

**EPISODE 20**
29 July 2025

**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.

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.

# SA Algal Bloom

1. Which state in Australia has been impacted by an algal bloom outbreak? Highlight on a map.
2. How is the algal bloom outbreak impacting marine animals, plants and people?
3. How big is the algal bloom outbreak?
4. What is algae?
5. What support is the government providing for the algal bloom crisis?

# UK Voting Age

1. What country is lowering their voting age to 16?
2. What other countries allow 16-year-olds to vote in national elections? Name two.
3. What is the most common minimum voting age around the world?
4. What are some arguments for and against lowering the voting age to 16?
5. What do you think about lowering the voting age to 16? Give your opinion on the topic.

Check out the [teacher](https://www.abc.net.au/btn/weekly-teacher-resources/10746906) resource on the Archives page.

# Aviation Safety

1. Summarise the BTN Aviation Safety story.
2. Planes are one of the safest ways you can travel. True or false?
3. How has aviation safety improved since planes were first invented? Give 1-2 examples.
4. What is the purpose of a black box?
5. What colour is a black box?
	1. Black
	2. Green
	3. Orange

# Teenage Boss

1. What does Teenage Boss teach kids?
2. What is a budget? Describe using your own words.
3. How much money did Ben receive to pay for his family expenses?
4. Was Ben successful in managing his family’s budget? Explain.
5. Why is it important for young people to learn how to budget?

Check out the [teacher](https://www.abc.net.au/btn/weekly-teacher-resources/10746906) resource on the Archives page.

# Chess Champ

1. How old was Reyaansh when he started playing chess?
2. Chess is one of the oldest sport games. True or false?
3. Which country did chess originate?
4. What is the weakest piece in chess?
5. What did you learn watching this story?



**EPISODE 20**
29 July 2025

**KEY LEARNING**

Students will explore the arguments for and against lowering the voting age to 16.

**CURRICULUM**

**HASS – Year 5**

The key values and features of Australia’s democracy, including elections, and the roles and responsibilities of elected representatives.

**HASS – Year 6**

The key institutions of Australia’s system of government, how it is based on the Westminster system, and the key values and beliefs of Western democracies.

**English – Year 6**

Plan, draft and publish imaginative, informative and persuasive texts, choosing and experimenting with text structures, language features, images and digital resources appropriate to purpose and audience.

Teacher Resource

**UK Voting Age**

# 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 country is lowering their voting age to 16?
2. What other countries allow 16-year-olds to vote in national elections? Name two.
3. What is the most common minimum voting age around the world?
4. What are some arguments for and against lowering the voting age to 16?
5. What do you think about lowering the voting age to 16? Give your opinion on the topic.

**Activity: What do you think?**

Before watching the BTN UK Voting Age story facilitate a class discussion asking students the following question.

*How old do you think someone should be to vote? Why?*

In pairs, students will respond to the question, recording their ideas on a piece of paper. Ask some volunteers in the class to share their thoughts. Follow on this discussion with a quick classroom poll “*Should 16-year-olds be allowed to vote in elections?*”.

After watching the BTN UK Voting Age story record what students already know and what they have learnt about voting. What questions do they have about voting and elections? Use the following questions to help guide discussion.

* Have you ever voted for something? Think of different situations where you have been able to have your vote. For example, in the classroom with hands-up voting, at home in family decisions or at clubs voting for new members.
* Who can vote at an election?
* Who should have the right to vote?
* How old do you have to be to vote in Australia?
* Is voting compulsory in Australia?
* How has people’s right to vote changed over the years?
* Is voting important? Give reasons for your answer.
* Imagine If you were going to vote in an election, which issues would be important to you?
* Complete the following sentence. It is important that young people’s voices are heard because…
* How can young people get their voice heard about issues they care about?
* Think of three questions you have about the BTN story.

**Activity: Glossary**

Create your own classroom glossary about voting. Start by brainstorming words as a class using a mind map to record your responses. Find definitions for each word. Here are some words to get students started.

|  |  |  |
| --- | --- | --- |
| BALLOT BOX | CAMPAIGN | ELECTORATE |
| POLITICAL PARTY | ELECTORAL ROLL | ELECTION |

Further activities for students:

* Choose one word/term from your glossary. Find a definition for the word and explore its meaning in more detail. Explain the meaning of the word or term to your classmates. Use examples to help explain the word’s meaning.
* Visit the Parliamentary Education Office (PEO) for a [glossary](https://peo.gov.au/understand-our-parliament/glossary/) to browse or search the meanings of key parliamentary terms.
* What is suffrage?

# Activity: Public Opinion

Students will interview a range of people to find out the different attitudes and feelings people have towards lowering the voting age to 16 in Australia. Students will use the following as a guide during the interview process:

* Think about who you will interview, for example, family and/or friends.
* Prepare for your interview by writing some questions that you will ask your interviewee. Write open-ended questions. Open-ended questions have no right or wrong answer and can’t be answered with a ‘yes’ or ‘no’.
* Find out what voting means to them.
* Ask if they think the voting age should be lowered and ask them to explain their answer.
* Think about ways to record peoples’ responses – written, audio or video.

# Activity: Opinion Poll

Hold a poll in your class. Students will conduct their own opinion poll on the issue of lowering the voting age in Australia. Working in groups, students will need to decide who their sample group will be and how many people will be polled.

* Write a poll question. Poll questions should be clear, concise, and relevant to the topic. For example, S*hould the voting age be lowered to 16 in Australia?*
* What method they will use to conduct the poll? (Face to face interviews or written responses).
* Ask students to graph the opinion poll results and display in the classroom. Students can reflect on how reliable they think the results were. What would they do differently next time?
* Students may want to film their interviews and then create a movie to present to other students.

# Activity: Class Debate

Debating is an activity that helps students improve a range of skills including public speaking, communication skills, research skills, persuasion, confidence, teamwork and critical thinking. Use the following guide to help plan a classroom debate.

Before starting this activity watch the BTN [Voting Age](https://www.abc.net.au/btn/classroom/voting-age/105225950) story which covers the topic.

**Brainstorm**

As a class brainstorm a list of arguments for and against the issue, using a T-chart to record your student’s responses.

BTN – [Voting Age](https://www.abc.net.au/btn/classroom/voting-age/105225950)

Arguments **for** lowering the voting age to 16…

* Many 16 and 17-year-olds have to pay tax so they should have a say in how their money is used.
* Helps young people learn about politics, democracy and responsibility at a young age.
* Voting while still in school means young people will have access to support and resources about government and elections.
* Young people already make serious decisions, like driving and working.
* Many policies affect young people – like education, climate change, housing – so they should be able to have a voice in politics.

Arguments **against** lowering the voting age to 16…

* Some people say that many 16 and 17-year-olds aren’t mature enough and don’t have enough life experience to make informed voting decisions.
* Some people believe that many 16 and 17-year-olds aren’t interested in politics so may not know who to vote for.

**Classroom Debate – Should the voting age be lowered to 16?**

Divide your class into groups of 6. Each group will then be divided into 2 teams, one representing the affirmative and the other the negative. The team arguing for the topic is called the affirmative and the team arguing against is called the negative, and the team that's judged to make the best argument wins!

To learn more about how debates work watch the BTN High [School Debating](https://www.abc.net.au/btn/high/school-debating/103817364) story.

For each team there is a 1st speaker, 2nd speaker and 3rd speaker, each with a special role. Each speaker will prepare a 1–2-minute speech. Working together as a team students will choose their 3 best points to argue during the debate, work out their roles and what points each speaker will cover.

# Activity – Active Citizenship

Ask students to brainstorm ideas on the whiteboard about what it means to be an active engaged citizen. Encourage them to think about actions that individuals can take to make a positive impact on their communities. Individually or in pairs students will discuss and respond to the following questions.

* What issues are important to you in your community?
* How can individuals contribute to positive change in these areas? Think of big and small actions.

Below are some ways that students can become more active and engaged citizens.



**Join your SRC**Would you like to have a greater say in your school community? Nominate yourself for your School Representative Council.

 **Run a Class Poll**

What’s important to your school community? Conduct a poll in your class or whole school to learn more about your community’s needs and opinions.

**Petition**

Would you like to raise awareness about an issue in your school, local community or in parliament? Get involved and have your say by starting a petition.

**Write a letter**Would you like to see an improvement in your local community? Write a letter to the mayor of your council asking for change.

# Useful Websites

* [UK Voting Age](https://www.abc.net.au/btn/newsbreak/btn-newsbreak-20250718/105546092) – BTN Newsbreak
* [16 and 17-year-olds could be able to vote in the next election](https://www.bbc.co.uk/newsround/articles/cly87q9x638o) – BBC Newsround
* [UK Voting age: Should you be able to vote at 16?](https://www.bbc.co.uk/newsround/61226750) – BBC Newsround
* [Voting Age](https://www.abc.net.au/btn/classroom/voting-age/105225950) – BTN
* [Lowering the Voting Age](https://www.abc.net.au/btn/high/lowering-the-voting-age/103660252) – BTN High
* [History of Voting](https://www.abc.net.au/btn/classroom/history-of-voting/13849266) – BTN
* [Why do people over 18 have to vote?](https://peo.gov.au/understand-our-parliament/your-questions-on-notice/questions/why-do-people-over-18-have-to-vote) – PEO
* [Australian voting history in action](https://www.aec.gov.au/About_AEC/25/theme1-voting-history.htm) – Australian Electoral Commission



**EPISODE 20**
29 July 2025

**KEY LEARNING**

Students will plan, run and manage a school fundraising event, to learn more about budgeting, marketing, sales, and basic accounting principles.

**CURRICULUM**

**Mathematics – Year 5**

Create simple financial plans.

**Mathematics – Year 6**

Interpret and compare a range of data displays, including side-by-side column graphs for two categorical variables.

**Mathematics – Year 7**

Investigate and calculate 'best buys', with and without digital technologies.

**Economics & Business – Year 7**

Why and how individuals and businesses plan to achieve short-term and long-term personal, organisational and financial objectives.

Apply economics and business knowledge, skills and concepts in familiar and new situations.

Teacher Resource

**Teenage Boss**

# 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 does Teenage Boss teach kids?
2. What is a budget? Describe using your own words.
3. How much money did Ben receive to pay for his family expenses?
4. Was Ben successful in managing his family’s budget? Explain.
5. Why is it important for young people to learn how to budget?

# Activity: What do you know about budgets?

As a class discuss the BTN Teenage Boss story to get an understanding of what your students know about budgets and what they want to learn. Use the following questions to guide discussion:

* What do you know about budgets?
* Think of as many words as you can that relate to budgets. Make a list.
* What is a budget? Describe using your own words.
* Have you used a budget before? Describe your experience.
* Who uses budgets? Make a list.
* Why do we use budgets?
* How is a budget useful?
* What do you want to learn about budgets?



**Mind Map**

Students can use a mind map to record their ideas!

# Activity: School Fundraising Event

Students will plan and run a small-scale fundraising event at their school and in the process gain an understanding of financial concepts including budgeting, pricing and profit. Students will work together to decide on a simple snack to prepare and sell to students for a school fundraiser. They will learn how to manage costs, set prices, and calculate profit. This activity encourages collaboration, problem solving and decision making. Use the following as a guide.

**Introduction to Fundraising and Financial Planning**

* Hold a class discussion asking your students “what is fundraising” and “why do schools fundraise?”. Provide examples of school fundraisers.
* Introduce students to financial concepts, for example, cost price, selling price, profit, budget and float. Start a class glossary of financial terms.
* As a class brainstorm a range of snack ideas:
	+ Think of snacks that:
		- are popular with kids
		- are easy to make at school in a short timeframe (do you have a kitchen with facilities?)
		- are cost efficient (so you can make a profit when you sell them)
		- consider any known allergies
		- can be packaged and distributed easily
		- can be made in bulk (as you will be selling them to every student in your school).

**Planning and Deciding on Snacks**

* As a class decide on 1-2 snacks that you will make for your school fundraising event. Here are some examples: fruit skewers or fruit cup, cookies, popcorn.
* Begin planning – if you are making the snack from scratch find a recipe and list the ingredients you will need. If you are buying the product, what will it be?
* Write a shopping list for the ingredients you will need.
* What tools and equipment will you need to make the snacks? Does your school have a kitchen you can use?

**Budgeting and Pricing**

* Learn how to create a simple budget [Moneysmart – Budget Planner](https://moneysmart.gov.au/budgeting/budget-planner)
* Use supermarket websites to research ingredient prices. Find ingredients that have a low unit price.
* How much does it cost you to make the snacks, and how much will you sell them for? Calculate the cost per unit and decide on a selling price. Will you be making a profit on each item sold?
* What are your fundraising goals?

**Marketing and Order Form**

* Design and create signage to promote your fundraising event (for example, a poster or flyer). Include a title, photos or drawings of what you are selling, a list of ingredients, prices, dates (for when you will be taking orders, collecting money, and distributing snacks to the class). Share the poster with your school.
* Design an order form to record your orders (for each student in each class). Orders and payments will be taken in advance of the fundraising event day. How will you take your orders? Use a table that includes columns to record students’ names, their order, and the cost per student.

**Event Preparation**

* Take orders and payments from students in each class using your order form. You are responsible for making sure the money you take is kept safe and then given to your teacher.
* Calculate the total number of orders. Calculate the amount of ingredients you will need to buy to fulfill your orders.

**Fundraising Event Day**

* Make/bake the snacks as a class. Document the process by photographing each step.
* Orders will need to be distributed to students in each class (as per your pre-order forms).

**Reflection**

* Reflect on the process. What did you enjoy about this activity? What worked well and what was challenging? What would you do differently next time? What new skills did you learn?

# Activity: Choose an activity

Working in pairs or small groups, students choose one of the following activities.



**Price V Unit Price**

What is the difference between “price” and “unit price”? Compare the value of different package sizes or brands of the same product. Why is unit pricing helpful?

**Tips & hints**

Do you have any good financial tips and hints? Share and compare your ideas with the class. Create a handbook with all your class’s tips!

**Piggy Bank**

Make your own piggy bank out of papier Mache! Here are some [instructions](https://brisbanekids.com.au/papier-mache-piggy-bank/). Start saving using your own personalised piggy bank.

**Budget**

Create a budget to buy dinner for 1 night for your family. Ask your family if they would give you money to buy the ingredients for your family dinner.

# Useful Websites

* [Budget and Saving Hacks](https://www.youtube.com/watch?v=8V7QmMHxYgA) (YouTube) – ABC Teenage Boss
* [Teenage Boss Next Level](https://iview.abc.net.au/show/teenage-boss-next-level) – ABC iView
* [Teenage Boss](https://www.abc.net.au/btn/classroom/teenage-boss/10488868) – BTN
* [Moneysmart Teaching Resources](https://moneysmart.gov.au/teaching/lesson-plans) – ASIC



Teacher Resource

**BTN Transcript: Episode 20 - 29/7/2025**

Yama. I'm Jack Evans, and you're watching BTN. Let's see what's coming up. We'll find out about the UK's plan to let 16-year-olds vote, meet a teenage boss and learn what it takes to be a chess grandmaster.

# SA Algal Bloom

Reporter: Justina Ward

*INTRO: But first today, we're going underwater. Off the coast of South Australia, there's an algal bloom, which is having a devastating impact on sea life and the people who love it or rely on it for a living. Here's Justina.*

JUSTINA WARD, REPORTER: The ocean plays a big role in school life here, at Star of the Sea.

STUDENT: Our school is right next to the beach.

STUDENT: And the best thing about it is being able to do so many activities around, like, the marine life here.

STUDENT: We have a Marine Discovery Centre, and it's, like, a place where they teach you about all the sea creatures, the animals and the plants and coral.

STUDENTS: Oh, my gosh! Oh, that's... Oh, what's that?

But lately, their local patch of the ocean has been facing some big problems.

STUDENT: The algae bloom is actually endangering lots of our animals in the ocean.

STUDENT: It's killing all, like, a lot of animals and washing them up on the shore, along the coastline.

Yeah. This is what people here in South Australia have been seeing on the coastline recently. At least 13,800 animals from nearly 400 different species have died including fish, seahorses and even dolphins.

STUDENT: There's a lot of stingrays, fish, some eels, some worms.

STUDENT: It's kind of traumatising to see. Like these lives are just gone because of some algae.

The algal bloom was first spotted south of Adelaide back in March and since then it's grown to nearly twice the size of the ACT.

FAITH COLEMAN, ESTUARINE ECOLOGIST: It is huge this four and a half thousand-kilometre area of algal bloom that's moving around the state waters.

Algae is an organism that's actually neither plant nor animal, that lives in water. There are lots of different types of algae and many play an important part in the marine ecosystem. They also create about 70% of the oxygen that we breathe. But not all of it is good. This type of algae Karenia mikimotoi produces toxins which are lethal to marine life.

GEORGIE KENNING, MARINE SCIENTIST: The toxins become caught in their gill filaments and restricting their breathing. It doesn't affect us in the same way, it can give you itchy eyes and a sore throat.

Karenia mikimotoi really likes warm, still waters. That's exactly what SA's had in the past year with sea temps about 2.5 degrees warmer than usual.

GEORGIE KENNING, MARINE SCIENTIST: It's also due to nutrients going out into the ocean from humans here on land can be through farming and agriculture, fertilisers, but also with our storm water runoff in urban areas as well as the nutrient upwelling we're seeing from cold, nutrient rich waters.

Some hoped the winter weather would help break up the bloom but so far, there isn't any sign of it going away which has been making people feel pretty down.

ZOE, LOCAL: We're not really being heard and it's also kind of feeling useless because I don't really know what we can do.

It's also had a big impact on things like tourism and fishing.

JO BARRETT, KIOSK OWNER: Customers are asking where our fish is coming from. “Is it local?” - they don't want to buy local.

Locals, including the state government, want this declared a national disaster which would mean the federal government would provide money to people who are affected.

PETER MALINAUSKAS, SA PREMIER: This is a natural disaster, and it should be treated as one.

While that didn't happen, the government says it’s helping.

MURRAY WATT, MINISTER FOR THE ENVIRONMENT AND WATER: The federal Cabinet has approved a one off 14-million-dollar package of federal government funding support for South Australia.

Some experts warn that blooms like this could happen more often as ocean temperatures rise around the world. And that this should be a wakeup call to watch what we're putting into the ocean and to get better at spotting warning signs early, in case something like this happens again.

STUDENT: I'm hoping we can learn from this experience and prevent this situation from happening again.

STUDENT: we can try and keep our ocean from polluting and keep it cleaner.

STUDENT: we need to learn how to actually keep the ocean safe and keep the animals safe because they also have a life too.

# News Quiz

Federal parliament is back. Members of the House of Representatives and the Senate sat for the first time since the election last week, including Australia’s youngest ever senator, Charlotte Walker. Do you know how old she is? 27, 21 or 18? She’s 21.

CHARLOTTE WALKER, MP: I say this to my fellow young Australians. We hear you, and we will act on your demands for a better future.

Australia has lifted restrictions on importing which products from the United States? Soft drinks, beef or corn syrup? It’s beef. The restrictions were put on some beef coming from the US because of the risk of spreading a disease known as mad cow, which can affect cattle and humans. The government says that the risk is much lower than it was but not everyone was happy about the move.

BEEF PRODUCER: It's a huge call from our federal government.

DAVID LITTLEPROUD, MP: It raises suspicion because of the fact that Anthony Albanese is trying to get a meeting with Donald Trump.

And meet Finnie the unicorn, the official mascot of the Glasgow Commonwealth Games. What is her stripey horn inspired by? Cany canes, traffic cones or zebra crossings? It’s traffic cones. You see, there's a famous statue in Glasgow that's known for having traffic cones put on it by the locals, a quirky tradition that started in the 1980s. And has since become a bit of a symbol of the Glaswegian sense of humour.

# UK Voting Age

Reporter: Tatenda Chibika

*INTRO: Now, how would you feel about voting when you turned 16? Well, over in the UK, the government has decided that teenagers should have the right to weigh in on how their country is run. Here's Tatenda with more.*

TATENDA, BTN REPORTER: It's not that often that high schoolers are right at the centre of politics.

But that's what's happening in the UK right now.

RUSHANARA ALI, DEMOCRACY MINISTER: We will give 16 and 17-year-olds the right to vote in all elections, giving them a say in shaping their future.

PERSON: The young people are gonna be stepping up in politics in like the next couple of years.

PERSON: It's quite a bit of pressure but I think it'll be okay.

16 and 17-year-olds can already vote in local and parliamentary elections in Scotland and Wales but to vote in the UK's parliamentary elections, you have to be 18, just like here in Australia. But some say that's not fair, including the UK's prime minister.

KEIR STARMER, UK PRIME MINISTER: If you're old enough to go out to work, if you're old enough to pay your taxes, then you are entitled to have a say on how your taxes are spent.

And many young Brits are pretty happy.

PERSON: It's always really annoying watching like older people vote and then but there's not realistically, it's not going to affect to them, it's going to affect our futures.

PERSON: I think a lot of people, even from a very young age, have very strong opinions and they think their opinions should be heard.

PERSON: I've always been kind of frustrated just watching politics and not being able to do anything and I know loads of other people who feel the same.

The UK won't be the first country to let 16-year-olds vote in its national election. While 18 is the most common minimum voting age. There are seven countries, where it's 16 along with the independent territories of the Channel Islands and Isle of Man. Four countries have a minimum voting age of 17 and in the Solomon Islands you have to be 19 to vote. There are also a bunch of places where you have to be 20, 21 or even 25. Researchers say lowering the voting age doesn't seem to have a big effect on the outcome of elections.

CHRISTINE HUEBERT, UNIVERSITY OF SHEFFIELD: The democracy is not going to die, nothing bad is going to happen. If anything, small changes are happening.

What lowering the voting age does do, according to Christine, is get more people out to vote. You see in the UK, and most other countries, you don't have to vote, and a lot of people don't. Around 48 million people were eligible to vote in the 2024 UK election but only around 60 per cent did the lowest voter turnout since 2001. Some reckon if people start voting at a younger age, they're more likely to keep voting and stay interested in politics. But not everyone's on board with the change.

PAUL HOLMES, SHADOW MINISTER: Why does this government think a 16-year-old can vote but not be allowed to buy a lottery ticket, an alcoholic drink, marry, or go to war, or even stand in the elections they're voting in?

At 16, our brains are still developing. And some say people at that age don't have the knowledge or life experience to make big decisions about politics.

PERSON: I feel like it's pretty irresponsible because I don't think people so young should be able to make decisions that can change a whole nation's way of living.

The changes still have to go through parliament in the UK. But, here in Australia it has a lot of people asking, “Should we be lowering our voting age too?” So, what do you think?

PERSON: I don't think that 16-year-olds have the emotional maturity to fully understand politics and what they're voting for.

PERSON: Some of them would be passionate and they would want to, but I think other people would just vote whatever.

PERSON: If it's not compulsory, it might not be such a significant impact.

PERSON: I mean, I have a job, and I pay tax, so if I can pay tax, I can vote for who the Prime Minister's gonna be.

# Aviation Safety

Reporter: Aiden McNamara

*INTRO: Recently, there have been some questions about aviation safety after some big plane crashes overseas. But as Aiden found out flying is actually a pretty safe way to get around. Take a look.*

Zooming above the clouds ten thousand metres off the ground. It's a lot of trust to put in a big chunk of metal, especially this one.

AIDEN MCNAMARA, BTN REPORTER: Doesn't even have wings.

While it's not unusual to be a little bit nervous about flying, planes are actually one of the safest ways you can travel. In fact, you're actually more likely to die from falling off your bed or getting struck by lightning. But it wasn't always that way.

The early days of flight were, let's say, 'creative'. When the Wright Brothers made their historic flight in 1903 their plane was made mostly from wood, wire, and fabric and it flew for like 12 seconds. In the years that followed, planes got better at, well, staying in the air and by the end of the First World War, aviation had begun to take off. Although for the most part it was loud, uncomfortable and expensive. And as flight became more frequent, so did accidents.

Those early tragedies led to big changes in the rules about how planes could be made and who could fly them. Governments created agencies devoted to aviation safety and brought in systems like runway lighting and air traffic control. They also started formal processes for investigating crashes to learn from what went wrong and stop it from happening again.

KEITH TONKIN, AVIATION ANALYST: In the aviation industry, we say all the rules are written in blood and that's because every accident has lessons to be learnt.

AIDEN: And there’s an Australian invention that's been helping us learn those lessons for more than sixty years.

NIGEL DAW, AVIATION ENTHUSIAST: This is a black box and it's mandatory for every airliner to have one. And it records all the flight information, as well as the conversations in the cockpit.

AIDEN: Why is it orange?

NIGEL DAW: It's so after a crash, the investigators can find it.

These bricks are pretty much unbreakable. And by finding them and listening back to the pilot's conversation and analysing the data, investigators have been able to work out the cause of hundreds of accidents. These days anything that goes wrong in aviation, from a near miss to a major tragedy, is thoroughly investigated. And the point isn't to blame anyone but to find ways to improve safety.

KEITH TONKIN: And so those improvements mean that there's a lower likelihood of that same accident happening again.

And because planes fly all over the world countries have agreed to follow the same rules. They're set by the International Civil Aviation Organization, which is part of the UN, and cover things like pilot training, air traffic control, plane maintenance and accident investigation.

Countries and airlines share safety information and experts from around the world often work together. Then there’s the planes themselves, which have multiple levels of safety, so, if one thing goes wrong, there's usually a backup.

Now, accidents are really rare. Which is why, when they do happen, they're big news. And why there's always a huge effort to find answers so that lessons can be learned and lives can be saved.

KEITH TONKIN: I think we certainly take for granted the ease with which we can fly from one place to another now and when we see accidents on the TV or online it's a good reminder that we need to make sure we keep applying all the rules and requirements to keep aviation safe.

# Quiz

Did you know during the 1920s a practice known as "wing walking" became popular amongst some brave stunt people. It involved standing, dancing and even doing handstands on the wings of planes while in flight. And no, it wasn't very safe.

# Teenage Boss

Reporter: Wren Gillett

*INTRO: Imagine having complete control of spending your family’s money for an entire month. Well, that was the reality for 16-year-old Ben who recently was part of a TV show called Teenage Boss. Wren caught up with him to find out how it went.*

WREN GILLETT, REPORTER: Hello Ben. It's lovely to meet you through a screen.

BEN: Hi Wren. How are you?

WREN: I'm good and I hear you're a money expert now.

BEN: Oh, experts pushing it. But I've learnt a thing or two.

EMMA WATKINS, PRESENTER TEENAGE BOSS: As teenage boss, you will be in charge of $3,423.

BEN: Oh my gosh. $3423, that's a lot to work with.

Teenage Boss is a show that was created to teach kids about financial literacy. In each episode, a teenager like Ben is given total control of their family’s finances for an entire month.

BEN: Have you ever seen this much cash before? No, neither have I.

WREN: What was the first thing you did when you saw it?

BEN: Big like bulging dollar sign eyes.

BEN: There's totally a scheming part of me that's stroking my cat and thinking yes, yes, it's all mine, the powers all mine. But it's definitely a lot of money to be responsible for.

Yeah, it's not as easy as it sounds, with that $3423 Ben had to think about all the things his family might need to pay for and on top of that he wanted to put some of it aside for something special.

EMILY, BEN'S MUM: He's just upped the saving goal to $1200 to spend on little bits of interlocking plastic, my god.

BEN: I mean, you can never have too much Lego.

As much as Ben loves his little bits of interlocking plastic, he was secretly saving for a holiday.

BEN: I'm actually saving to take Anwun and I on a trip to Adelaide to see Aunty Cassie and Uncle Will and baby Tom.

EMILY: What.

But in order to do that, Ben needed to budget.

BEN: In the show I sat down with Emma Wiggle, which was amazing and we kind of went through like, okay, what's the family’s expenses at the moment?

BEN: Entertainment and eating out. We will not be eating out.

MUM: Nothing?

BEN: Flat no.

WREN: Were you surprised by how much things cost?

BEN: Totally, totally. Yeah. Yeah. Like all the little things stacking up and tiny purchases here and there adding and suddenly I've got this whole box full of receipts that I have to troll through and figure out how much we have left.

Ben says being Teenage Boss taught him a whole heap of things, including how the cost of living crisis is affecting prices of all sorts of things.

BEN: I remember when a block of chocolate was 3 bucks and now it's 7. But it's, I guess, it's always happened to an extent because I remember my mum telling me stories of when she was young and you could buy a whole bag of lollies for $0.10 and I was like, mum, what? That's ridiculous. And now I'm living that and I'm experiencing that within my lifetime which is really interesting.

At the end of the month Ben’s managed to stay just under budget and save a total of $1222.35 which means...

BEN: There's something I need to tell you Anwun, which I've been keeping a secret all month, I'm taking you on a trip to Adelaide to see Aunty Cassie and Uncle Will with this money.

WREN: Why do you think it's important for young people to learn how to budget?

BEN: Oh it's such a crucial skill in so many ways. I mean, we're stepping into a kind of a new cost of living crisis at the moment. And so, I think it's more important than ever that young people have a grasp on how money works and how far money can go and that they're thinking about it at an early age, which is why I felt so lucky to have this experience in my teenage years.

# Sport

It was a comeback for the record books when St Kilda came from 46 points down to beat Melbourne on the weekend.

COMMENTATOR: Could be the finish, to beat all finishes.

Melbourne thought they had the game all sewn up going into the final quarter, but the Saints fought back with goal, after goal, after goal. Nasiah Wanganeen-Milera sealed the deal after the siren.

COMMENTATOR: Nasiah's on fire.

The Saints weren't the only ones enjoying a historic win.

COMMENTATOR: Oscar Piastri wins the Belgian Grand Prix.

Despite the wet conditions the 24-year-old Aussie cruised past his McLaren teammate Lando Norris to take home his sixth victory of the season.

Meanwhile, England's Lionesses have defended their title at the European Championships. Spain went into the game as massive favourites and took an early lead, but the Lionesses levelled the score in the second half eventually sending the game to a dramatic penalty shootout.

COMMENTATOR: England retain the European Championship crown.

And the world's greatest bike race, the Tour de France, has wrapped up. Tadej Pogacar secured his fourth win and his place as one of the cycling greats, while Wout van Aert won the final stage in Paris.

# Chess Champ

Reporter: Reyaansh

*INTRO: Finally, today we're going to meet 11-year-old Reyaansh. He's a rising chess star in Australia and he's got big plans to become a grand master.*

I'm Reyaansh Chakrabarty and I'm 11 years old. I play chess and I'm Australia's highest rated junior chess player. I want to be Australia's youngest chess grandmaster.I became interested in chess when I was almost six years old. Then one day I started watching The Queen's Gambit show. I saw Beth looking up at the ceiling and seeing the pieces talk to her and I realised that to be good at a sport like chess, you need to love it, to the point that you're almost obsessed with it in a healthy way. And that's how my chess journey started.

Chess is one of the oldest sport games and was born from the Indian game chaturanga before the 600 AD. It spread throughout Asia and Europe and around the 16th century evolved into the game we know as today called chess.

Did you know that there are more possible chess games than there are atoms in the observable universe?The pawn by itself is very weak, so is the bishop and the knight but when you coordinate these pieces they can talk to each other and become really strong. Chess is poetry because it is beautiful and there are elegant solutions to complex problems.I like the style of many chess players but if I have to pick one, I would have to say it is Grand Master Viswanathan Anand. He's a 5 time world chess champion and I was fortunate to meet him once.

How do I prepare for chess games? Well, I have a small team that helps me prepare. Then I try to do some prep on my own. I try to get some good sleep and relax as some games could go on for four to five hours. Then I'm ready. Openings are the first few development moves of the game. I have a few favourite openings, but I would not like to share them. When I'm playing, I can calculate many moves in advance, sometimes almost 8 to 10 moves deep, but it really depends on the position. Towards the end it gets a bit nerve wracking when we both have little time, but I know that in order to win a game, instead of not being nervous, I have to be less nervous than my opponent.

One of the biggest highlights of my career was winning the Under 16 Australian National Chess Championships when I was nine years old. I want to be Australia's youngest chess grandmaster. I think Anton Smirnov became a grandmaster by the age of 15 or 16, so, I will work hard to become a grandmaster before then. I believe it is a combination of hard work, love for the game and the desire to be super successful. I believe that you have to love what you do, be it chess, math or soccer. If you think you'll love it, then you can try to play games online and learn from someone and analyse your games, so you don't repeat your mistakes. After that you play, learn, play and repeat.

**Closer**

Well, that's all we've got for you today, but we'll be back next week with more. In the meantime, you can catch Newsbreak every weeknight. There's also BTN High for all you high schoolers out there as well as plenty to see and do on our website. Have an awesome week and I'll see you next time. Bye.