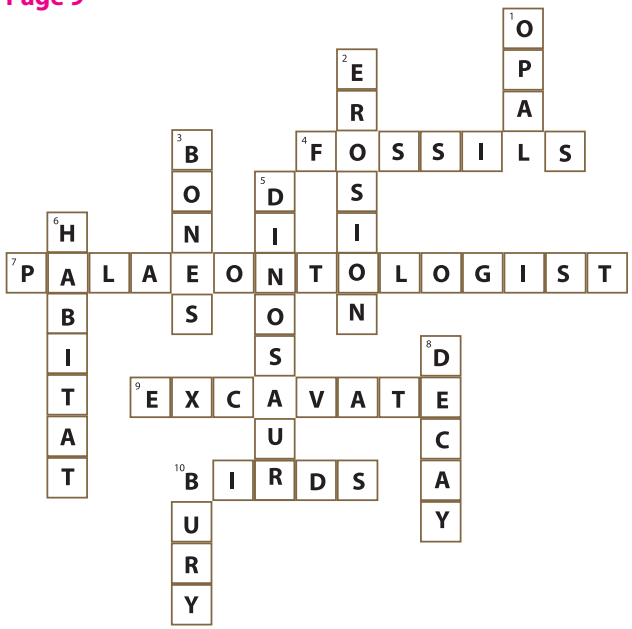

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Page 12

ECHIDNA
KANGAROO
POSSUM
PLATYPUS
KOALA
DINGO
WALLABY
WOMBAT
EMU
LYREBIRD
KOOKABURRA
QUOLL
COCKATOO
CASSOWARY
REDBACK SPIDER
BILBY
BLACK SWAN
GOANNA
CLOWNFISH
FUNNEL WEB SPIDER

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K	S	A	E	R	C	N	A	P	Z	T	G

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B	G	F	D	E	Z	E	E	N	S	T	M
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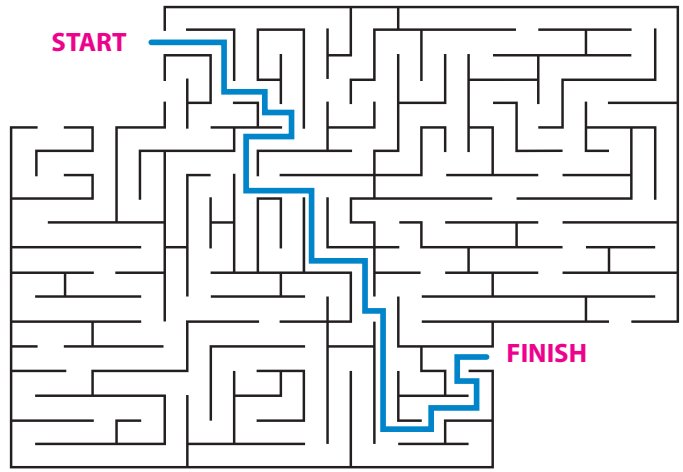

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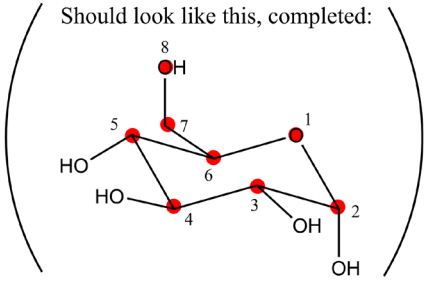

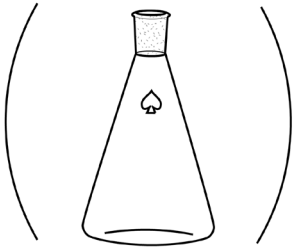

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I love science and maths subjects

Learning science and maths subjects are fun and challenging..

A boy jumped from a car.

A girl played music from Beethoven.

A dog and a cat raced for the food.

The dog won the race.

I dream about becoming a computer scientist.

I want to develop a robot to do household work.

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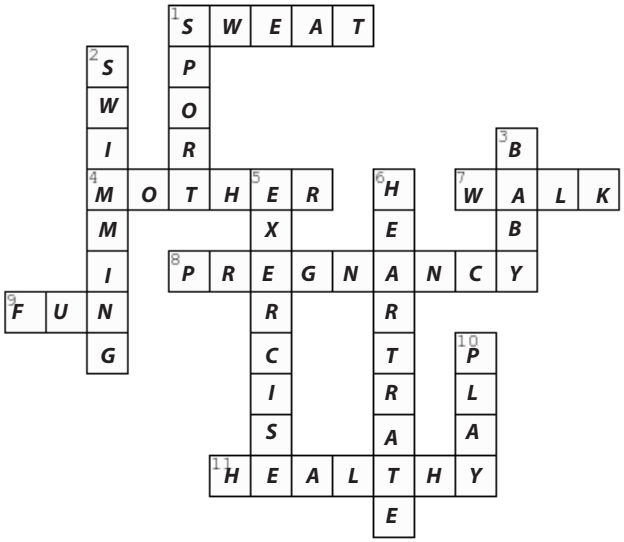

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E	B	N	O	I	T	I	N	G	O	C	E	R	C	D

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INNOVATION
LABORATORY
SCIENCE
ENGINEER
TALENT
CURIOSITY
READING
EXPERIMENT
QUESTION
TECHNOLOGY
INVENT
ATOM MOLECULES
PASSION
DOCTOR
ANALYSIS
METHOD
MODEL
PROBLEM
EXAMINE

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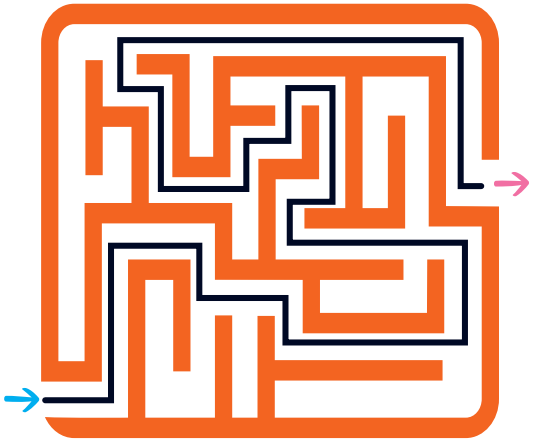

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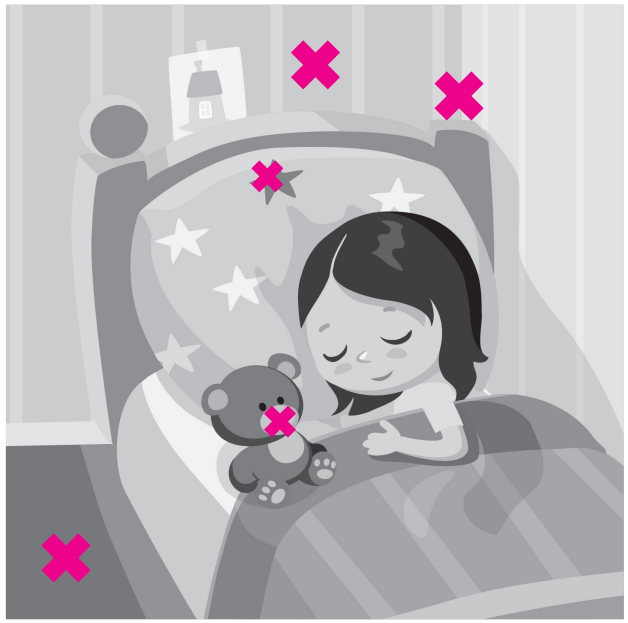

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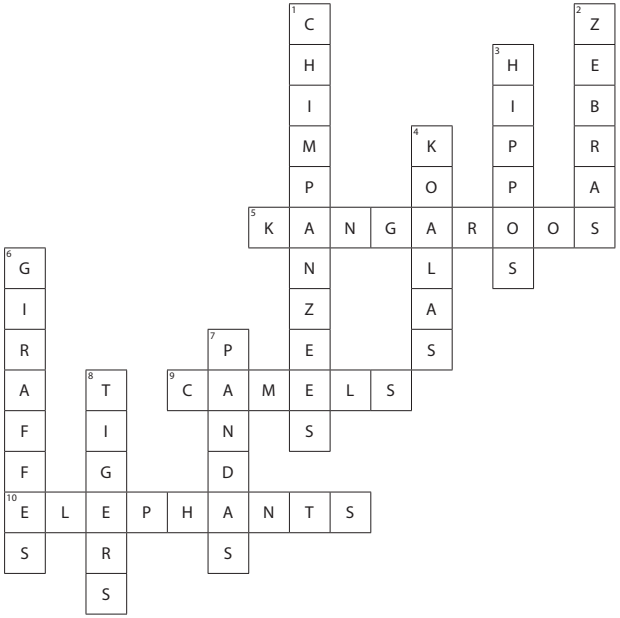

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Q	O	H	I	T	W	O	E	C	R	D	T	R	G	T	Y	D
U	L	I	N	A	I	R	U	O	T	I	T	K	P	N	A	S
D	L	P	I	R	F	S	G	S	H	R	U	C	J	K	A	L
Z	I	M	Y	E	X	C	V	B	E	U	S	O	N	M	Q	K
W	N	U	M	B	E	R	A	R	A	M	T	R	L	I	A	T
Y	A	N	O	M	A	L	U	R	O	M	O	R	P	H	A	U
I	T	K	R	A	O	P	A	S	D	F	G	U	H	J	K	L
Z	E	X	U	P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

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Where does it grow?

… below the ground?

beetroot
carrot
potato
onion

… above the ground?

apple
mango
orange
tomato
banana
pear
pumpkin
tomato
peas
capsicum
pinapple

Queensland is home to lots of people who use all sorts of amazing science, technology, engineering and mathematics (STEM) in their jobs.

A big thank you to those who have contributed activities to this book and for sharing their love of their work.

We hope this activity book inspires young Queenslanders and provides information about the great work happening in Queensland and the range of careers in STEM.

If you're a teacher, parent, scientist or researcher, you may like to read our Engaging Queenslanders in Science strategy. This strategy looks to involve all Queenslanders in science—at school, at events and at home. It is available at www.chiefscientist.qld.gov.au.

Special acknowledgement to Professor Kathy Andrews from That's Rad! Science for the concept idea.

If you want the answers or for more fun activities, visit the Office of the Queensland Chief Scientist website www.chiefscientist.qld.gov.au.

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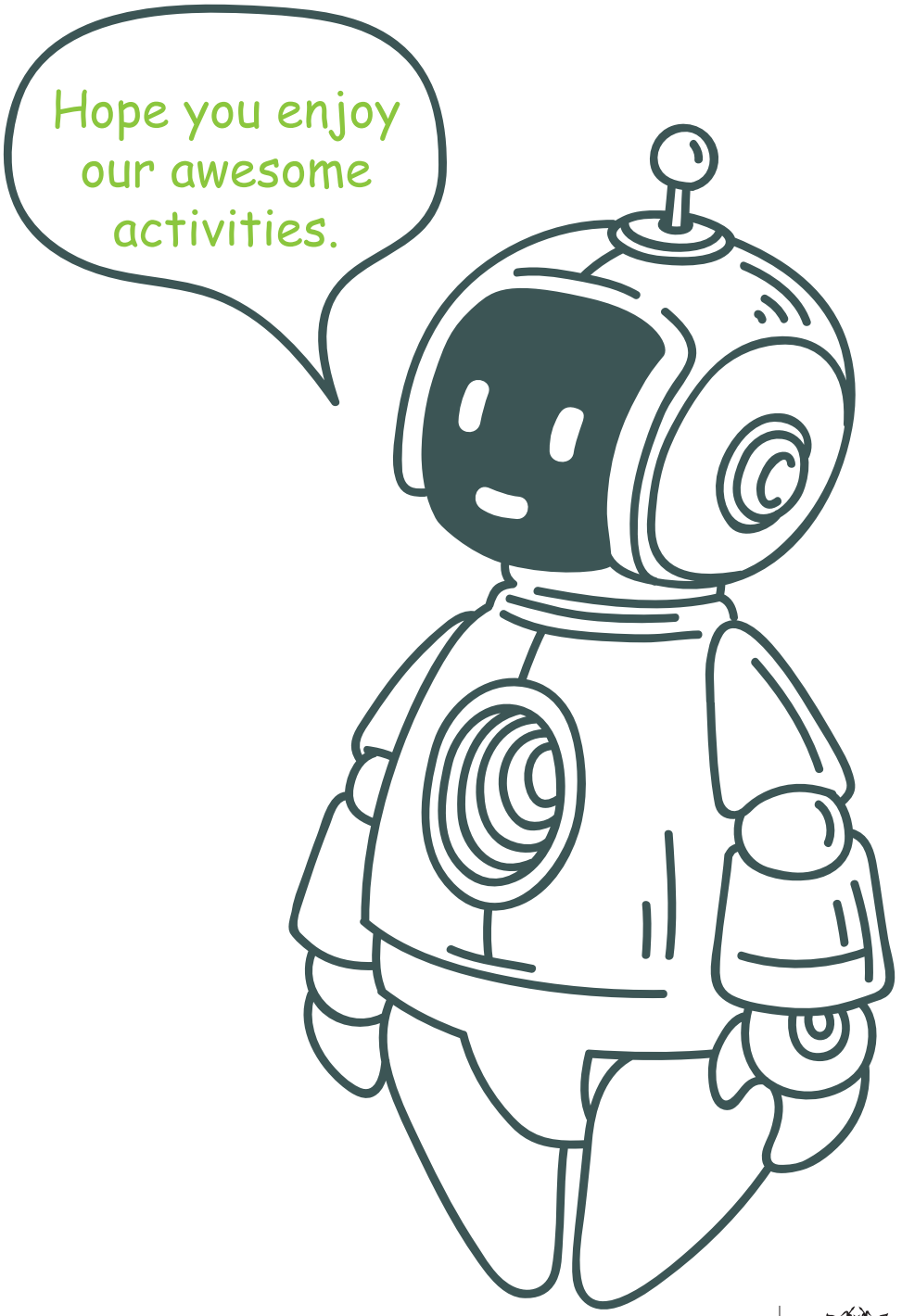

ADVANCE QUEENSLAND

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