Focus Questions

Episode 29
22nd October 2019

Syria Turkey Conflict

1. Discuss the *Syria Turkey Conflict* story as a class and record the main points of the discussion.
2. Where is Syria? Locate using Google Maps.
3. Which country attacked northern Syria recently?
4. When did the conflict in Syria start?
5. What is the name of the ethnic group that lives in northern Syria?
6. What did Syrian Kurds and US soldiers do in Northern Syria to make the area stable?
7. What did President Trump order recently?
8. How did people react to the order?
9. What questions do you have after watching the BTN story?
10. What do you understand more clearly since watching the BTN story?

Solar Car Challenge

1. Briefly describe the World Solar Challenge.
2. Where does the race start and finish?
3. What is the distance of the race?
4. How do the solar panels work?
5. Solar power is a non-renewable resource. True or false?
6. The cars are only allowed on the road between _____and _____.
7. Explain how the World Solar Challenge began.
8. What challenges did some of the teams face this year?
9. What is the cruiser class?
10. What do you think is the future of solar cars? Explain your answer.

> Check out the Solar Car Challenge resource on the Teachers page.

Deepfake Videos

1. What was the main point of the BTN story?
2. What is a deepfake video?
3. Deepfakes use _____ intelligence software to analyse and map people's faces.
4. Give an example of a deepfake video.
5. How is deepfake technology used in films?
6. Experts say that it's getting easier for ordinary people to create deepfake videos. True or false?
7. Why are experts worried about deepfake technology?
8. What are researchers doing to detect deepfake videos?
9. What can kids do to be more aware of deepfake videos?
10. What did you learn watching this story?

> Get your class involved in BTN's Ask A Reporter. This week's topic is deepfake videos.

Map Future

1. Briefly summarise the BTN *Map Future* story.
2. What is the purpose of a map?
3. Maps are created by people called _____.
4. Before computers, how were maps made?
5. What does GPS stand for?
6. How did GPS change the way we use maps?
7. What is a topographical map?
8. Finish the following sentence: Geoscience Australia has decided to stop printing…
9. Why are some people not happy with the decision?
10. When do you use maps? Give examples.

> Check out the Map Future resource on the Teachers page.

Dog History

1. What did the BTN *Dog History* story explain?
2. What did a recent study find about people who own dogs?
3. Wolves are the ancestors of all dogs. True or false?
4. How is the friendship between dogs and people thought to have started?
5. How did wolves change over time?
6. Give an example of how dogs have been bred for a particular purpose.
7. How can dogs be good for a person's mental health?
8. What is the name of the chemical that's released in our brains when dogs and humans look at each other?
9. How are dogs good for a person's physical health?
10. How did the story make you feel?

BTN has launched its first ever Kids Talk Survey. We want to know what's going on in the lives of school kids around the country. It will run alongside the ABC's Australia Talks survey and will allow researchers and the ABC to compare kids' attitudes on some issues with those of adult Australians. Do the survey now.

Teacher Resource

Solar Car Challenge

Episode 29
22nd October 2019

Focus Questions

1. Briefly describe the World Solar Challenge.
2. Where does the race start and finish?
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5. Solar power is a non-renewable resource. True or false?
6. The cars are only allowed on the road between _____and _____.
7. Explain how the World Solar Challenge began.
8. What challenges did some of the teams face this year?
9. What is the cruiser class?
10. What do you think is the future of solar cars? Explain your answer.

Activity

Before students watch the BTN story, ask them what they already know about solar cars and solar energy.

Class Discussion

After watching the BTN *Solar Car Challenge* story, students will respond to the following questions:

- What did you SEE in this video?
- What does this video make your WONDER?
- What did you LEARN from this story?
- What QUESTIONS do you have after watching the story?

Glossary

Students will brainstorm a list of key words that relate to solar cars. Students may want to use pictures and diagrams to illustrate the meaning and create their own glossary. Here are some words to get them started.

Solar	Solar panel	Energy
Battery	Renewable	Emissions

Key Learning

Students will learn more about solar cars, how they work and design their own car of the future.

Curriculum

Science – Years 5 & 6
Scientific knowledge is used to solve problems and inform personal and community decisions.

Communicate ideas, explanations and processes using scientific representations in a variety of ways, including multi-modal texts.

Science – Year 7
Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations.

Design and Technologies – Years 5 & 6
Examine how people in design and technologies occupations address competing considerations, including sustainability in the design of products, services, and environments for current and future use.

Activity

KWLH

Watch the BTN *Solar Car Challenge* story and discuss as a class. What questions were raised in the discussion and what are the gaps in their knowledge. The following KWLH organiser provides students with a framework to explore their knowledge on this topic and consider what they would like to know and learn.

What do I know?	***What do I want to know?***	***What have I learnt?***	***How will I find out?***

Students will develop their own question/s for inquiry, collecting and recording information from a wide variety of sources. Students may develop their own question for inquiry or select one or more of the questions below.

- Why have solar powered cars? What are the benefits?
- What are the pros and cons of solar powered cars?
- How does a solar powered car work?
- How has solar car technology improved in recent years?
- How are solar powered cars different to petrol fuelled cars?
- How long will it be before everyone can drive a solar powered car?
- What are fossil fuels and what are the issues with continuing fossil fuel use?
- What types of alternative energy sources are being developed for future cars?
- What emissions do conventional cars produce and why are they a problem?
- What do you think is the future of solar cars?

Activity

How does a solar powered car work?

Students will find out as much as they can about solar powered cars using a range of primary and secondary sources (internet, newspapers and books). They can use their 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
6-in-1 solar educational kit

Activity

Pros and cons

Students will research the pros and cons of solar cars organising their information into two columns. Students will use their research findings to help plan and create an information poster.

Information poster

Students will design a poster or infographic which illustrates one or more of the benefits of solar cars.

- Think of ways that solar 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.

Activity

Car of the future

Before starting this activity, hold a class discussion, asking students what sort of car they think they will be driving in 50 years' time? BTN has done a number of stories about alternative energy sources for cars. They can check out the following stories to help with their research:

- Electric Cars
- Electric Car Future
- Hybrid Cars

Students will then design an eco-friendly car of the future, with the aim to decrease air pollution. Students will consider the impact that vehicles have on our planet and then design a car that causes as little harm as possible to the environment. Students will need to consider the following:

- Provide a drawing of the car with labels to show its features.
- Choose a body size, engine size, fuel type and accessories.
- What speed will your car travel?
- What materials will be used to make your car?
- What are the interior and exterior features?
- What new technologies will you incorporate in your design?
- How will the car benefit people and the environment?
- Why is your design the best one for your community?
- Present your design to the class.

Useful Websites

World Solar Challenge 2019
https://www.worldsolarchallenge.org/

Solar Cars – BTN
https://www.abc.net.au/btn/classroom/solar-cars/10533412

Solar Transport – BTN
https://www.abc.net.au/btn/classroom/solar-transport/10525652

Teacher Resource

Map Future

Episode 29
22nd October 2019

Focus Questions

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3. Maps are created by people called _____.
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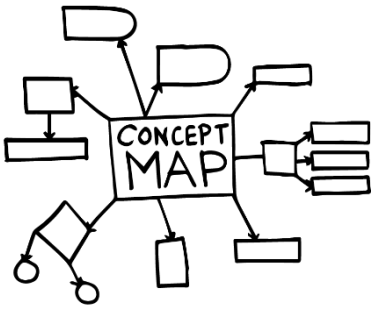
5. What does GPS stand for?
6. How did GPS change the way we use maps?
7. What is a topographical map?
8. Finish the following sentence: Geoscience Australia has decided to stop printing…
9. Why are some people not happy with the decision?
10. When do you use maps? Give examples.

Activity

Class discussion

Before watching the BTN *Map Future* story hold a class discussion to find out what your students know about maps.

- What is a map?
- What is the purpose of a map?
- When do you use maps?
- Make a list of words that relate to maps. Make your own classroom glossary after watching the BTN *Map Future* story.



Activity

What do you see, think and wonder?

After watching the BTN *Map Future* story, 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?

Key Learning

Students will explore the history of cartography. Students will represent data in the form of a map.

Curriculum

HASS – Years 5 & 6
Locate and collect relevant information and data from primary sources and secondary sources.

Organise and represent data in a range of formats including tables, graphs and large- and small-scale maps, using discipline-appropriate conventions.

Interpret data and information displayed in a range of formats to identify, describe and compare distributions, patterns and trends, and to infer relationships.

HASS – Year 7
Organise, categorise and represent data in a range of appropriate formats using discipline-specific conventions, including different types of graphs, tables, field sketches and annotated diagrams, and maps at different scales.

Interpret and analyse data and information displayed in a range of formats to identify and propose explanations for distributions, patterns, trends and relationships.

Activity

Glossary

Students will develop a glossary of words and terms that relate to maps in the context of the BTN *Map Future* story. Below are some words to get them started. Students will add words and meanings to their glossary as they come across unfamiliar words throughout their research. Students will then write their own sentence using each of the terms.

	Meaning	Sentence
Cartographer		
Scale		
Topography		
Legend		
GPS		
Contour lines		
Longitude and latitude		

Activity

KWLH

Discuss the BTN *Map Future* story as a class. What questions were raised in the discussion and what are the gaps in their knowledge? The following KWLH organiser provides students with a framework to explore their knowledge on this topic and consider what they would like to know and learn.

What do I know?	***What do I want to know?***	***What have I learnt?***	***How will I find out?***

Topic for inquiry

Students will start to think like a cartographer and develop their own question/s for inquiry, collecting and recording information from a wide variety of sources. Students may develop their own question for inquiry or select one or more of the questions below.

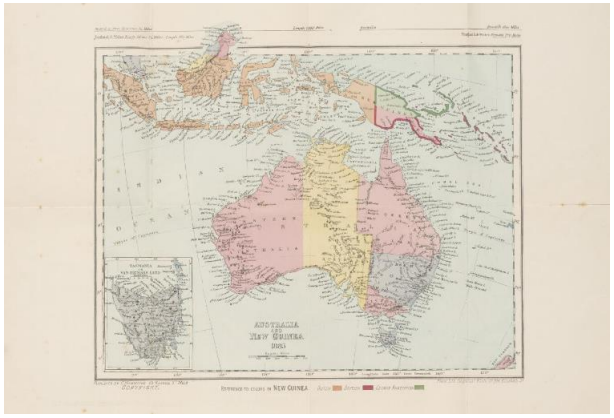
- Explore the history of maps using a timeline to record your results. Include some of the earliest maps of the world and compare to modern maps of the world. How are they similar and different?
- How has technology changed map making? Investigate how maps were made many years ago compared to maps that are made now.
- How does Global Positioning System (GPS) work? Explain how navigation satellites help us figure out where we are and how we get to other places.
- How is GPS used in everyday life? Include how GPS can help monitor extreme weather events. Give examples.

Activity

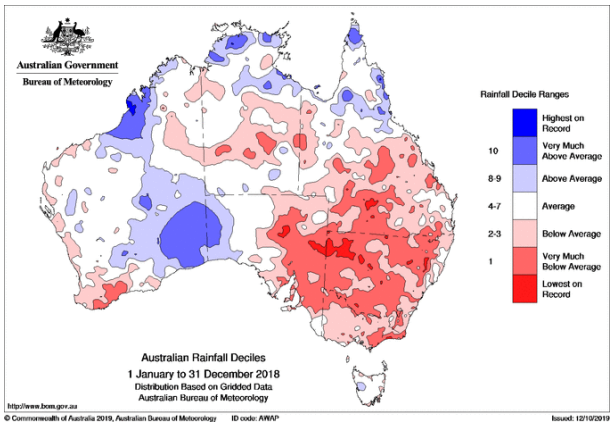
Visual literacy

In this activity students will observe, analyse and query a range of maps. Below is a selection of maps for students to observe and respond to. Alternatively, students can visit the maps collection on the National Library of Australia website and choose a map that interests them. Students will observe, analyse and query the map/s and respond to the following questions:

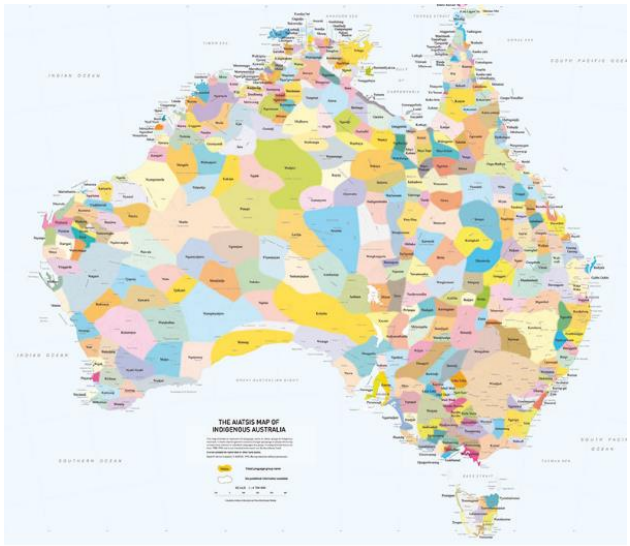
- What is the title of the map?
- When was the map produced?
- Who produced the map?
- How do you think it was made?
- What features do you see on this map? Make a list.
- What is the purpose of the map?
- What geographical questions do you have about the map?



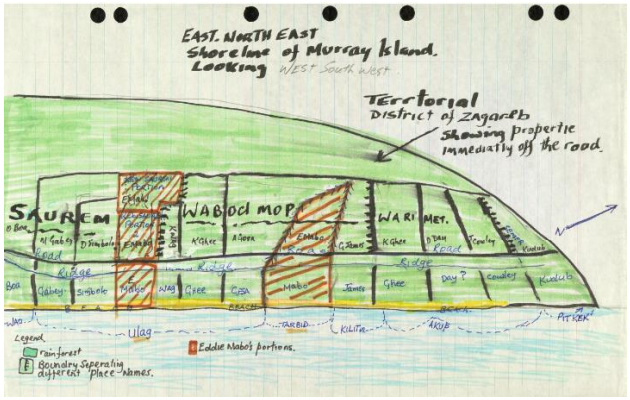
Australia and New Guinea 1885, National Library of Australia



Australian Rainfall Deciles 2018, Bureau of Meteorology



Map of Indigenous Australia, AIATSIS



Eddie Mabo's map, National Library of Australia

Activity

Create a map

Provide students with the opportunity to think and behave like cartographers (someone who makes maps). In this activity students will be given the mission to map their classroom or school grounds, identify a range of geographical features and construct a map.

Students may work individually or in small groups and will use the following as a guide:

- What tools and materials will you need to construct your map?
- Decide what the purpose of your map will be and how it will be useful to people.
- What objects or geographical features will you include in your map?
- How will you figure out what scale to use?
- Consider including contour lines on your map to show the shape of things (like hills).
- Consider including a grid on your map which will help people locate specific places.
- Include a title, north arrow, symbols and scale on your map.

Students will reflect on the activity by responding to one or more of the following questions:

- What did you enjoy about the map making process?
- Compare and contrast your map with that of your classmates. What is similar or different?
- What did you find surprising?
- What would you do differently next time?

Useful Websites

Modern Maps – BTN
https://www.abc.net.au/btn/classroom/modern-maps/10532294

Map of Indigenous Australia – AIATSIS
https://aiatsis.gov.au/explore/articles/aiatsis-map-indigenous-australia

Maps of Australia – Geoscience Australia
https://www.ga.gov.au/data-pubs/maps

Maps, location and direction – ABC Education
http://education.abc.net.au/home#!/topic/495424/maps-location-and-direction

How does GPS work? – NASA Space Place
https://spaceplace.nasa.gov/gps/en/

BTN Transcript: Episode 29 – 22/10/19

Hey, Amelia Moseley here, you're watching BTN. Let’s check out what's coming up. We investigate deepfakes for Media Literacy Week, check out all the thrills and spills of this year's Solar Car Challenge and find out more about the history of dogs.

Syria Turkey Conflict

Reporter: Emma Davis

INTRO: All that soon. But first today to a big story that you might have heard about over the past few weeks. A new conflict has flared up in Syria in the Middle East and it has a lot of people worried. Let’s find out more about it.

For many kids like these in the north east of Syria, this is what life's been like for the past few weeks. They're among hundreds of thousands of people who have had to leave their homes in search of safety since Turkey attacked cities and towns in northern Syria. So, what's going on? Well to understand it you have to know a little bit about Syria's recent history.

In 2011 there were protests against the government, which started peacefully but turned violent. Government forces killed hundreds of people and that sparked a long and complicated civil war. Lots of groups fought for power in Syria including a terrorist group called Islamic State, whose members carried out some terrible attacks overseas. Other countries joined the fight against Islamic State and here's where it gets a bit tricky. Russia and Iran joined forces with the Syrian government, but the US helped a rebel Kurdish group that was also fighting Islamic State.

The Kurds are an ethnic group that live in this area. There are around 30 million Kurdish people and they have their own language and culture, but they don't have a country of their own. In Turkey a Kurdish militant group has fought against the government for decades and carried out many attacks. Turkey and other countries consider that group to be a terrorist organisation. The Kurdish fighters in Syria belong to a different group but Turkey says they're linked, and it wasn't happy about the US fighting alongside them. But the Syrian Kurds were really important in the fight against Islamic State.

By working with US soldiers, they managed to take back northern Syria. They captured thousands of people linked to Islamic State and held them in camps along the Turkish and Iraqi borders. US troops have been there, helping the Kurds to guard the prisoners and make sure things stayed peaceful along the border.

JAMIE JARRARD, US SPECIAL FORCES: What I do know is that our presence here has enabled this area to be stable

But that changed when President Donald Trump ordered US troops to leave the north of Syria.

DONALD TRUMP, US PRESIDENT: We want to bring our soldiers back home. These are the endless wars.

President Trump said it wasn't America's job to police the area, but it made many people angry. They said it was wrong to abandon the Kurds and they were worried that, with the US gone, Turkey would use the opportunity to attack them. They were right. Within three days Turkey had sent forces into Syria. Turkey's President said he wanted to create a safe area to resettle Syrian refugees and to stop Kurdish forces threatening Turkey but many people around the world have spoken out against Turkey's decision. As well as innocent people being killed, there are worries it will lead to Islamic State getting stronger again. Already the fighting has led to prisoners escaping and hundreds of thousands of people evacuating cities under attack.

Syrian forces have now joined the Kurds and Russia says it will help them as well. Late last week the US helped to organise a ceasefire which means, for the moment, both sides have agreed to not fight each other. While there have been reports of violence, it's meant that many people have been able to safely evacuate but this new conflict isn't over yet and no-one's really sure how it's going to end.

This Week in News

The biggest story in the news this week was, well, it's hard to tell because on Monday all the big newspapers in Australia decided to black out their front pages and websites. Why'd they do it? Well, they were making a bit of a statement about press freedom. They reckon Australia's national security laws can make it hard for journalists to do their job properly. Many in the media were angry about some raids that happened earlier this year on a journalist's house and the ABC's Sydney office. The Federal Police were investigating some articles which they said may have broken the law. That's one of the things being looked into in a government investigation that's going on at the moment into press freedom.

Two astronauts have made history, becoming the first women to complete a spacewalk together. NASA astronauts Jessica Meir and Christina Koch stepped outside the International Space Station to replace a faulty battery, in a spacewalk lasting seven hours and 17 minutes. US President, Donald Trump, was seriously impressed.

DONALD TRUMP, US PRESIDENT: And I just want to congratulate you. What you do is incredible. It's so you're very brave people. I don't think I want to do it. I must tell you that. But you are amazing people.

NASA had meant to hold the first all-female spacewalk months ago but didn't have enough of the right sized suits. They clearly do now.

Kids Talk Survey

KID: What do you think about?

KID 2: School

KID 3: Screen time

KID 4: Homework

KID 5: Bullying

KID 6: The news.

We at BTN want to know. That's why we're launching Kids Talk. A big survey all about you and the things that matter in your life. Including how you're feeling, the issues you're dealing with, how you get to school and how long you spend on your devices. No, not just how much time you say you spend. We want school kids all around Australia to get involved so we can get to know you. Just head to our website for all the details.

Solar Car Challenge

Reporter: Emma Davis

INTRO: Last week teams of students from around the world raced across the outback for the Solar Car Challenge. It's an event that's been going since the 80s and it's all about showcasing the possibilities of solar power. Check it out.

It's a race full of speed, spills and sometimes heartbreak. These were the scenes from this year's World Solar Challenge. It's part race, part science show, where high school and uni students from heaps of different countries build a solar car from scratch then they race it 3 thousand kays from Darwin to Adelaide. The cars are only allowed to be on the road between 8am and 5pm and at night teams have to find a good place to camp on the side of the road. It's kinda obvious why, the cars run on sunlight. These solar panels absorb the energy from the Sun and convert it into an electric current that powers the car.

The event was originally inspired by these two guys: Hans Tholstrup and Larry Perkins. Tholstrup was really into finding different ways of powering cars because he was worried that fuel would eventually run out. So, he joined forces with Perkins and created The Quiet Achiever. That's this thing. In 1983 they became the first people to drive from Perth to Sydney in a solar car and a few years later, in 1987, Hans Tholstrop invited the rest of the world to join the challenge.

JONATHAN TENNYSON, SOLAR CAR DESIGNER: Everybody can drive down the road on sunshine

In the early days, solar power was kinda unusual so these teams were doing groundbreaking work, even if the cars did look a bit like science experiments.

Fast forward 32 years and the race has changed a lot. This year a record 53 teams entered from 24 countries and there was a lot of drama. Dutch team Vattenfall were the favourites to win, having won seven races before including the last three in a row. But on the final day disaster struck. The car caught on fire and while the driver was ok the car obviously wasn't. One of the other favourites also ran into a bit of trouble when heavy winds caused a crash.

ANNELIES DEKKER, TEAM TWENTE: Everyone is ok, our driver is ok, so I'm very happy with that, that's the first thing that was important.

There was also some nasty weather at night which made things kinda uncomfortable. But the race went on and, in the end, it was the Belgian team Agoria that took out the challenger title.

WILLEM-JAN CLAES, TEAM AGORIA LEADER: The car did very well, the team is very good, the pilots were amazing, so it feels crazy to be here as first.

But that's not the only part of the event. There's also a cruiser class which is more about creating practical cars that could be used by people in the future. Unlike the speedy models, these ones are designed for comfort and reliability and some reckon that one day we could all be driving around in cars like these.

SEVERIN KOBUS, TEAM SONNENWAGEN AACHEN: I really hope that by doing this, as a bunch of mostly students, we can show the world what is possible and what we can already achieve and maybe that can boost the future of driving cars.

Quiz

The process of creating an electric current from the Sun's rays is called the:

Solar electric effect
Photovoltaic effect or the
Photosynthetic effect

It's the photovoltaic effect. It was discovered in 1839 by Alexandre Edmond Becquerel.

Deepfake Videos

Reporter: Jack Evans

INTRO: Imagine you were watching a video of, I dunno, say me and you couldn't tell whether I was real or a very clever fake. Well that might be a real possibility in the future thanks to technology that's often known as deepfake and it's got some experts a little worried. Here's Jack.

HAGRID: You're a wizard Harry.

JACK: I'm a what? A Lizard?

Have you ever pictured yourself as a movie star?

DARTH VADER: I am your father

JACK: Really? I don't see the resemblance.

Or a pop star? Yeah ok, so maybe these aren't the most convincing videos you've ever seen. But it might not be long before any movie or video or speech you think of could instantly star you. Or Nicholas Cage, if you'd rather. These are part of a growing collection of videos that are often known as deepfakes.

Deepfakes use artificial intelligence or "AI" software to analyse and map people's faces and use that information to create a convincing fake. You've probably seen it used before in movies. For example, in Star Wars Rogue One to make an actress look like a younger Carrie Fischer. Or in Fast and the Furious 7 when

actor Paul Walker tragically died during production - the film was finished by shooting scenes with Walkers' brothers. Then using deepfake technology they mapped Paul's face onto theirs.

Hoa Li is a computer scientist who worked on Fast and the Furious and he said while that took a whole team of animators. It's now possible to do something similar with just one person and you don't have to be a movie producer. A recent study found the number of deepfakes online has shot up in the past year. With YouTubers using some clever software to swap actors around or practice some impressive impressions. And while it's usually just for fun, there is a dark side to deepfakes.

JACK: Imagine watching a video of a politician and not knowing if it's real. It'd be hard to know what to believe.

Already there have been a few cases of people being fooled by deepfake videos, like this one which shows a former Italian Prime Minister insulting other politicians. It's not really him, it's a fake. But some people thought it was real and if you think the voice is a give-away think again. There's software already available that lets you take a voice recording and change it to make someone say whatever you want.

COMPUTERISED VOICE: I should probably watch Behind the News this year.

With this sort of technology getting better and better experts are worried it'll be used in the future to spread fake news and misinformation and maybe even change the outcome of elections. It's why researchers around the world are looking for ways to outsmart deepfakes. Like this software which uses AI to detect changes that have been made to videos.

PATRINI: We use the same type of technology, deep learning and computer vision, to understand the videos and in particular to see if they might be manipulated.

But experts like Patrini say it's also up to us to be media literate and to think critically about what we're seeing. He says there are some questions we should ask ourselves before sharing or trusting a video. Like, where has it come from? Is it a website or a source that you can trust? What is being said? Is it something controversial or out of character for the person? Who else is talking about it? Is it appearing in multiple trusted places? Or in this case, is it just too silly to be real?

Ask a Reporter

Do you have more questions about deepfakes? Well, we'll be around to answer them live on Ask a Reporter this Friday. Just head to our website for all the details.

Map Future

Reporter: Jack Evans

INTRO: You can also watch a longer explainer that we've made on deepfakes on the website and ABC Education has a whole webpage full of games and videos for Media Literacy Week so make sure you check that out. Now to a story about maps. Recently Geoscience Australia announced that it was going to stop selling some of its maps on paper. It says most people are accessing them online now and it got Jack thinking about how maps and map-making have changed over the years. Check it out.

It started just like every other day, but something felt off.

JACK: Oh, it's happening, the apocalypse is here.

Fortunately I had been preparing for the time a tech destroying solar flare wiped out all of the world’s electricity and devices.

JACK: Right. Now ahh, where's that dot that tells me where I am?

Unfortunately, for some of us reading a paper map can be a little confusing at first. But for thousands of years people right around the globe have been using them. They show us the size and shapes of countries, help us judge distances and figure out where we are and where we want to get to.

JACK: Directions to ABC, hello?

Maps are created by people called cartographers. Before we had computers, they drew maps by hand. First by observing and guessing, and then by using geometry which let people measure distances really accurately just using angles. This method is still used today. Although now we have more sophisticated equipment that uses lasers to get really precise measurements.

When planes came along we were able to take photos from really high up, giving us an even more accurate picture. And then when satellites came along, well we could see what our world really looked like. And then along came the Global Positioning System. A group of more than 30 satellites that are constantly zooming around the Earth that can show you exactly where you are at any point. GPS completely changed the way most of us use maps. Today finding where you are and where you want to go is as easy as punching in an address and away you go. Which means paper maps aren't as common these days.

JACK: Oh, GPS, how I miss you.

It's one of the reasons why the government agency in charge of making maps has decided to stop printing large scale topographical maps. That's a type of map that shows you physical features of the area and give you an idea of how high and steep things are by using contour lines.

JACK: It's as if the closer the lines are the steeper it is.

Geoscience Australia says people will still be able to access topographical maps online and print them if they need to. But not everyone is happy with the decision.

CLAIRE DRABSCH: It's always, it's a great back up having a map and a compass you're not going to run out of battery. It's not going to break down and so it is also that when everything when all technology fails you've got that map and compass there to get you where you need to go.

JACK: Oh, I've made it.

EMMA: Jack, where have you been all day?

JACK: Emma, it’s the apocalypse. A solar flare wiped out all electronic infrastructure.

EMMA: What? No, it didn’t. You just didn’t turn it on.

JACK: Ohhh. But wait, what about the kettle?

Did You Know?

Did you know, the oldest known maps aren't of the Earth, they're of the stars. Archaeologists have found star maps in 18,000-year-old cave paintings from Lascaux in France.

Sport

The Wallabies are out of the World Cup and looking for a new coach. Michael Cheika was the guy in the top job, but he quit after Australia was thrashed by England in the quarter final. The score was 40 to 16 and while the Aussies worked hard they also made a lot of mistakes. Meanwhile South Africa crushed Japan's World Cup dreams on the weekend defeating the host team by 23 points. The Springboks will play Wales in a semi-final match next weekend while England will face the All Blacks.

Speaking of tournaments, the Silver Ferns are a step closer to winning the Constellation Cup. The comp's held every year between Australia and New Zealand and this year's event is a close one. So far Australia's won one and New Zealand's won two and both of those games were super close. The final game is next weekend and if the silver ferns manage to get up it'll be just their second championship win in 9 years.

Dog History

Reporter: Leela Varghese

INTRO: Finally, today to a story about our very best, most lovable furry friends. Cats. Just joking, it's about dogs. Recently a study came out saying that people who own a dog tend to live longer. So, Leela found out more about it and delved into the history of our doggy-human friendship.

LEELA VARGHESE, REPORTER: Dogs and humans. Has there ever been a friendship so great? It's pretty hard to picture a world without dogs. Oh man, that's too sad. Bring them back. Bring them back. Not only are dogs our best friends according to a recent study, they might actually keep you alive longer.

KID ONE: Really?

Yep, we'll get back to that in a bit.

LEELA: But first, let's take a look at the history of the relationship between dogs and their masters. Are you sure there's no room for me on the chair?

No one knows for sure exactly where, when or how it happened. But we do know:

LEELA: It began with wolves the ancestors of all dogs.

As you can see we don't have any real wolves, so dogs will be doing some acting. Be the wolf Sooki. Be the wolf. Some think that tens of thousands of years ago humans might have deliberately caught and bred wolf puppies to tame them.

KID TWO: Oh, the wolf's cute. Give her the bone.

KID ONE: Okay.

Others think it was the wolves who struck up the friendship because they realised if they hung around campsites and acted all cute and non-threatening they might get some extra food. Either way, it was a friendship both sides benefited from. With the wolves helping us with hunting and protection in return for sweet, sweet snacks and scratches.

KID TWO: We're going to be the best of friends.

Over time the wolves that were hanging with humans not only became tame, their physical appearance changed too, and they started to look and act less like wolves. Although, it was a long time before they started looking like, well, Sooki here.

LEELA: Eventually, humans started deliberately breeding dogs to look and act a certain way.

Whether it was to pull sleds in the snow or to chase down deer in the forest. Small breeds like terriers were bred for hunting rats. And dalmatians were bred to run beside carriages and protect people from bandits. In the past few centuries, humans have created hundreds of different breeds which have helped us with all sorts of things, from keeping us safe and secure to guiding us and finding us when we're lost. And in more recent years scientists have found they're actually helping our health by just being our friends. Studies have found that dogs are really good for your mental health. They help you to be calm, stress less and improve your overall mood and self-esteem. Which is why a few schools and uni’s have started to bring dogs to class.

LEELA: Apparently when a dogs and humans look into each other’s eyes, both our brains release a burst of oxytocin, otherwise known as the love chemical. Aww.

Dogs also encourage you to be more active, as you can see, which might be one of the reasons why a recent study has said that people who own dogs tend to live longer. It found that dog ownership reduced people's risk of dying early by 24%. The researchers reckon it's probably because they encourage you to get outside, be social and are such good company. Of course, that's something all dog owners already know.

LEELA: Unfortunately, I don't own Sooki here. Or any dog for that matter. Hey, can we share your dog?

Closer

Cutest wolves ever. Well that's it for now but we'll be back as usual next week. In the meantime, don't forget to jump online and take part in our Kids Talk survey. We're getting heaps of responses already and we really want to hear from as many of you as possible. So, tell your friends. Have an awesome week. See you soon.