

## Questions for discussion

Episode 30 27<sup>th</sup> October 2015

### Storms Explained

- 1. Hurricane Patricia was the biggest hurricane every recorded in the western hemisphere. True or false?
- 2. Describe the damage the Typhoon Koppu caused in the Philippines.
- 3. What do we call big storms in Australia?
- 4. How are typhoons, cyclones and hurricanes different?
- 5. Where does the word cyclone come from and what does it mean?
- 6. Which language does the word hurricane come from?
- 7. Typhoon comes from the Chinese word Tai Fung which means \_\_\_\_\_\_
- 8. How do they develop?
- 9. Why do countries like the Philippines and Mexico get typhoons and hurricanes more often?
- 10. What does the Philippines need to help with recovery?

Do the quiz on the BtN website

### Uluru Handback

- 1. In pairs, discuss the *Uluru Handback* story and record the main points of your discussion.
- 2. Which Aboriginal Group are the traditional owners of Uluru
  - a. Anangu
  - b. Noongar
  - c. Yolngu
- 3. Why is Uluru a sacred place for them?
- 4. What did European settlers call Uluru?
- 5. What significant event happened on October 26 1985?
- 6. What did the handback officially recognise?
- 7. Who do the traditional owners share the running of Uluru-Kata Tjuta National Park with?
- 8. Why has the relationship between Indigenous and non-Indigenous Australians been tense?
- 9. Do you think tourists should be allowed to climb Uluru? Explain your answer.
- 10. How did this story make you feel?

Check out the <u>Uluru Handback resource</u> on the Teachers page Vote in the Behind the News online poll

### Solar Transport

- 1. Before you watch the BtN story, record what you know about solar powered cars.
- 2. Where does the World Solar Challenge start and finish?
- 3. How far do the cars travel?
- 4. What is the goal of the race?
- 5. The event's been running since the 1980s. How have the cars changed over time?



- 6. What sort of engines do solar powered cars have?
- 7. Where is the electricity stored?
- 8. How has the technology improved in recent years?
- 9. What are some disadvantages of solar powered cars?
- 10. What do you think is the future of solar powered cars? Explain your answer.

Check out the Solar Transport resource on the Teachers page

### **High Rise Schools**

- 1. What was the main point of the BtN story?
- 2. In which state is the high rise school?
- 3. Describe the school's appearance.
- 4. What do the students like about their school?
- 5. Where is the school gymnasium?
- 6. Which places in the city do they use for lessons?
- 7. Why are high rise schools being built?
- 8. Create a plus, minus and interesting chart about high rise schools.
- 9. How do the students make sure they get enough physical activity?
- 10. Would you like to go to a high rise school? Why or why not?

Write a message about the story and post it in the comments section on the story page.

### **Blind Tennis**

- 1. Briefly summarise the *Blind Tennis* story.
- 2. Why are the kids in the BtN story playing a modified version of tennis?
- 3. Describe the ball used in blind tennis.
- 4. Why is sound important in blind tennis?
- 5. How is the court different to a conventional tennis court?
- 6. What have some of the students written to encourage others to play blind tennis?
- 7. What is Braille?
- 8. Which special drawing technique did they use in the instruction book?
- 9. What are some of the challenges of playing blind tennis?
- 10. Use a Venn diagram (two overlapping circles) to show the similarities and differences between blind tennis and conventional tennis.

Write a message about the story and post it in the comments section on the story page.





**Teacher Resource** 

# Uluru Handback

# 9

## **FOCUS QUESTIONS**

- 1. In pairs, discuss the *Uluru Handback* story and record the main points of your discussion.
- 2. Which Aboriginal Group are the traditional owners of Uluru
  - a. Anangu
  - b. Noongar
  - c. Yolngu
- 3. Why is Uluru a sacred place for them?
- 4. What did European settlers call Uluru?
- 5. What significant event happened on October 26 1985?
- 6. What did the handback officially recognise?
- 7. Who do the traditional owners share the running of Uluru-Kata Tjuta National Park with?
- 8. Why has the relationship between Indigenous and non-Indigenous Australians been tense?
- 9. Do you think tourists should be allowed to climb Uluru? Explain your answer.
- 10. How did this story make you feel?



## **ACTIVITY**

### **Brainstorm**

Discuss the BtN *Uluru Handback* story as a class. Ask students the following questions:

- What do you know about Uluru?
- What was Uluru once called?
- How would you describe Uluru?
- Uluru is often called a `national icon'. What do you think that means?
- What is `the handback'?
- Who are the Anangu people?
- Why is Uluru such a sacred place to the Anangu people?
- Why are tourists and non-indigenous Australians not allowed in some parts of Uluru?

Episode 30



### **KEY LEARNING**

Students will develop an understanding of the handback of Uluru to the Anangu people and their deep connection to the place. They will also investigate the issue of allowing people to climb Uluru.



### AUSTRALIAN CURRICULUM

### Science - Year 4

Earth's surface changes over time as a result of natural processes and human activity (ACSSU075)

Science knowledge helps people to understand the effect of their actions (ACSHE062)

### History - Year 4

The diversity of Australia's first peoples and the long and continuous connection of Aboriginal and Torres Strait Islander Peoples to Country/ Place (land, sea, waterways and skies) and the implications for their daily lives. (ACHHK077)

### Geography - Year 8

The aesthetic, cultural and spiritual value of landscapes and landforms for people, including Aboriginal and Torres Strait Islander Peoples

(ACHGK049)

The different types of landscapes and their distinctive landform features (ACHGK048)

The ways of protecting significant landscapes (ACHGK052)



# **ACTIVITY**

### **Connection to Country**

Students will explore in more depth Indigenous Australian's connection to their land. Hold a class discussion to find out what students already know about this connection.

Watch the Behind the News <u>Land Rights story</u>. What does it tell us about:

- The strong connection Indigenous Australians have to the land?
- The importance of the Mabo decision?



LAND RIGHTS



## **ACTIVITY**

### **History of the Handback**

Students will explore the handback of Uluru to the traditional owners, the Anangu people and share their information as an oral presentation. Questions to consider include:

- Who are the traditional owners of Uluru-Kata Tiuta?
- What is the European history of Uluru-Kata Tjuta?
- What were the events leading up to the handback?
- Why is the handback considered an important moment for indigenous land rights in Australia?
- Why was the handback considered controversial?



Image: Parks Australia

More information about the handback can be found <u>here</u>.

## **ACTIVITY**

### Significance of Uluru-Kata Tjuta to the Anangu people

Watch the <u>Parks Australia video</u> that explains the significance of Uluru-Kata Tjuta to the Anangu people. It explains Tjukurpa *(pronounced chook-orr-pa)* which is the foundation of Anangu culture. Find out more about Tjukurpa <u>here</u>.

Students will find out more about the Creation stories about Uluru-Kata Tjuta and then create a picture book about the stories. To help with their research, students can watch a short video <a href="here">here</a> where a traditional owner of the Uluru-Kata Tjuta region, tells of the Creation story.





# **ACTIVITY**

### Should Uluru be closed to climbers?

Students will explore the issue of closing Uluru to climbers and develop a persuasive text from one of the following perspectives.

- Environmentalists (environmental impact)
- Indigenous Anangu people traditional owners (spiritual, cultural)
- Tourist industry (impact on the economy)

Students brainstorm what they know about the debate from that group's perspective and record key questions to investigate. Encourage students to use a range of sources.

Key issues to consider are:

- The cultural values of Uluru (significance to the traditional owners)
- The natural heritage of Uluru
- Environmental impact of climbing Uluru
- Impact on the tourism industry
- Safety considerations

### Tips for writing persuasive texts

- Who is your audience? For example, are you directing your argument at kids, teachers or politicians?
- Provide facts and evidence to support your argument.
- Be creative with your word choice to enhance your argument. Convey emotion using thinking and feeling words.
- Write in the present tense
- · Check your spelling and punctuation.

### Structure of an exposition text

### Introduction

- What is the point you are trying to argue? Construct an introductory paragraph which states the issue or topic.
- Introduce the arguments that will be developed in the body of the text.

### **Body**

- Construct arguments that support your point of view.
- Each paragraph starts with a topic sentence which introduces each point.
- The rest of the paragraph gives more reasons.
- Arguments can be ordered from strongest to weakest.

### Conclusion

- Restate your position on the argument.
- Construct a concluding paragraph that provides a summary of your arguments and a call to action.



## **USEFUL WEBSITES**

Parks Australia - Uluru-Kata Tjuta National Park <a href="http://www.environment.gov.au/parks/uluru/">http://www.environment.gov.au/parks/uluru/</a>

Parks Australia – The Handback pdf <a href="http://www.parksaustralia.gov.au/uluru/pub/fs-handback.pdf">http://www.parksaustralia.gov.au/uluru/pub/fs-handback.pdf</a>

National Museum of Australia – Uluru <a href="http://www.nma.gov.au/exhibitions/symbols">http://www.nma.gov.au/exhibitions/symbols</a> of australia/uluru

Behind the News – Uluru Uproar <a href="http://www.abc.net.au/btn/story/s2627617.htm">http://www.abc.net.au/btn/story/s2627617.htm</a>

Behind the News – Land Rights http://www.abc.net.au/btn/story/s4014894.htm

ABC News – Handback of Uluru to traditional custodians commemorated in Central Australia http://www.abc.net.au/news/2015-10-26/handback-of-uluru-to-traditional-custodians-celebrated/6884192





## Teacher Resource

Episode 30 27<sup>th</sup> October 2015

# Solar Transport



## **FOCUS QUESTIONS**

- 1. Before you watch the BtN story, record what you know about solar powered cars.
- 2. Where does the World Solar Challenge start and finish?
- 3. How far do the cars travel?
- 4. What is the goal of the race?
- 5. The event's been running since the 1980s. How have the cars changed over time?
- 6. What sort of engines do solar powered cars have?
- 7. Where is the electricity stored?
- 8. How has the technology improved in recent years?
- 9. What are some disadvantages of solar powered cars?
- 10. What do you think is the future of solar powered cars? Explain your answer.



## **ACTIVITY**

### Class glossary

Create your own classroom glossary about solar powered cars. Use the BtN *Solar Transport* story transcript to get you started. Start by brainstorming words as a class using a mind map to record your responses and then find definitions for each word. Consider using pictures and diagrams to illustrate meanings.

- sun
- power
- technology
- · solar panels
- energy
- convert
- electricity
- electric engine
- battery
- recharge
- alternative fuel



Challenge students by asking them to use words from their class glossary to write their own sentences. Alternatively, students can

make their own crossword puzzle or word find.



Students will investigate the advantages and disadvantages of solar powered cars.



#### Science - Years 5 & 6

Scientific understandings, discoveries and inventions are used to solve problems that directly affect peoples' lives. (ACSHE083) (ACSHE100)

Scientific knowledge is used to inform personal and community decisions (ACSHE220) (ACSHE217)

### Science - Year 6

Energy from a variety of sources can be used to generate electricity (ACSSU219)

### Science - Year 7

Some of Earth's resources are renewable, including water that cycles through the environment, but others are non-renewable (ACSSU116)

### Science - Year 8

Science and technology contribute to finding solutions to a range of contemporary issues; these solutions may impact on other areas of society and involve ethical considerations (ACSHE135)



# **ACTIVITY**

### What is solar energy?

Investigate how energy from the sun can be used to generate electricity. Watch BtN's <u>Solar Energy</u> and <u>Solar Future</u> stories as part of your research. Teachers, download the corresponding teacher resources for each story. Students will investigate:

- how we depend on electricity in our everyday lives
- the difference between renewable and non-renewable sources of energy
- the science of solar energy
- the advantages and disadvantages of solar energy, from environmental, economic and social perspectives.



## **ACTIVITY**

Make a list of questions you have about solar powered cars that you would like to ask a scientist or engineer. Use the internet to find answers to your questions. Visit the ABC's <u>Ask an Expert</u> website, to see if any of your questions are answered. Compare your questions and answers with your classmates.









- What happens if it is a cloudy day?
- Why have solar powered cars?
- What are the pros and cons of solar powered cars?
- How does a solar powered car work?
- How are solar powered cars different to petrol fuelled cars?
- How long will it be before everyone can drive a solar powered car?



## **ACTIVITY**

### How does a solar powered car work?

Find out as much as you can about solar powered cars using a range of primary and secondary sources (internet, newspapers and books). Use your research to help draw a diagram which includes the following information:

- Solar energy becomes electricity
- Power storage
- Motor controller
- The motor

Become an engineer and build your own solar powered car. Use the internet to find a supplier of educational resources, or refer to the links below for several solar powered car kits that can be purchased online.

Solar car kits Micro solar car

6-in-1 solar educational kit





### **Pros and cons**

Research the pros and cons of solar powered cars organising your information into two columns. Use your research findings to help plan and create an information poster.

### Information poster

Design a poster or infographic which illustrates one or more of the benefits of solar powered cars.

- Think of ways that solar powered cars can help people, the environment and/or the economy.
- Write down your key message that you want to get across. It can be a sentence or a short slogan.
- · Create your poster.
- Share and explain your poster design with the class.
- Display your artworks around your school or local community to raise awareness about the topic.



### Design a sustainable community

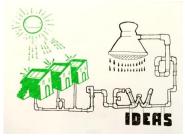
Students will design a community that relies more on renewable resources, like solar energy for transport. Design a community with an emphasis on pedestrians, bikes and transport that uses alternative fuel sources. Students may create a community where we can work, go to school and shop closer to where we live, create more bike lanes, have more people living closer together so they can support public transport and create safer streets to encourage walking and riding.

Students should consider the following:

- What renewable energies will you need to power your city?
- How can your city be more water smart? Consider including storm water harvesting technology.
- Will you build lots of little houses or a few high-density apartment buildings?
- Is your city pedestrian and cyclist friendly?
- What sort of transport will your city use?
- What recycling programs will your city have?

Watch this YouTube animation about <u>climate change</u>, <u>energy and action</u> to get inspired!











World Solar Challenge – About <a href="http://www.worldsolarchallenge.org/about\_wsc\_2015/overview">http://www.worldsolarchallenge.org/about\_wsc\_2015/overview</a>

Energy Quest – A Student's Guide to Alternative Fuel Vehicles <a href="http://www.energyquest.ca.gov/transportation/index.html">http://www.energyquest.ca.gov/transportation/index.html</a>

Behind the News – Solar Cars <a href="http://www.abc.net.au/btn/story/s3343596.htm">http://www.abc.net.au/btn/story/s3343596.htm</a>

Behind the News – Solar Future <a href="http://www.abc.net.au/btn/story/s3820130.htm">http://www.abc.net.au/btn/story/s3820130.htm</a>

Behind the News – Solar Energy <a href="http://www.abc.net.au/btn/story/s4183229.htm">http://www.abc.net.au/btn/story/s4183229.htm</a>



## BtN: Episode 30 Transcript 27/10/15

Coming up today on Behind the News.

- 30 years on from the historic handback of Uluru we find out why this rock is so significant to its traditional owners.
- Discover what's stopping us from driving solar cars like this to school each day.
- And these kids show us how tennis can be adapted for people with a visual impairment.

Hi I'm Nathan and welcome to BtN! You can see all those stories later but first.

### Storms Explained

Reporter: Carl Smith

INTRO: Over the past week two massive storms have caused a huge amount of destruction in two different parts of the world. The first was a typhoon that hit the Philippines. The second a hurricane that hit Mexico and the US. Both storms seemed pretty similar but they had different names. So what is the difference between a hurricane and a typhoon? Here's Carl with the answer.

It was the biggest hurricane ever recorded in the Western hemisphere. Hurricane Patricia battered Mexico and the US, turning homes and towns inside out.

Meanwhile on the other side of the planet, this wild weather lashed the Philippines for nearly a week, forcing thousands of kids to flee their homes.

Official reports so far say no one has died because of Hurricane Patricia. But in the Philippines 58 people were killed and more than 100,000 are still stuck in evacuation centres like this.

LOTTA SYLWANDER, UNICEF PHILIPPINES: Things are destroyed and so it will take several weeks, maybe months until children can go back.

Both of these storms were very strong, and both hit within a week of each other. But they both had different names: one was a hurricane, the other a typhoon. And here in Australia we call big storms 'cyclones'.



NEWS REPORTER: When the cyclone crossed which is making it harder for the workers cleaning up.

So what's the difference? Well, as it turns out there is no difference! These mega storms all have to form over warm water near the equator. But the equator wraps right around the world, and over time different cultures using different languages, have come up with different names for them.

The word cyclone is believed to have come from a Greek word, Kukloma, which means 'wheel, or coil of a snake'. It was adopted by the English language, so it's used in lots of places once colonised by the British like Australia and India.

Hurricane has its roots in a Caribbean language, where Juracán was the name of a storm god. It was then adopted by the Spanish that colonised the area, so it's still the term used around the Americas.

And typhoon is believed to have come from a few languages, including Chinese, where tai fung means big wind. So it's still used in most of Asia.

So other than the name, these three types of big storms are all exactly the same. They even form in the same way too.

They always start building over warm ocean water, where the surface of the sea is above 26.5 degrees Celsius. When it's that hot, water starts to evaporate, and that warm humid air begins to rise into the sky. As it moves up through the atmosphere, it releases heat and water making thunderclouds. This process can kick-start a chain reaction, evaporating more water and making bigger clouds.

The last ingredient needed to make one of these storms is the rotation of the Earth which causes the clouds to spin around faster and faster. Some countries like the Philippines and Mexico get hit more often because they're closer to the warm water of the equator. So aid organisations like UNICEF are asking for some help, especially for the people of the Philippines, who are facing a long road to recovery.

LOTTA SYLWANDER, UNICEF PHILIPPINES: What we need help with now, right now, is to make sure we have enough things that we can give to families like big water jugs, tablets that you can put in the water that cleans the water; that we can also provide with blankets, with things to sleep on.

After such a devastating storm a little can go a long way.

### The Wire

To other news now.

Australia's free trade agreement with China now has the support of both the government and opposition.



A free trade agreement is a promise between two countries to try to make it cheaper and easier to sell things to each other. Australia and China signed one last year.

But the opposition was worried it could have a bad impact on Australian workers. Now the two parties have come to an agreement which they say will be fair for everyone.

Former Treasurer Joe Hockey has quit politics after 19 years! He was Treasurer under former Prime Minister Tony Abbott.

But when Malcolm Turnbull took over as PM last month he decided it was time to step down. He gave a final speech in parliament saying he's ready to spend more time with his family.

JOE HOCKEY: You know last Monday was Iggy's sixth birthday and I've missed every single one of his birthdays. I won't miss another one.

And even old rivals helped say farewell!

"It may surprise you, but many of my colleagues want to say a few words about you -good words."

Australia isn't the only one switching leaders lately - Canada has also got a new PM!

The country's liberal party won there for the first time in ten years making Justin Trudeau Canada's new, young PM. But he has a pretty good idea what the job's like. He's actually the son of a former PM.

And last week the world celebrated 'Back to the Future' Day! It's the date made famous in the 80s sci-fi series where Marty McFly and the Doc go forward in time to the future which was set in this year.

Turns out they were weirdly close to predicting some modern technology like video calls, card-free payments and smartglasses. And pretty close with hoverboards, flying cars and power laces which are all already in the works.

But experts say time travel itself will take some more uh, time, to perfect.

### Uluru Handback

Reporter: Eloise Fuss

INTRO: Thirty years ago the most famous rock in Australia, Uluru, was officially handed back to its traditional Aboriginal owners. Next up we have Eloise with the story behind the



historic handback. But first a warning to Aboriginal and Torres Strait Islander viewers, this story contains images of people who've died.

It's the national icon, in the heart of the country. And each year, thousands of people from around the world flock to see Uluru!

But not everyone has to travel a long way to check it out. For some Aboriginal kids, this place is home!

Lots of these kids are Anangu, the traditional owners of this land. And for them, Uluru is a really special place. The Anangu believe their ancestors created Uluru at the beginning of time. They say these holes in the rock were left by the spears of poisonous snake men. And the cracks, by an angry python woman striking out at her enemies.

Because of this, they see it as their job to protect this sacred place, and pass on Uluru's stories.

But this special relationship hasn't always been respected. When European explorers first came across it, about 150 years ago, they took ownership of it and even renamed it, Ayers Rock, after the Premier of South Australia at the time.

Over time roads and airstrips were built and it became a popular destination for tourists. But some of that was devastating for the Anangu, who'd been connected to it for thousands of years.

But thirty years ago, on October 26 1985, all that changed. Uluru and the area surrounding it was handed back to its traditional owners by the Governor General and their connection to it was officially recognised by the Government.

It was a moment of celebration for the Anangu people, but it came with one big condition. The traditional owners still wouldn't get full control. Right away, they had to lease the land back to the Federal Government for 99 years. And they had to share responsibility for it, mainly so that tourists could keep visiting.

Since then, things have sometimes been a bit tense. And one of the main reasons is this tourists are still allowed to climb Uluru - which its Aboriginal owners say is disrespectful since it's a sacred site. They've put a sign at the bottom asking people not to. Some people even want the climb banned altogether.

So thirty years on from the historic Uluru handback there are still a few issues. But there is also plenty worth celebrating too and the Anungu people say they'll keep protecting Uluru and passing on its stories.

### Poll

Okay now that climbing debate is still raging today. So let's find out what you think in this week's BtN poll.



Should tourists be allowed to climb Uluru? Head to our website to place your vote.

### Solar Cars

Reporter: Carl Smith

INTRO: Okay next up we're travelling to Adelaide where recently more than 40 solar vehicles crossed the finish line of the World Solar Challenge. It's a pretty impressive feat to make a car that can travel 3000kays using just the power of the sun. But why don't we see them on our roads every day? Here's Carl with the answer.

The World Solar Challenge. It's the biggest event on the solar car-racing calendar.

SOLAR CAR TEAM MEMBER: There are six teams that are competing that are really close together. It will be an exciting race, the differences are small. But in the end of the day, we're gonna cross first.

The cars have to get from Darwin to Adelaide - more than 3000 kilometres! And they have to do it using only the power of the sun.

AMY GUNNELL, SOLAR CAR DRIVER, TEAM ARROW AUSTRALIA: We're super excited, happy to have clear roads ahead of us, which means we'll get out of town really quickly and be on our way to Adelaide.

The goal of the race is to help improve solar car technology. So a lot of teams come from universities or massive tech companies but not all of them.

CAMERON MUTIS, LIBERTY SOLAR TEAM USA: So we're a high school team, which definitely puts us at a bit of a disadvantage, not having all the funding that these college teams have. So for us to have a car that's able to compete with these immaculate teams is such a cool experience for us!

The event's been running since the 1980s and over that time the cars have become faster and more sophisticated. But after almost 30 years are we any closer to actually seeing these things driving around town? Well, to help answer that question we need to understand how they actually work.

Solar cars use solar panels to convert the sun's energy into electricity. Running on electricity also means solar cars need electric engines instead of petrol ones and they need battery packs to store all of that electricity too. The technology for each of those parts has improved a lot in recent years. Batteries are now smaller, cheaper and can hold more power. Solar panels now convert more of the sun's energy than they used to and they're also cheaper.

Electric engines have improved too and lots of companies have even released electric cars that can just be plugged in to recharge at home!



But combining all of that new technology together in a solar car is still a big challenge. Even though the parts are cheaper than they used to be, they're still pretty expensive. Some of these cars cost millions of dollars to create!

It's also hard to collect enough energy to move a car using just a few small solar panels on the roof.

That's why these solar cars are often odd shapes, to catch as much light as possible. And despite the big roofs these cars still have to be very light to travel at a decent speed.

SOLAR CAR TEAM MEMBER: We can hit speeds of about 120 kilometres per hour, the highest speed we've ever hit is 132 but we tend to cruise at about 70 or 80, that's kind of the efficient point of the car.

Another problem is night time, or cloudy days, when there isn't enough sun around to power them!

And then there's the issue of space. There's barely enough room for one person in some of these cars, let alone a whole family or a load of shopping!

But over time these scientists and engineers hope to keep improving their solar cars. And one day you might even be able to drive one to school!

In the meantime though, seeing a solar car in your neighbourhood will probably only happen during special events like this.

CAMERON MUTIS, LIBERTY SOLAR TEAM USA: Just being here halfway across the world getting to race against all these countries it's just incredible for us, we're so excited to be here!

### QUIZ 1

And solar cars sound like a good subject for our first quiz. Good luck!

Which chemical element is used to make solar panels? Is it:

- Carbon
- Plutonium
- Or Silicon

The answer is Silicon



### High Rise Schools

Reporter: Jemma Rowe

INTRO: Now most Australian schools look fairly similar - a few classroom buildings, one or two storeys high with an assembly hall and usually an oval to one side. But a new school in Perth has thrown that stereotype out of the window by moving into a high rise office block in the centre of the city. Jemma had a look at the upsides and downsides of vertical learning.

Welcome to the grand opening of, drum roll please, St George's Anglican Grammar! In fact, it looks more like an office block!

Well, that's because it is. But while it's a big change from their last campus, the kids here are already giving their new vertical school an A+.

PETRA: It's been really cool, the first time I came in it was really surprising because I thought it would be different but it's way better than I thought.

MORGAN: It's a great place to go, I love it, yeah.

For these kids the rooftop is their gymnasium, the local church is their chapel, the city is their photography studio, and the Art Gallery of Western Australia is their art room.

PETRA: For art we could go to the art gallery to get some inspiration for paintings and for sport we can use the facilities around, so that's really good, it's been really good so far.

But why build high rise schools, when regular ones seem to work just fine? Well as the world's population grows the space we have for schools will shrink. And experts say using existing office blocks uses less land, and is much cheaper than building big new schools further out of town.

ALYSSA: There's all these facilities that are so close to us, I don't see why other schools wouldn't want to utilise these opportunities.

But some people aren't as excited about vertical schools. Health experts worry that being stuck in the same building all day means kids will spend too much time in classrooms, and not enough time in the fresh air getting exercise. But the school's principal says that's not a problem.

SCHOOL PRINCIPAL: We do some really exciting physical education activities. For example we have archery happening on a Monday at Langley Park, we have a stand up paddle boarding unit planned for later this term so there's plenty of opportunity for them and they get their full quota of physical education.

Plus all of these stairs should help.

ALYSSA: There's a lot of stairs.



This school is the first in Western Australia to go up, rather than out. But the state is already planning more, and New South Wales is also *rising* to the occasion, with 4 new high rise schools in the works.

So it seems *sky-high* schools could be the way of the future. But what do you think about it?

CHLOE: It'd be pretty cool for the view but if you had to get out quickly it'd be pretty hard.

INANA: Well I wouldn't necessarily like it because you don't have as much fresh air and opportunity to go outside.

ROWAN: I think I'd actually feel quite annoyed because I'd be in a bit of an enclosed space.

McKENZIE: Maybe like slides to each class like this slide, this slide goes to like the art classroom, and this slide goes to the computing room.

### Quiz 2

Okay it's nearly time for sport. But first let's go to another quiz.

How tall is the tallest university building in the world? Is it:

- 40m
- 240m
- Or 840m

The answer is 240m. It's the state University of Moscow and it's spread over 36 floors.

### The Score

Right it's sport time now. Here's all the highlights.

The Wallabies are through to the final of the Rugby World Cup after defeating a determined Argentina 29 to 15.

The Aussies started well with Rob Simmons stealing the fastest try of the world cup. Then Adam Ashley-Cooper crossed the line three more times! But the Pumas weren't giving up taking advantage of the penalties Australia continued to give away in the scrum. But with four unanswered tries it wasn't enough to match the Wallabies.



STEPHEN MOORE, WALLABIES CAPTAIN: I'm really proud of the way we defended, we give ourselves an opportunity now to play in a final.

Australia will now play New Zealand on Sunday morning in the Wallabies fourth world cup final appearance.

And Argentina has lost out to an Aussie team in the soccer too!

Australia's under 17 team, the Joeys, beat Argentina two-one in the junior soccer world cup in Chile. Nicholas Pennetta was a stand-out with this goal in the 25th minute.

They'll take on Nigeria later in the week but will have to wait for other results to see if they make it through to the knockout rounds.

And golfer Jason Day has taken out the Don Award.

It's named after cricket legend Sir Donald Bradman and it's given to the Aussie athlete judged to have inspired the nation the most. Surfer Mick Fanning, cyclist Anna Meares and NFL star Jarryd Hayne were just some of the talented Aussies up for this year's award. Jason Day says winning the Don has topped off his best year so far. And because he was in the US, his mum had to accept the award on his behalf!

### **Blind Tennis**

Reporter: Eloise Fuss

INTRO: Staying with sport now. And for kids with a vision-impairment choosing a sport can be pretty difficult. But in SA some kids are trying out a new adapted version of tennis for the first time and they're loving it. Here's Eloise to find out how it works.

Tennis is a great game but for kids with a vision impairment, like these guys, it can be pretty hard to play.

KID 1: The challenging thing is my colour blindness I can't see colour, and a yellow ball on a green surface is really hard.

So they've been learning to play a modified version called blind tennis.

INSTRUCTOR: Okay what we're going to do today is some forward and backhands

This special program is testing out blind tennis in South Australia for the first time. So how does it work? Well the ball's bigger and softer and it has a rattle inside so players can hear where it lands on the court.



KID 1: Because if they can't hear the ball they might go left if the ball's going right. You actually need to hear where it's going.

And the ball's allowed to bounce a couple more times.

KID 1: If you're legally blind, like I'm a bit, you can only bounce twice but if you're full blind you can bounce it three times.

There's a few changes to the court too.

REPORTER: So what's been done here?

KID 2: Well underneath the tape there's a bit of wire, and the reason's there's some wire is so we can navigate, we can position ourselves so we just know where we are and if the balls gone out.

Off the court these kids have even written their own 'blind tennis' instruction books to encourage other kids to play. And some of them are in braille!

KID 3: Chapter 9, what we liked about playing blind tennis.

It's way of writing, using different patterns of dots.

KID 4: There's two little dots, which means a cursor, so what you have to do is write on these braille keys here, and write what you want to write.

So people who are blind or don't have much vision can read it using their fingertips!

KID 4: Over the last few weeks they experimented the game of blind tennis.

They even drew pictures for the book using a special technique.

KID 3: You start to draw like on a normal piece of paper except it comes out raised. It has a tennis racquet and it's about to hit the ball.

But what their book doesn't say is that playing tennis with no vision is really hard! I found out when I had a go wearing these practice goggles.

REPORTER: That is really, really hard.

But these kids have embraced the sport and the challenges that come with it.

KID 2: If you have good hearing it is really useful because it's easier to track the ball, than if you don't especially when there's multiple balls going at once.

And they hope more kids will take up the challenge and join them for a hit!

### Closer

And that wraps us up for another week!



But the fun will continue on Friday for #AskaReporter.

If you've never tried it all it takes is one click to see a live broadcast of one of the reporters and I answering your questions via twitter. This week's topic will be on our *Uluru Handback* story.

So go to our website for more info on how your class can get involved!

Right that's it from me. Bye for now!