Learning from home: ABC TV Education resources



* 1. **Secondary – week 4**
     1. **18/05/2020 – 22/05/2020**

Supplementary activities to support educational content broadcast on ABC ME during Term 2, 2020

* 1. **About this resource**

ABC Education, in collaboration with the NSW Department of Education, have planned a daily schedule of free to air educational programs supported by standalone resources that complement the ABC TV Education program airing during Term 2, 2020. All activities can be completed without access to the internet or a device and are suitable for lower primary, upper primary and secondary students.

* 1. **Educational benefit**

Student booklets include activities designed by curriculum experts to meet educational outcomes and are based on a selection of ABC programs that are of high educational value. Activities address topics from a range of subjects including: English; mathematics; science and technology; geography; history; PDHPE and creative arts.

These optional resources do not replace teaching and learning programs provided by schools but may be used by teachers and parents/carers to supplement student learning. Teachers may select activities relevant to their teaching and learning program and modify to meet student needs.

* 1. **Recording student responses**

Students complete activities before, during and after viewing selected daily episodes. Where appropriate, space is provided in each booklet for students to record their responses. Students may require additional writing paper or a separate workbook for some tasks. Completed student booklets may be collected by teachers and used as evidence of learning.

* 1. **How to access ABC TV Education programs**

The selected daily episodes can be viewed via the ABC TV Education broadcast on ABC ME (Channel 23) from 10am-3pm weekdays. Each day commences with programs suitable for lower primary students followed by upper primary and then secondary. Programs will also be available at [abc.net.au/iview](https://iview.abc.net.au/) after the broadcast. A schedule of the selected episodes is included in each student booklet.

* 1. **Episode schedule – week 4**

The timetable below outlines the episode focus for each day. The full ABC TV Education program can be found at <http://www.abc.net.au/tveducation/>

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Time | Program | Episode title | Key learning area | Pages |
| **Monday**  **18/05/2020** | 11:45am | Ecomaths | Reducing Car Use | mathematics, science | [4-5](#_Ecomaths_–_Reducing) |
| **Monday**  **18/05/2020** | 1:50pm | Get Into Textiles | CAD/CAM In Textile Manufacturing | technology mandatory, textiles technology | [6-7](#_Get_Into_Textiles) |
| **Tuesday**  **19/05/2020** | 12:45pm | Fierce Earth | Deserts | HSIE, science | [8-9](#_Fierce_Earth_–) |
| **Wednesday**  **20/05/2020** | 2:30pm | Dates That Made History | 1431: Fall of the Angkor Empire | HSIE, history | [10-11](#_Dates_That_Made) |
| **Thursday**  **21/05/2020** | 2:10pm | Social Media Me | What Is Digital Citizenship? | PDHPE | [12-13](#_Social_Media_Me) |
| **Thursday**  **21/05/2020** | 2:25pm | BTN: Media Literacy | Fake News | English | [14-15](#_BTN-Media_Literacy-_Fake) |
| **Friday**  **22/05/2020** | 2:00pm | Your Paintings | Vincent Van Gogh | visual arts | [16-17](#_Your_Paintings_–) |

© State of New South Wales (Department of Education), 2020

The copyright material published in this document is subject to the Copyright Act 1968 (Cth), and is owned by the NSW Department of Education or, where indicated, by a party other than the NSW Department of Education.

Copyright material available in this document is licensed under a Creative Commons Attribution 4.0 International (CC BY 4.0) licence.

See <http://education.nsw.gov.au/about-us/copyright> for further details.

# Ecomaths – Reducing Car Use

**ABC ME screening details: Monday** 18 May, 2020 at 11:45am

This episode can also be viewed on [ABC iView](https://iview.abc.net.au/show/ecomaths) after the scheduled screening time.

**Key learning areas:** mathematics, science

**Level:** secondary

**About:** In this episode, Stefan explores alternatives to car use by pedalling a rickshaw across Bristol and performing simple calculations to determine the carbon cost of a new cycle way.

## Before the episode

1. How many cars do you own?
2. How many days a week do you use your cars?
3. Estimate how many kilometres a week your cars would drive.

## During the episode

1. Why do we prefer cars as a means of travel?
2. How many kilograms of CO2 is saved by a person riding as opposed to driving 1 km?
3. How many kilograms of CO2 were produced by building 1 km of cycling track?

## After the episode

1. Think of friends and people you know. Record in the frequency table below how each person gets to school.
2. Calculate the fraction and percentage of people that travel by each mode of transport.
3. Cars and light vehicles account for 10% of Australia’s greenhouse gas emissions. If Australia produces 43 000 000 tonnes of CO2 each year, how much is produced by cars and light vehicles?
4. The average emissions for cars in Australia is 45% higher than it is in Europe. Based on your answer to question 3, how much CO2 is produced by cars in Europe?
5. The average car produces 184 g CO2 per kilometre. Based on your kilometre estimate from before the episode, how many kilograms of CO2 would your cars produce in a year?
6. How many kilograms of CO2 could you save by cycling or walking everywhere rather than using a car?

| Mode of transport | Number of people | Fraction | Percentage |
| --- | --- | --- | --- |
| Car |  |  |  |
| Bus |  |  |  |
| Train |  |  |  |
| Walk |  |  |  |
| Ride |  |  |  |
|  |  |  |  |
|  |  |  |  |
| **Total** |  |  |  |

**Follow-up activity:** Buses only emit 12-22gCO2/km (per person) and trains 3-21gCO2/km (per person). Consider which of your car trips could be replaced by either walking, cycling, bus or train. Work out how many kilograms of CO2 you could save each year by swapping to these modes of transport.

# Get Into Textiles – CAD/CAM In Textile Manufacturing

**ABC ME screening details: Monday** 18 May, 2020 at 1:50pm

This episode can also be viewed on [ABC iView](https://iview.abc.net.au/show/get-into-textiles)

**Key learning areas:** technology mandatory, textiles technology

**Level:** secondary

**About:** This resource looks at how CAD/CAM is transforming all sections of the textile industry, from digital printing and embroidery to knitting and laser cutting.

## Before the episode

1. Sketch your school logo. Identify where this logo is on part of your uniform. Is it stitched or printed onto the fabric?

## During the episode

1. Outline the difference between tradition screen/rotary printing and digital printing on fabrics. When will digital printing become more popular for commercial production?
2. When designing embroidery patterns, why is it important for designers to consider how many colours or stitches they use in each design?
3. The episode showed a computerised knitting machine producing jumpers. What are the benefits of knitting a garment in one piece?

## After the episode

1. Outline the benefits to individuals and society of CAD/CAM in textile manufacturing.
2. Outline the importance of communication during the CAD/CAM processes of textile manufacturing.
3. Explain the environmental benefits of using CAD/CAM processes over traditional processes when producing textile items.

**Follow-up activity:** Sketch a logo or design to go onto a backpack. Outline the CAD/CAM design and manufacturing processes that could be used to produce your design.

# Fierce Earth – Deserts

**ABC ME screening details: Tuesday** 19 May, 2020 at 12:45pm

This episode can also be viewed on [ABC iView](https://iview.abc.net.au/show/fierce-earth) after the scheduled screening time.

**Key learning areas:** HSIE, science

**Level:** secondary

**About:** This Fierce Earth special takes viewers on a journey to Morocco, North Africa and to the Sahara Desert - the biggest hot desert in the world.

## Before the episode

1. Identify two deserts and their key environmental features.
2. Draw a diagram of a house that is suited for living in a desert. Annotate the key features of the house to survive in a desert.

## During the episode

1. How are deserts defined?
2. How are deserts formed?
3. How does the distance from water affect the Sahara and the vegetation in the area?
4. What is the size of the Sahara?
5. Describe the process through which sand dunes are formed.
6. Why do sand dunes increase and decrease in size?
7. Describe the destructive forces of winds in deserts. Use specific examples from the video.

## After the episode

1. Explain the process of desertification and the effects of desertification on people.
2. What are the basic rules for surviving a sand storm?
3. Using the drawing from the ‘before the episode’ activity and the families in the video, compare your diagram of the house to the families that have adapted to and live in the desert. The response should use specific examples of similarities and differences from the drawing and the families from the video. Provided below is a Venn diagram to scaffold the comparison.

**Follow-up activity:** Department of Foreign Affairs and Trade and the Smart Traveller website has commissioned you to develop an informative travel brochure that advises tourist of the dangers of traveling to and living in a desert.

# Dates That Made History – 1431: Fall of the Angkor Empire

**ABC ME screening details: Wednesday** 20 May, 2020 at 2:30pm

This episode can also be viewed on [ABC iView](https://iview.abc.net.au/show/dates-that-made-history) after the scheduled screening time.

**Key learning areas:** HSIE, history

**Level:** secondary

**About:** This series tells world history through a few major dates. Driven by the delivery of historian Patrick Boucheron, history comes to life in an accessible and lively manner. We'd like to believe in the idea of a lost civilisation in the case of the Angkor Wat. Yet the magnificent ruins of these monumental temples show no sign of any brutal disappearance.

* 1. Before the episode

1. Consider the title of this series ‘Dates That Made History’. What do you think makes a specific date or event important and memorable in history? Why do you think we remember some dates and events more than others?

## During the episode

1. What is meant by ‘a multitude of histories’?
2. Sketch the layout of Angkor Wat and explain the historical significance of the design.
3. Explain what is meant by ‘the fall of Angkor is a story without images.’ Why is this period of time so difficult for historians to be sure about?
4. List the various theories mentioned about why the Angkor Empire fell. Which theory do you think is the most likely and why?

## After the episode

1. Why do you think the mystery of the Angkor ruins causes such difficulty for Western historians?
2. 1431 is the date given for the fall of Angkor. Explain why this date chosen and why it is problematic.

**Follow-up activity:** The ruins of Angkor are incredibly popular with tourists from all over the world. Explain why this site is so appealing to tourists from different countries and cultures. Make a list of the possible impacts of tourism on the historical site, both positive and negative.

# Social Media Me – What Is Digital Citizenship?

**ABC ME screening details: Thursday** 21 May, 2020 at 2:10pm

This episode can also be viewed on [ABC iView](https://iview.abc.net.au/show/ecomaths) after the scheduled screening time.

**Key learning areas:** PDHPE

**Level:** secondary

**About:** Jules has built a positive social media presence promoting good digital citizenship, online ethics and safety, however it takes a new turn. Whilst her friend Aaron faces some social media challenges of his own.

## Before the episode

1. Personal responsibility means protecting your privacy, knowing your rights and responsibilities, thinking about the impact of your online actions, and staying within the law. It’s also about being accountable for the way you present yourself online and standing up for others. Write or draw what personal responsibility online means to you?

## During the episode

1. Make a list of actions and behaviours which were seen in the episode which would be considered positive when we consider personal responsibility?
2. What are you personally responsible for when online or using technology?

## After the episode

1. In the episode, which character showed personal responsibility? What were the character’s actions that demonstrated personal responsibility?
2. Make a list of ways you can help others to maintain privacy and stay safe without being putting yourself at risk?
3. Using your list of positive personal responsibility actions and behaviours which were seen in the episode, create a description of what it means to be a responsible or ethical digital citizen.
4. How would you challenge a friend, who is not being personally responsible online? For example, what if a friend filmed a fight and posted it online or shared an image of someone else without permission online? What would you say to remind them of their personal responsibility to take action/stand up for others? Write a text message, email, letter or a script of a verbal conversation you would have with your friend. Be prepared to share it with your teacher as evidence of learning.

**Follow-up activity:** Can you think of who you could access in the school environment and out of the school environment, who could help you if someone breached your privacy, or impacted your health and safety through unethical or irresponsible actions online? Draw a mind map to visually identify your support network and those you can talk to, trust or act on your behalf.

# BTN-Media Literacy- Fake News

**ABC ME screening details:** Thursday 21 **May**, 2020 at 2:25pm

This episode can be viewed on [ABC iView - Education](https://iview.abc.net.au/category/education) after the scheduled screening time.

**Key learning areas:** English

**Level:** secondary

**About:** This episode examines the history, reasons for and impact of fake news.

## Before the episode

“Media literacy skills" are the skills you need to work out who is trying to purposely mislead you and who is not to distinguish between "fake news" and real news. It’s a valuable exercise at a time when misinformation and disinformation abound.

Research shows that on average teenagers spend at least six hours a day using media ([The Common Sense Census, Media Use by Tweens and Teens, 2015](https://www.commonsensemedia.org/research/the-common-sense-census-media-use-by-tweens-and-teens-2015)). According to the Reuters Institute for the Study of Journalism, social media outstrips television as the main news source for young people ([Social media now ‘outstrips TV’ as news source for young people](https://www.bbc.co.uk/news/uk-36528256) BBC).

1. Where have you heard the term ‘fake news?
2. In your own words explain your understanding of the term ‘fake news’.
3. Consult three dictionaries and construct a definition of this term.
4. Explain the differences between your own and the dictionary definitions.
5. Discuss with a parent/carer or friend, any fake news stories you are aware of.
6. Predicting: why do you think ‘fake news’ exists?
7. Construct a mind map showing the qualities or features of a fake news story.

## During the episode

1. How long has the idea of fake news been around?
2. What impact did the printing press have in spreading misinformation and/or for entertainment? List three examples from the episode.
3. List 5 reasons people create fake news.
4. Identify the best tips for how to determine if something is fake news.

## After the episode

Asking the right questions will help you determine the credibility of a media source. The following two questions are a good place to start:

1. **Who created it? Was** it a doctor, scientist, journalist, business owner or brand?
2. **Why was it created?**Does it entertain or inform us? Are there advertisements?
3. Write down your updated definition of fake news now that you have watched the episode and conducted your own research.
4. Create 3 fake news headlines and explain your intended audience, your goal and the possible impact of the headline.
5. Compose a ‘fake news’ article based on a real event. Ensure the article has a sustained journalistic ‘voice’.  Include one piece of fact to legitimise the story.
6. Compose your own artwork that accompanies this narrative. Attempt to make it as realistic as possible to legitimise the fake news story even further.
7. Reflection question: why do you think fake news can be so hard to spot?

## Follow-up activity

Complete one of the following activities:

1. Create a presentation for your class about fake news. You need to:
   * Begin with a salutation (Good morning, class) and opening paragraph
   * Explain your understanding of fake news
   * Discuss the different types of fake news
   * Explore the impact of fake news
   * Provide evidence to support your ideas
   * Give tips on how to identify if something is fake news
   * A conclusion.
2. Create your presentation using the dot points above as headings.
3. Create your own ‘Fake News’ news article (minimum 500 words). Include:
   * A headline
   * Persuasive techniques (expert quotes, endorsements, research etcetera.)
   * Introduction, paragraphs, conclusion.
4. Watch the ABC news and another channel over 2 nights. In a table list these stories and indicate any differences. Do any of them seem like fake news? Why or why not?

# Your Paintings – Vincent Van Gogh

**ABC ME screening details: Friday** 22 May, 2020 at 2:00pm

This episode can also be viewed on [ABC iView](https://iview.abc.net.au/show/your-paintings)

**Key learning areas:** visual arts

**Level:** secondary

**About:** A statue comes to life in a magical gallery and climbs into the painting 'Van Gogh's Chair' by Vincent Van Gogh.

## Before the episode

1. Think about an item or items that might best describe you. Write or illustrate your thoughts in the box below.

## During the episode

1. Describe what you observe in the artwork, Van Gogh’s Chair. Why is it considered a self-portrait of Vincent Van Gogh?
2. List 4-5 important points about Vincent Van Gogh.

## After the episode

1. Vincent Van Gogh chose a chair to tell us about himself. How did he accomplish this in his artwork, ‘Van Gogh’s Chair’? What techniques and colours did he use?
2. Why do you think that lots of people in 1888 did not understand Vincent Van Gogh’s artwork? What are your personal feelings about his artwork?
3. The ‘chair’ in Vincent Van Gogh’s painting tells us so much about himself. It is described as a self-portrait. If you were going to paint an object to tell people about you, what would it be? Is it the same item you chose before the episode?
4. Using Vincent Van Gogh’s artistic techniques paint your self-portrait. Remember it is the object you chose that tells people about you.

**Follow-up activity:** Choose another member of your family and paint their ‘portrait’ using Vincent Van Gogh’s technique. Remember this object will tell us about that person.