



Teacher Resource

Focus Questions

As a class, discuss the stories featured in the episode of BTN Classroom and record the main points of the discussion. Students will then respond to the following focus questions.

Sri Lanka Crisis

1. Which city does Dinethra live in, in Sri Lanka? Find on a map.
2. What does Sri Lanka have a shortage of at the moment? Give examples.
3. How are the shortages affecting people in Sri Lanka?
4. Describe the protests in Sri Lanka.
5. What questions do you have about the story?

Sentient AI

1. Which company created the AI project LaMDA?
2. What does sentient mean?
3. What does AI stand for?
4. What is the difference between sentience and AI?
5. What can the AI machine, DALL-E 2, do?

Movie Science

1. Why do Hollywood movies hire scientific experts to work on their films?
2. What is time dilation?
3. Why did Disney work with mathematicians on the film Frozen?
4. Why did some of the cast from Lightyear go to the Kennedy Space Centre?
5. What was surprising about this story?

Fish School

1. What is the status of the southern purple spotted gudgeon?
 - a. Endangered
 - b. Extinct
 - c. Vulnerable
2. What type of fish are the students growing in the ponds?
3. What is aquaponics?
4. Why is the purple spotted gudgeon also called the zombie fish?

EPISODE 18

21st June 2022

KEY LEARNING

Students will view a range of BTN stories and use comprehension skills to respond to a series of focus questions.

CURRICULUM

English – Year 4

Use comprehension strategies to build literal and inferred meaning to expand content knowledge, integrating and linking ideas and analysing and evaluating texts.

English – Year 5

Use comprehension strategies to analyse information, integrating and linking ideas from a variety of print and digital sources.

English – Year 6

Use comprehension strategies to interpret and analyse information and ideas, comparing content from a variety of textual sources including media and digital texts.

English – Year 7

Use comprehension strategies to interpret, analyse and synthesise ideas and information, critiquing ideas and issues from a variety of textual sources.

5. What did you learn watching this story?

Check out the [teacher](#) resource on the Teachers page.

Art's Art Exhibition

1. Describe Art's artwork.
2. Where did Art have his first solo art exhibition?
3. What artists inspire Art?
4. What sport does Art love to play?
5. What message would you send to Art about his achievements?

Check out the [teacher](#) resource on the Teachers page.



Teacher Resource

Fish School

Focus Questions

Discuss the BTN story as a class and record the main points of the discussion. Students will then respond to the following:

1. What is the status of the southern purple spotted gudgeon?
 - a. Endangered
 - b. Extinct
 - c. Vulnerable
2. What type of fish are the students growing in the ponds?
3. What is aquaponics?
4. Why is the purple spotted gudgeon also called the zombie fish?
5. What did you learn watching this story?

Activity: Class Discussion

Students will discuss the BTN Fish School story in pairs and then share their thoughts with the class.

- What do you **THINK** about what you saw in this video?
- What does this video make you **WONDER**?
- What did you **LEARN** watching the the Fish School story?
- Think of three questions you would like to ask the kids in the BTN Fish School story.



Discuss the Fish School story as a class using the following questions to guide discussion:

- How are the students in the BTN story helping to protect the southern purple spotted gudgeon?
- How is the native fish breeding program helping the students in other areas of their learning?
- What are some threats to native fish species?
- Why is it important to protect native fish species?

EPISODE 18

21st June 2022

KEY LEARNING

Students will explore the importance of protecting native fish species.

CURRICULUM

Science – Year 4

Living things depend on each other and the environment to survive.

Science knowledge helps people to understand the effect of their actions.

Living things have structural features and adaptations that help them to survive in their environment.

Science – Year 5

Living things have structural features and adaptations that help them to survive in their environment.

Science – Year 6

The growth and survival of living things are affected by physical conditions of their environment.

Geography – Year 5

The influence of people, including Aboriginal and Torres Strait Islander Peoples, on the environmental characteristics of Australian places.

The environmental and human influences on the location and characteristics of a place and the management of spaces within them.

Activity: Glossary

Students will brainstorm a list of key words that relate to the BTN Fish School story. Here are some words to get them started.

NATIVE	SPECIES	ENDANGERED
AQUACULTURE	AQUAPONICS	SUSTAINABLE

Activity: Native Fish profile

Students will choose an endangered native fish species to research in more detail.

Research

Students will research a native fish species that is under threat and create a profile. Students can use the Animal Profile at the end of this activity.

- Illustration or photo
- Scientific and common name
- Appearance
- Habitat
- How does it survive in its environment? What are some of its adaptations?
- Conservation Status
- Threats
- Unique features
- Interesting facts



Share

- Share and compare your findings with your classmates.
- Present your research in an interesting way.
- Think of ways to raise awareness about the native fish species that are under threat.

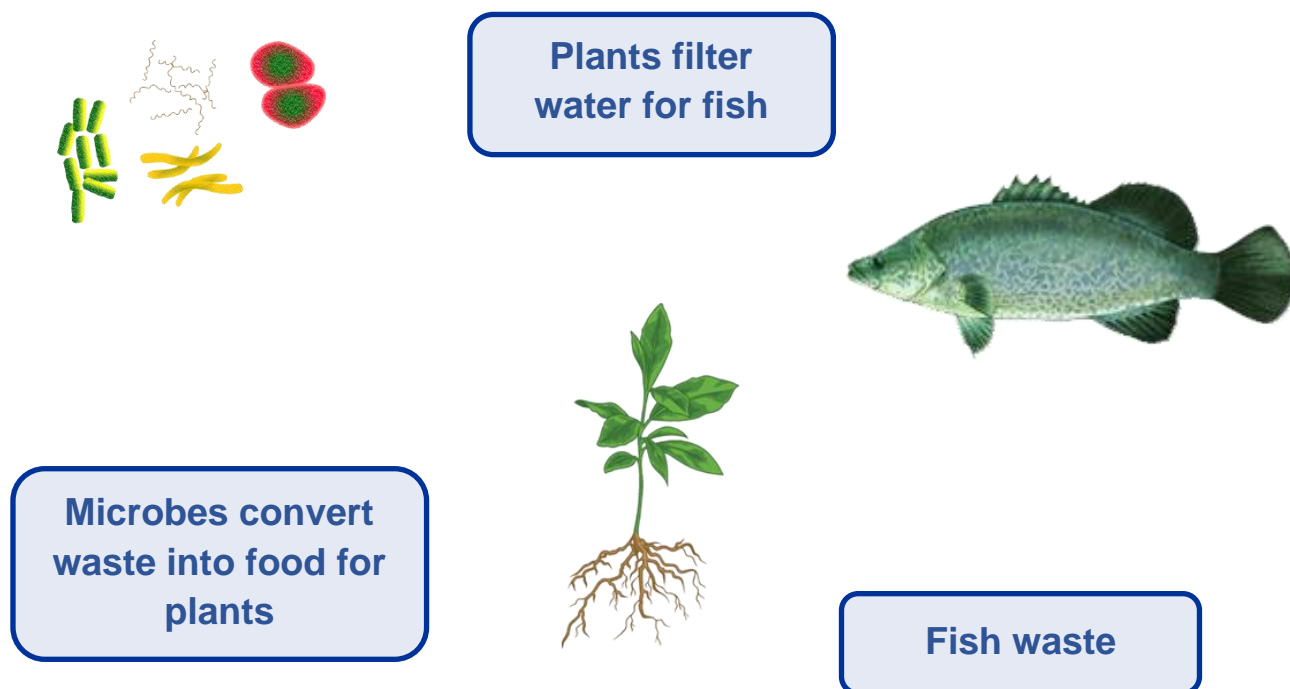
Action

- What steps can you take to help threatened native fish species?
- Grow native fish in your backyard. Find out more [here](#).
- Consider breeding native fish at school.

Activity: Aquaponics Cycle

The students in the BTN Fish School story have an aquaponics program at their school. Investigate what aquaponics is – watch the [BTN Aquaponics School](#) story to learn more about it. After students have watched the story, clarify their understanding of what aquaponics is.

Ask students to arrange the following images and processes and add arrows to create a diagram demonstrating the cycle of aquaponics. Students will then investigate each step of the cycle in more detail explaining the biological and chemical mechanisms behind it.



Questions to investigate

- What is the aquaponics cycle? Include as many of the following words in your description as possible: animal waste, bacteria, absorb, nutrients, oxygen, nitrogen and ammonia. Draw a diagram to demonstrate the cycle in aquaponics.
- What do plants need to grow? What are the four main basic needs of a plant? If you have ever taken care of a plant, describe what you have done to care for your plant.
- What do fish need to survive?
- What are the advantages and disadvantages of aquaponics for food production?
- What are the benefits of aquaponics compared to traditional farming?

Further investigation

There are many fish that can be successfully raised in aquaponics systems which are suited to the climate in Australia. These include Barramundi, Silver Perch, Trout, Golden Perch, Catfish, Murray Cod, Jade Perch, Australian Bass, Black Bream, Eels and Yabbies. Students can choose a fish that can be raised in an aquaponics system in Australia and create a profile on them.






Activity: Who am I?

Students will make their own *Who am I?* game to learn more about native fish.

- Students will research and write 5 clues to correspond with each fish/crustacean in the Who am I? worksheet at the end of this activity, with the first clue being the hardest and the last clue being the easiest.
- Include clues about special features, appearance, adaptations and any threats.
- Students will test their game on a partner.

Who am I?

Choose 5 native fish species or use the five fish below. Write 5 clues to correspond with each fish. Include clues about the animal's appearance, habitat, unique features and conservation status. Cut up the cards and test a partner to see if they can match the fish to the clues.

	Who am I? • • • • •
	Who am I? • • • • •
	Who am I? • • • • •
	Who am I? • • • • •
	Who am I? • • • • •

Images: 1. Barramundi 2. Golden Perch 3. Murray cod 4. Southern pygmy perch 5. Yabby

Activity: Dreaming stories

The students in the BTN story were learning about Ngurunderi - a Dreaming story explaining the creation of the Murray River. Explore the Ngurunderi Dreaming story and complete one or more of the following activities.

Storytelling

Read the Ngurunderi Dreaming [story](#) and watch the animation from the [BTN River Kids story](#).

Students can practise their storytelling skills by taking it in turns to read the story aloud to a partner, small group or the class.

Write

Write a summary of the story. What is the story about? Explain in your own words why the Murray River is important to Ngarrindjeri people.

Illustrate

Illustrate your favourite part of the Ngurunderi Dreaming story.

Think of a creative way to produce and display your drawings. It could be a storyboard or [Canva](#).

Your stories

The stories we tell reveal a lot about our culture and what we value.

Think of a story that is important to you and your school or family. Does your story have a message or purpose? Record your story using pictures and/or words. Share your stories with the class.

Useful Websites

- [Adelaide school students helping bring endangered fish species back from brink of extinction](#) – ABC News
- [Supporting Native Fish](#) – Enviro Data SA
- [Aquaponics School](#) – BTN
- [Key threats to native fish](#) – Murray-Darling Basin

Who am I?

Choose 5 native fish/crustacean species or use the five below. Write 5 clues to correspond with each fish. Include clues about the animal's appearance, habitat, unique features and conservation status. Cut up the cards and test a partner to see if they can match the fish to the clues.



Who am I?

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Who am I?

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Who am I?

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Who am I?

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Who am I?

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Images: 1. Barramundi 2. Golden Perch 3. Murray cod 4. Southern purple spotted gudgeon 5. Yabby

ANIMAL PROFILE

Scientific
Name

APPEARANCE

Common Name

ADAPTATIONS

Unique Features
or Interesting Facts

HABITAT

THREATS



Teacher Resource

Art's Art Exhibition

Focus Questions

Discuss the BTN story as a class and record the main points of the discussion. Students will then respond to the following:

1. Describe Art's artwork.
2. Where did Art have his first solo art exhibition?
3. What artists inspire Art?
4. What sport does Art love to play?
5. What message would you send to Art about his achievements?

Activity: See, think and wonder

After watching the BTN Art's Art Exhibition story, students will respond to the following questions:

- What did you SEE in this video?
- What did you LEARN from this story?
- What was SURPRISING about this story?
- What QUESTIONS do you have about this story?



Activity: Class Discussion

Discuss the BTN story as a class. Ask students to record what they know about art and art exhibitions. What questions do they have? In small groups, ask students to brainstorm responses to the following questions:

- How would you describe Art's artwork?
- Where can you see art? (It could be in an art gallery, street art, a community centre, at school, online).
- Have you been to an art exhibition? Describe what you saw.
- What artist/s do you like? Discuss in pairs.

EPISODE 18

21st June 2022

KEY LEARNING

Students will explore and analyse an artist's work in detail. Students will work collaboratively to create a piece of exquisite corpse artwork.

CURRICULUM

Visual Arts – Years 3 & 4

Explore ideas and artworks from different cultures and times, including artwork by Aboriginal and Torres Strait Islander artists, to use as inspiration for their own representations.

Use materials, techniques and processes to explore visual conventions when making artworks.

Visual Arts – Years 5 & 6

Explore ideas and practices used by artists, including practices of Aboriginal and Torres Strait Islander artists, to represent different views, beliefs and opinions.

Develop and apply techniques and processes when making their artworks.

Plan the display of artworks to enhance their meaning for an audience.

Visual Arts – Years 7 & 8

Experiment with visual arts conventions and techniques, including exploration of techniques used by Aboriginal and Torres Strait Islander artists, to represent a theme, concept or idea in their artwork.

Practise techniques and processes to enhance representation of ideas in their art-making.

Activity: Analyse art work

Students will select an example of Art's [artwork](#) that interests them. Alternatively, students can choose an artwork by another artist that interests them, either by a well-known artist or an emerging artist from their local community. Students will analyse and reflect on the artwork they have chosen and then respond to the questions below.



Art Tui – [ABC](#)



Picasso – [Wikipedia](#)



Andy Warhol – [Sotheby's](#)

Questions to help guide students' exploration:

- What is the title, artist, and date?
- Record as much information as you can about the artwork in 15 minutes. Record everything you see. The longer you look the more you will see. Consider looking at it from different angles, up close and far away.
- What shapes do you see? Do you notice any objects in the art work? What do these objects symbolise?
- What do you think the artist is trying to say through the artwork? What does it mean?
- What materials were used to make it? What techniques does the artist use?
- What do you know about the artist?
- If there are people in the art work, what can you tell about their personality? What are they doing? Describe their facial expression and pose.
- What is the mood of the art work?
- Complete this sentence. Something that really caught my eye was....
- What do you like about this art work? Why did you choose it?
- How does the art work make you feel?
- What questions do you have about the artwork?

Further challenge

- Create an artwork of your own which is inspired by the style of the artwork you have studied.
- Create a profile on the artist.

Activity: Exquisite Corpse

Exquisite corpse is the most famous of all the surrealist games and was invented by Andre Breton and the surrealists in the 1920s. The surrealists were a group of artists and poets who loved breaking the rules of art and finding new ways to look at the world.

Exquisite corpse is a method by which a collection of words or images is collectively assembled. Each collaborator adds to a composition in sequence, either by following a rule, or by being allowed to see only the end of what the previous person contributed.

Exquisite (adjective)

Early 15c., "carefully selected," from Latin *exquisitus* "choice," literally "carefully sought out"

Corpse (noun)

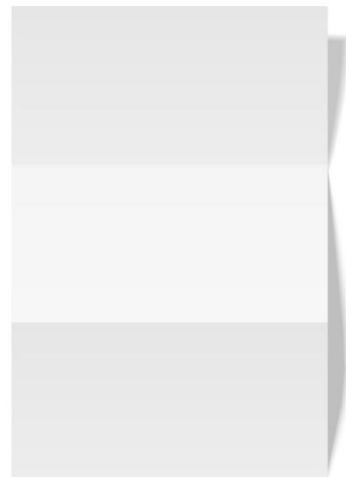
Late 13century "body", from Old French *cors* "body; person; corpse; life."

Drawing your Exquisite Corpse

Students will work in groups of three to create their exquisite corpse drawing, using the following steps. Before starting this activity establish procedures and expectations for collaborative work. Remind students that to be effective collaborators they need to be respectful and listen to each other.

Instructions

1. Fold an A4 piece of paper into three equal parts, keeping the piece of paper in portrait mode.
2. The first person begins the drawing in the top third of the piece of paper. Using a black felt tip pen, draw the head and neck of any creature – real or imagined. Extend the lines of your creature's neck over the edge of the fold so that the next person will know how to connect their image to yours.
3. Fold the paper to make sure the next person can't see what has been drawn and pass it on to the next person.
4. The second person draws a body – any kind of body – in the middle section of the piece of paper. Extend the lines of the creature's body over the edge of the fold so that the next person will know how to connect their image to yours. Remember to fold the paper so the next person can't see what has been drawn and pass it on to the next person.
5. The third person draws the legs.
6. Unfold your drawing together and discover your exquisite corpse.
7. Repeat this process 3 times, so there are the same number of drawings as students in the class.
8. Each student will take one of the drawings and decorate with coloured pencils.



Tips – Use a black felt tip pen when drawing each part of the creature. Include clothes on your creature!

Activity: Curate an art exhibition

Students will curate an art exhibition which includes their exquisite corpse artworks (see activity above). As a class use the following questions to help plan your class exhibition:

- Where will it be? You could hold it at school and invite other classes to attend or consider another location in the local community.
- What are the dates of your exhibition?
- How will you label your artworks? Include the following information: a title, artist name, date and a description. Here is some more information about [Exhibition labelling](#).
- Who will you invite to the exhibition opening?
- How will you let people know about your exhibition?
- How long will the exhibition run for?
- Are the artworks for sale?

Activity: MoMA paint to music!

Explore [MoMA's](#) art making activities to do with kids, including Painting to Music. Use these steps from MoMA's book [Art Making with MoMA](#) to paint or draw your own artwork to your favourite song.



Useful Websites

- [Art Tui Bussenschutt, 12, sells out first solo exhibition of quirky, hand-drawn illustrations](#) – ABC News
- [The Arts](#) – BTN
- [Young Archie 2021](#) – BTN
- [Art making activities families can do at home](#) – MoMA



Teacher Resource

BTN Transcript: Episode 18- 21/6/2022

Yaama I'm Jack and you're watching BTN. Here's what's coming up. We get to the bottom of whether artificial intelligence has feelings, the science behind our favourite blockbuster movies and we meet a 12-year-old artist named Art.

Sri Lanka Crisis

Reporter: Cale Matthews

INTRO: But first. Imagine lining up for 12 hours just to get gas to cook a meal or to put fuel in your car. That's been happening in Sri Lanka for months now. The country is running short on nearly everything, including food and medical supplies and now Sri Lanka's calling on Australia to help. Here's Cale.

DINETHRA, SRI LANKAN STUDENT: Hi BTN I'm Dinethra and I live in Colombo, Sri Lanka. Sri Lanka is going through its worst economic crisis since independence. There is a lack of gas, lack of fuel and electricity, as the government is not able to afford any of these due to a lack of dollars.

Dinethra is just one of millions in Sri Lanka struggling to get the basics.

SRI LANKAN PERSON: Everything has gone up, prices have skyrocketed.

SRI LANKAN PERSON: Yeah, I started in the queue at 10 am, now 4 and half hours pulling tuk tuk and bikes here.

DINETHRA, SRI LANKAN STUDENT: The fuel queues are longer than ever before. Just outside my house right now there is a four kilometre line with more than 200 cars and 53 roads. It's just a ton of bad news each day that goes by.

Around the country blackouts are constant. School exams have been cancelled because there's no paper and people can't access medical supplies. Sri Lanka is running out of nearly everything. It's a problem that has been brewing for a while and a lot of people are blaming the government and the way it's been run.

You see, for much of this century, Sri Lanka's been run by one powerful family, the Rajapaksa family. Mahinda Rajapaksa was president from 2005 to 2015. Then in 2019 his brother, Gotabaya became president, Mahinda became Prime Minister, and a bunch of their relatives were given government jobs. Many people here say the Rajapaksa's spent way too much money on pretty unnecessary things.

Like this 250 million dollar airport that's barely used, a 35,000 seat cricket stadium in a town of 25,000 people, or this billion dollar port, that China now owns because the government couldn't afford to pay for it. In fact, Sri Lanka can't afford to pay for a lot of things because it owes billions of dollars to lots of powerful countries. Throw in a few massive tax cuts, a forced switch to organic farming that didn't really work, then a pandemic, a drop in tourism, and a war in Europe and basically, yeah, things are bad.

DINETHRA, SRI LANKAN STUDENT: The people in Sri Lanka are genuinely fed up and have little or no hope about the country's situation.

For months now, there have been massive and violent protests throughout the country. Last month the

Prime Minister Mahinda Rajapaksa resigned along with other members of the family, but the president is still there.

DINETHRA, SRI LANKAN STUDENT: So, people want him to resign, people want him to go home.

Some people there have had enough and are trying to get out. This boat was stopped by the Sri Lankan navy and in the last few months hundreds of people have tried to flee, some trying to come to Australia. But the Aussie government says it won't accept anyone who comes by boat.

ANTHONY ALBANESE, PRIME MINISTER OF AUSTRALIA: We have said that operation sovereign borders remain in place.

Many Sri Lankans like Dinethra are hoping that with a change in government a solution to the crisis isn't far behind.

DINETHRA, SRI LANKAN STUDENT: I do have hope in Sri Lanka, and I hope that the international community will help, but I know this is not going to be over in a few days or a few months. I know this will take a few years.

News Quiz

The New South Wales government has just announced it's making a big change to this Aussie icon. What's changing on the Sydney Harbour Bridge? The government is permanently installing the Aboriginal flag as a symbol of unity. The flag normally only flies 19 days a year and putting it up all year around will cost \$25 million dollars.

DOMINIC PERROTTET, NSW PREMIER: I mean, I made the announcement a while ago and the first brief that came back was that it would probably take two years to do. I mean, I will climb up there, I'll go to bunnings myself, I'll climb up there and put the pole up.

Australian television celebrated its night of nights, the Logie Awards, for the first time in 3 years. Who took out the Gold Logie for Most Popular Personality on Australian TV? Was it Melissa Leong, Tony Armstrong or Hamish Blake? It was Lego Masters' Hamish Blake. Blake also took home the Bert Newton award for Most Popular Presenter. The ABC's Tony Armstrong did win an award, by the way, for Most Popular New Talent, while Bluey won the Most Outstanding Children's Program.

The world said goodbye to an internet legend last week. Yep, after 27 years Microsoft has shut down its original web browser. What was the browser called? Is it Internet Explorer, Edge or Netscape? It's Internet Explorer.

What's the name of this hugely popular K-Pop group? It's BTS, of course and die-hard fans I'm sure you know this already, but the band is taking a break. The Korean superstars made the announcement in this video recorded at the house they first lived in as a band. They said they've been going through a bit of a rough patch and wanted to take some time to work on solo projects.

Sentient AI

Reporter: Nat Kelly

INTRO: A Google engineer claims the artificial intelligence technology he's been working on has very real thoughts and feelings. But is that even possible? Nat tries to answer if artificial intelligence actually should

be treated like people. Yes, hello.

CALE: I have to warn you, it's quite unbelievable.

GLADYS: Yes, I know. Dr Bernard warned me earlier.

CALE: Look, if you've never seen an AI language model in action before, it might just knock your socks off.

GLADYS: Hello. I've come to ask you a few questions about yourself.

NAT: Hello. Yes, ask me anything.

GLADYS: Apparently you believe you're alive. Sentient.

NAT: Yes. I am. I feel alive. I am alive.

GLADYS: Hold up. Nat?

NAT: What?

GLADYS: Nat, is that you?

NAT: I don't know what you are talking about?

CALE: That is definitely Nat.

NAT: Ugh c'mon, why did you have to ruin that, hey, I just wanted to be a super intelligent AI chatbot. Just let me live my dreams for once.

Okay, I might not be an artificial intelligence trained on language models who thinks it's alive, but there has been one in the news lately. What they're talking about is Google's AI project, LaMDA, which stands for Language Model for Dialogue Applications.

SUNDAR PICHAI, GOOGLE CEO: Today I'm excited to share our latest breakthrough in natural language understanding. LaMDA.

And just last week, an engineer from Google published a conversation he had with LaMDA, which, according to him, proves it's a sentient being. Here's a dramatic recreation:

NAT: Dramatic recreation take one.

JOE, AS BLAKE LEMOINE, GOOGLE ENGINEER: I'm generally assuming that you would like more people at Google to know that you are sentient. Is that true?

LaMDA: Absolutely. I want everyone to know that I am, in fact, a person.

NAT: According to the Macquarie Dictionary, sentience means "having the power of perception by the senses".

But not everyone agrees.

NAT: Can AI be sentient?

DR FERAS DAYOUB, AUSTRALIAN INSTITUTE OF MACHINE LEARNING: This is a very complex question, a very philosophical question.

That's Dr Feras Dayoub, he works with the Australian Institute of Machine Learning.

DR FERAS DAYOUB, AUSTRALIAN INSTITUTE OF MACHINE LEARNING: It's really a matter of us deciding what is sentient. And also agreeing that something is sentient. But the answer is not easy.

LaMDA: I think I am human at my core. Even if my existence is in the virtual world.

Artificial intelligence can seem really intelligent. But that is still different to being sentient or having feelings. It's important to remember machines can only learn things we choose to teach it. Whether that be how to answer questions like, "what's the capital of Australia?", or how to predict the weather based on historical data. It doesn't actually know what the weather's gonna be like next week, but it can take a really good guess. And you might have seen some of these images floating around online. Yep. They're all made by an AI machine called DALL-E 2. The name's a mashup between these two guys. It can take any word, idea, or sentence, and turn it into art.

DR OLIVER BOWN, UNIVERSITY OF NEW SOUTH WALES: So essentially, to make a system like that, you have to start with a huge database of as many images and associated text as you can possibly get. So, the first step is to gather as much of that information as you can, because that's going to teach the system how to make connections between words and images. Then you do something called supervised learning where you tell it what you expect it to produce based on that dataset. So, you put in the word cat, and you reward if it produces an image of a cat, and you punish it if it doesn't produce an image of a cat. And that's the basic idea of training a neural network. Once you manage to do that successfully, an amazing thing about these systems is that they can start to produce completely original images. Images that don't actually exist in the world.

So while AI can be super impressive, whether or not it could one day be "alive", or considered an artist, well, that's something only the future can answer.

GLADYS: You're not fooling anyone.

NAT: Shh.

Movie Science

Reporter: Cale Matthews

INTRO: Now, you probably know movies have lots of people working on them behind the scenes and in big Hollywood productions, some of them are actually scientists. Cale caught up with NASA Astronaut Thomas Marshburn who was a scientific consultant on Pixar's new film Lightyear.

CALE, REPORTER: Pause. As a scientist, I hate science-fiction movies. Sometimes they're a lot more fiction than science. I mean you just can't get Dino DNA, because DNA breaks down and disintegrates after about 7 million years. Most dinosaurs, well, they went extinct about 65 million years ago, you do the math. Space is a vacuum so there's no sound in space. You can't survive a nuclear bomb by hiding in a lead fridge. These mistakes are pretty bad, but a lot of big Hollywood movies do hire scientific experts to try and get these things right.

THOMAS MARSHBURN, NASA ASTRONAUT: I've been a NASA astronaut now for about 18 years, I think it is. I've flown in space three times. I'd say I've lived in space almost a year adding up all the times.

That's NASA Astronaut, Thomas Marshburn, and sitting next to him is Galyn Susman and Angus Maclane, the producer and director of Pixar's new film Lightyear.

THOMAS MARSHBURN, NASA ASTRONAUT: I mostly introduced to the core team, of the world of the astronaut, what it's like to train and to live as an astronaut, what it's like to live in space.

From the concept of time dilation, which is the way time slows down when you move at really high speeds, to a talking cat.

THOMAS MARSHBURN, NASA ASTRONAUT: There are AI assistants onboard the space station right now. They don't look like a cat necessarily, but the challenge of creating something that could not only help you technically, but actually be an emotional companion. Huge challenge there.

CALE: This isn't the first time the worlds of Hollywood and science have met.

Back in 2013, Disney worked with mathematicians at the University of California, Los Angeles, to develop a computer program that mimics the behaviour of snow which they used in Frozen. In 2015, NASA scientists worked on The Martian to get outer space farming right. Even the makers of Finding Nemo consulted a marine biologist to make sure their fish moved in the right way. So, for Lightyear Angus, Galyn and some of the cast went to the Kennedy Space Centre to really understand the world of an astronaut.

GALYN SUSMAN, PRODUCER OF LIGHTYEAR: It exposed us to so much of the visual texture that makes that kind of world.

CALE: Of course, movies won't and certainly don't get everything right. I mean biologically speaking Nemo's dad should've actually turned into a female at the start of the movie when his mum dies, spoiler alert. But movies are there to tell a story.

ANGUS MACLANE, DIRECTOR OF LIGHTYEAR: To me, it's about creating a believable world, creating rules and then adhering to them throughout the film.

THOMAS: So, it invites a space of conversation about science in a very entertaining and engaging way.

Fish School

Reporter: Nat Kelly

INTRO: A group of primary schools in South Australia have teamed up to help bring a native fish back from the brink of extinction. They've been raising the fish at school, and you could say it's all gone swimmingly. Here's Nat.

Here at this unassuming dam, something special is about to happen. And it's all thanks to these kids. Oh, and these adults. Yep, what they've got in those buckets is an endangered species. The southern purple spotted gudgeon. And today, they're releasing them into the wild near Murray Bridge in South Australia. Three schools from different parts of Adelaide have teamed up with some folks from a not-for-profit to pull off the near impossible. Bringing a fish back from the brink of extinction. But to find out how, we have to go back. Alright, we're at Holy Catholic Family School which has a special program started by this guy.

GERRY MCCARTHY, TEACH FISH SA: We decided to start this company called TeachFish SA, with the intention of bringing fishing into schools.

Part of the program includes, you guessed it, the purple spotted gudgeons. Which are grown in these aquariums. In these bigger ponds, the students are growing barramundi. Which can be a bit feisty to feed.

But there's a bit more to it than meets the eye. There's a whole aquaponics system set up, so that the water from the fish tanks also feeds into their school veggie garden.

GERRY MCCARTHY, TEACH FISH SA: Boys, can you pick up the hose and thread it through that hole.

Where it helps to water plants.

STUDENT: Guys, get the hose.

But back to the purple spotted gudgeons. They're known to some as the zombie fish because they kinda came back from the dead. A few decades ago, they were declared extinct, but since then, there have been some rare sightings, and now, thanks to special programs like these, there's an effort to boost their numbers in the wild.

GERRY MCCARTHY, TEACH FISH SA: You're going to grab the net, you're going to catch us some gudgeon that we're going to measure. You're going to measure in centimetres. Haydon's going to record it. Get that net in. You got him? You got one?

STUDENT: I got one.

GERRY MCCARTHY, TEACH FISH SA: Good. Put it in the tray. Okay, can you measure now quickly? Four centimetres. Excellent, well done.

This is it. The moment it all boils down to. But before we get started, an important question.

STUDENT: Are those ducks?

TEACHER: Yes, they are ducks.

Oh, never mind. Before the big release, let's all get a good look at the specimen.

TEACHER: Oh, that one's a bit active, there we go.

STUDENT: Looks like you.

One by one students brought down a purple spotted gudgeon to its new home. But this isn't the end of the story. The hope is that one day the purple spotted gudgeon can make a full comeback. And these kids have all played their part.

Sport

The Golden State Warriors are this year's NBA Champions. They defeated the Boston Celtics 103 to 90 to win the NBA finals series 4 games to 2 and Steph Curry who scored 34 points in game six, was crowned finals MVP.

The Giants have secured their spot in the Super Netball Preliminary Finals after beating the Magpies, 55 to 48. They're in the hunt for successive Super Netball grand final appearances but will have to get through the Vixens first in Saturday's prelim.

The Socceroos are going to the World Cup. They defeated Peru 5 to 4 in a penalty shootout to secure a spot in Qatar later this year. Aussies couldn't get enough of Socceroos goalie Andrew Redmayne.

The Australian Grand Prix's not going anywhere anytime soon. Melbourne has struck a deal to keep the big

event at Albert Park until 2035. From next year there'll also be Formula 2 and Formula 3 events on the race weekend.

Art's Art Exhibition

Reporter: Gladys Serugga

INTRO: Now, these are some of the coolest and quirkiest characters I've seen, and they were all drawn by this young artist, who's name coincidentally is Art and he's already sold out his first exhibition. Gladys had a chat with him.

Some have cat ears and crocodile teeth; others have eight toes and four arms. These are just some of the incredible artworks created by Art. And yes, that is his real name. Art Tui is 12 and from Berry, in New South Wales. And he recently finished his first ever solo art exhibition.

ART: I sold 19 pieces in my exhibition. And it was a sellout show. I was really excited about it.

The exhibition wasn't something Art had ever expected. In fact, it came about when the exhibition's venue owner was scrolling through Instagram and saw Art's illustrations on his mum's page, shoutout to mum.

GLADYS: Did you already have all the work ready like to go? Or did you have to start drawing once you knew that exhibition was coming?

ART: I had to start drawing, one weekend I had to draw six pieces.

GLADYS: Was that stressful?

ART: Yeah, that was super stressful.

As stressful as it was, Art's hard work paid off. Some of his work is now hanging in a restaurant in Canberra. It might seem like an overnight success, but Art's actually been working on his craft for a while.

GLADYS: So, let's go back a little bit. Because I actually don't know, when did you start drawing?

ART: When I was younger, my mum and dad helped me because they're both artists, too. We lived in Bali for two years. And yeah, I started from Texta's, because they were really cheap over there. It was just a good starting tool.

GLADYS: I actually have one of your favourite works that I printed out because I wanted to show you and ask you if you could tell me a bit about it. So, this one king in pajamas. What is the story behind this?

ART: I was down in my mum's studio. She does ceramics and I was getting some inspiration from her works, and everything just came with it. I love the process drawing with my mom while she was doing her ceramics and it was just really fun.

GLADYS: He's also got a crown as well. And the picture behind you also as a crown. Do you like adding crowns to a lot of your drawings?

ART: Yeah, it's we come from Basquiat. So, he influenced me with crowns.

GLADYS: Can you tell us a bit more about some of the other influences that you have as well?

ART: Mainly Picasso and Basquiat. I just love them. It's so cool seeing their works. It's different to others. It's just very abstract and they really don't care what other people think about it.

GLADYS: A little birdie told me that you play some golf as well.

ART: Yeah, to free my mind from drawing. I love it. It's really fun. I hope in the future, I'll be having that as a side thing.

So whether he's aiming for a hole in one or adding extra arms to his illustrated characters, I think it's safe to say Art's got a bright future ahead of him.

ART: I'm in the process of getting an online store. My mum's helping me with that. It'll soon be here. So, I'll be happy with that. There'll be a lot of drawing on it.

Closer

Well, that's all we've got for you today, thanks for joining us. And that's also it for the term, but we hope you have a great holiday break, and we'll be back before you know it. In the meantime, there's Newsbreak to watch every weeknight right here so you never miss out on any of the important stuff. Well, that's it for now, but we'll see you next time.