NSW Department of Education

# Learning from home: ABC TV Education

## resources

Upper primary – book one 27/04/2020 – 08/05/2020 (2 weeks)

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

#### NSW Department of Education

#### 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 Monday 27 April 2020 to Friday 8 May 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.

## **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.

## **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.

## 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 <u>abc.net.au/iview</u> after the broadcast. A schedule of the selected episodes is included in each student booklet.

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## Episode schedule

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

	Time	Program	Episode title	Key learning area	Pages
Monday 27/04/2020	11:45am	Ecomaths	Recycling	Mathematics, Science	<u>4-5</u>
Tuesday 28/04/2020	11:10am	199 Little Heroes	Iraq	Geography	<u>6-7</u>
Wednesday 29/04/2020	10:35am	Art With Mati And Dada	Giacomo Balla	Art	<u>8-9</u>
Thursday 30/04/2020	11:40am	MathXplosion	Birthday Trickery	Mathematics, Science	<u>10-11</u>
Friday 01/052020	11:10am	Bringing Books to Life	Wolven	English	<u>12-13</u>
Monday 04/05/2020	10:45am	Titch And Ted Do Maths	Fractions	Mathematics	<u>14-15</u>
Tuesday 05/05/2020	11:00am	In My Shoes: China	Chan'gou	Geography	<u>16-17</u>
Wednesday 06/05/2020	10:55am	History Hunters	Age Of Exploration	History	<u>18-19</u>
Thursday 07/05/2020	11:20am	Look Kool	Origami	Mathematics, Science	<u>20-21</u>
Friday 08/05/2020	1:25pm	The Storybuilding Tool Kit	Comedy	English	<u>22-23</u>



## Monday 27 April, 2020

Program: Ecomaths
Episode title: Recycling
Time: 11:45am on ABC ME
About: Stefan visits a vast recycling plant to explore how 2-D and 3-D shapes are used to sort and re-use rubbish, and visits a school that uses recycled objects in many different ways.

#### Before the episode:

1. Write and draw items around your house that can be recycled.

# Items that can be recycled

#### After the episode:

- 1. What were some of the items you saw being recycled in this episode? Add them to your brainstorm above if you didn't include them.
- 2. Why do you think recycling and re-using materials is important?

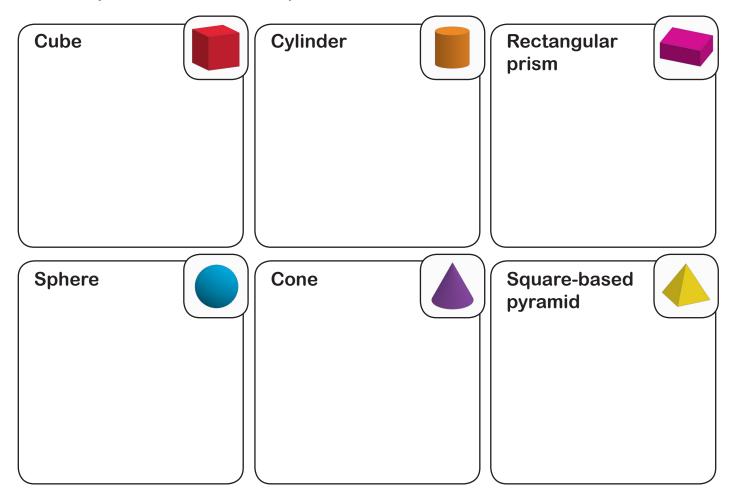




## Monday 27 April, 2020

View this episode after screening at https://iview.abc.net.au/show/ecomaths

3. What three-dimensional objects can you find around your house? List in the boxes below. The objects do not need to be recyclable.



4. Was there a three-dimensional object that you found more of than others? Why do you think this three-dimensional object is more common?

**Follow-up activity:** Can you think of any ways that you can use recycled materials to make something useful? You might make a cloche (seed cover), a bird feeder or a soil scoop. What other ideas do you have? **Note:** adult supervision is required when using scissors to cut plastic.

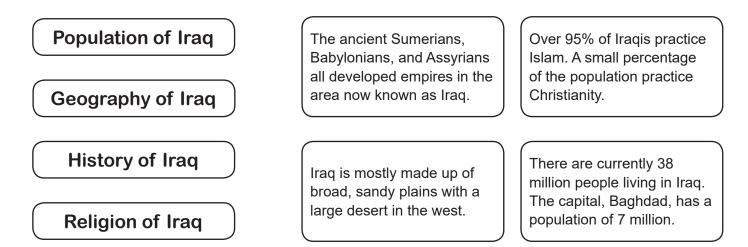


## Tuesday 28 April, 2020

Program: 199 Little Heroes
Episode title: Iraq
Time: 11:10am on ABC ME
About: Jaffer's a smart young boy. His road to school is a hard one, but at the same time an interesting one.

#### Before the episode:

1. Use lines or different colours to match the headings with the information boxes.



#### During the episode:

1. Write or draw pictures about Jaffer's life. Think about his home, family, friends, the surrounding natural environment, animals, local transport and food.



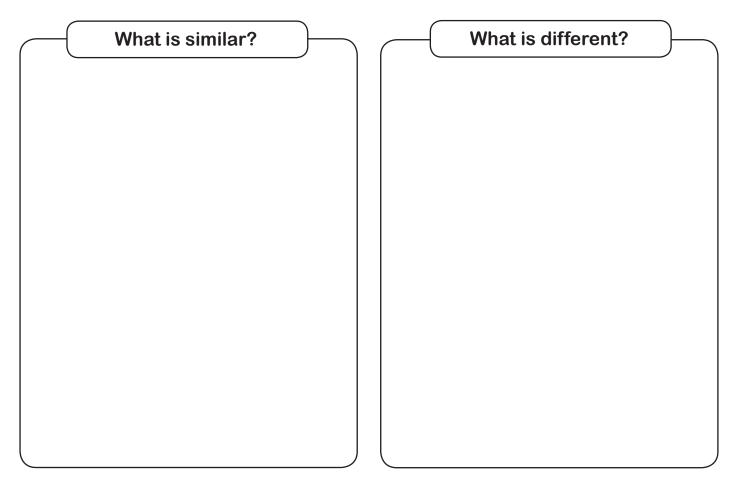


## Tuesday 28 April, 2020

View this episode after screening at https://iview.abc.net.au/show/199-little-heroes

#### After the episode:

1. Compare your daily life to Jaffer's.



- 2. Write a letter to Jaffer and tell him all about what life in Australia is like for you and your family. Think about the following points when writing your letter:
- family
- home
- environment
- school

- friends
- technology
- transport
- food

**Follow-up activity:** Create a travel brochure featuring the things that are special about the place where you live. For example, the surrounding environment, wildlife, the types of food you enjoy and the history of the place you call home.





## Wednesday 29 April, 2020

Program: Art With Mati And Dada
Episode title: Giacomo Balla
Time: 10:35am on ABC ME
About: Mati and Dada run smack into a Futurist Banquet of the senses.

#### Before the episode:

- 1. **Brainstorm:** Think of all the different types of transport that people have used throughout history.
- 2. **Draw:** Choose one mode of transport and focus on a moving part, for example, the wheel of a bike spinning or the legs of a horse in motion. Sketch the part you have chosen in your workbook or on a piece of paper. When drawing, consider how the object moves and what it might look like in motion.



#### During the episode:

1. Write and draw in the boxes below information about the artist Giacomo Balla and the artworks he created.

$\left( \right)$	Giacomo Balla	$\mathcal{Y}$	Artworks	





### Wednesday 29 April, 2020

View this episode after screening at https://iview.abc.net.au/show/art-with-mati-and-dada

#### After the episode:

1. **Art making:** Make your own 'Futurism' artwork like 'Dynamism of a dog on a leash'. Select a toy with simple moving parts, for example, a doll with moving arms and legs, a toy truck that rolls and tips. Firstly, set the toy up in its beginning position and draw. Then move the toy and its moving parts a little, and draw the new image overlapping with the first one. Repeat this step a few more times to create an artwork that shows the movement of your toy.

**Follow-up activity:** Brainstorm a list of all the types of technology that can be found in your home. Write a poem to share the different types of sounds and movements these objects make.





## Thursday 30 April, 2020

Program: MathXplosion
Episode title: Birthday Trickery
Time: 11:40am on ABC ME
About: This episode uses a fixed set of computational steps that use simple arithmetic and basic algebraic conventions (e.g., doubling expressions to generate a known solution).

#### Before the episode:

1. You will need a calculator to complete the activities from this episode. Most smart phones and digital devices (iPads for example) have calculator apps which do not require internet access.

#### After the episode:

1. Test out the calculator trick from this episode on your own birthday. Follow the steps below:

#### How to 'calculate' your birthday

- Press the 'C' button to clear your calculator
- Enter 7
- Multiply by the month of your birth (e.g. January = 1, February = 2) and press equals
- Subtract 1 from that number and press equals
- Multiply that number by 13 and press equals
- Add the date of your birth (e.g. if you were born on the 21st add 21) to that number and press equals
- Add 3 and press equals
- Multiply your number by 11 and press equals
- Subtract the month of your birth (e.g. January =1, February =2) and press equals
- Subtract the date of your birth (e.g. if you were born on the 21st subtract 21) and press equals
- Divide this number by 10 and press equals
- Add 11 and press equals
- Divide this number by 100
- The remaining digitals should reveal the month and the date of your birth as a decimal







## Thursday 30 April, 2020

**Upper primary** 

View this episode after screening at https://iview.abc.net.au/show/mathxplosion

2. Does this calculator trick work for your friends and family? Try it on someone else. Can you explain how it works?

3. Below is another example of 'maths magic'. Try it out for yourself.

#### Instructions

- Choose any number on the grid. Write it down.
- Write down a second number BUT it has to be a different ROW and different COLUMN to your first number.
- Record a third number. Again, it has to be a different ROW and different COLUMN to your first TWO numbers.
- Write down a fourth number. Once again, it has to be a different ROW and different COLUMN to your first THREE numbers.
- Add the four numbers together.

#### Your sum will be 34

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16

4. Try this grid trick on someone else. Did they also get a sum of 34? Why is this always the answer? Mathematicians think logically when solving problems. Spend some time investigating this grid and see if you can develop an explanation.

**Follow-up activity:** Do you know any other mathematical magic tricks? Are you able to invent one? What mathematical operations can you use to make a number much bigger or smaller?





## Friday 1 May, 2020

Program: Bringing Books to Life
Episode title: Wolven
Time: 11:10am on ABC ME
About: Presenter and actor Ceallach Spellman reads extracts
from 'Wolven' by Di Toft. He explains why he loves the book, how
it captured his imagination and why he enjoys reading.





#### Before the episode:

1. What types of characters have you enjoyed reading about? Name and draw the book characters that have become your favourites and sort them into the categories of hero (protagonist) or villain (antagonist).

Hero (protagonist)

Villain (antagonist)

#### During the episode:

1. Complete the story map below by writing or drawing what you learn about the book 'Wolven' by Di Toft.

Main characters:	Types of events/conflicts that occur in the text:
	1
Setting:	
ootting.	oction
	Rising action





## Friday 1 May, 2020

View this episode after screening at https://iview.abc.net.au/show/bringing-books-to-life

#### After the episode:

1. **Character review:** Using one of your favourite stories, reflect on how the author has constructed a main character and influenced how you feel about them. Use the chart below to find evidence of how the author has influenced your opinion about the character.

Sayings:		Thoughts:		
What other characters say about them:	Character: Actions:		Feelings:	

**Follow-up activity:** Write a persuasive book review about one of your favourite texts. Use the following prompts to guide your review: What was the story about? What were the most interesting events in the story? Who were the main characters? How would you describe them? What words or illustrations stood out in the book that made it so enjoyable? Why do you think the author wrote this story? Who would you recommend this book to?



## Monday 4 May, 2020

Program: Titch And Ted Do Maths

Episode title: Fractions

Time: 10:45am on ABC ME

**About:** Titch and Ted complete a series of odd jobs, learning all about fractions as they go.

**Upper primary** 

## three quarters

#### Before the episode:

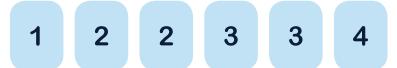
1. Go on a fraction hunt at home. How many quarters can you find in your house? Record your discoveries.

#### After the episode:

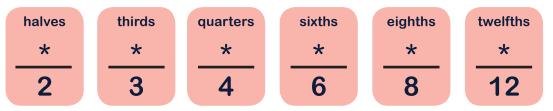
1. Make and play the colour in fractions game below. If you would like to view the game being played you can watch it here: <u>https://sites.google.com/education.nsw.gov.au/s3-math-digital-resource-1/colour-in-fractions</u>.

## **Colour in fractions game**

You will need to make two sets of different coloured cards like the ones shown below. The blue cards will tell you how many equal parts:



The pink cards will tell you the size of the parts:



#### Instructions:

Turn the cards face down. Turn a card over from each colour to make a fraction.

Then colour an equivalent of the fraction made on the fraction wall on the next page (for example 2 quarters is equivalent to 1 half).

Choose a new colour for each go.

Record what you turned over and what you coloured in the table below the fraction wall.

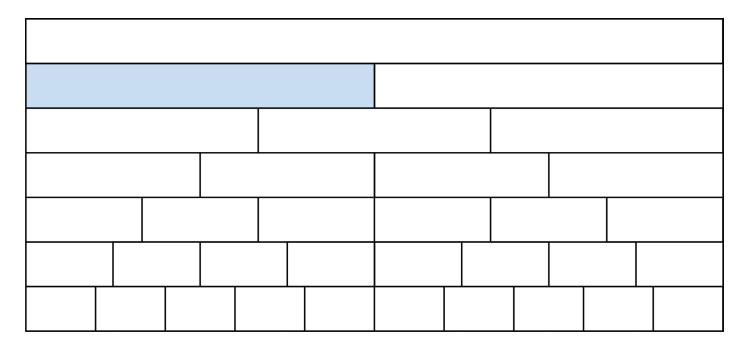




Monday	4	May,	2020
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View this episode after screening at https://iview.abc.net.au/show/titch-and-ted-do-maths

## **Fraction wall**



What I turned over	What I coloured
4 eighths (4/8)	1 half (1/2)

What I turned over	What I coloured

(Adapted from: D. Clarke and A. Roche, Engaging Maths: 25 Favourite Maths Lessons, 2014)

Follow-up activity: Make your own fraction wall by folding coloured strips of paper.



## Tuesday 5 May, 2020

Program: In My Shoes: China
Episode title: Chan'gou
Time: 11:00am on ABC ME
About: Wei Qing lives in Chan'gou, a remote village about three hours from the ancient city of Lijiang.

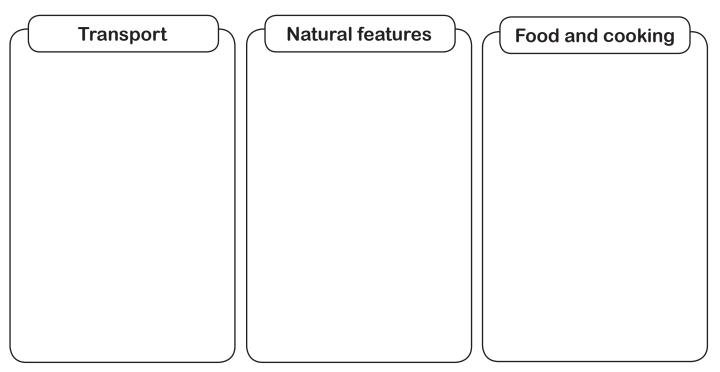
#### Before the episode:

1. Write or draw what you know about China. You might write about culture, people, food, places, plants, animals and the environment.



#### During the episode:

1. Take notes about the transport, natural features and food and cooking in this episode.





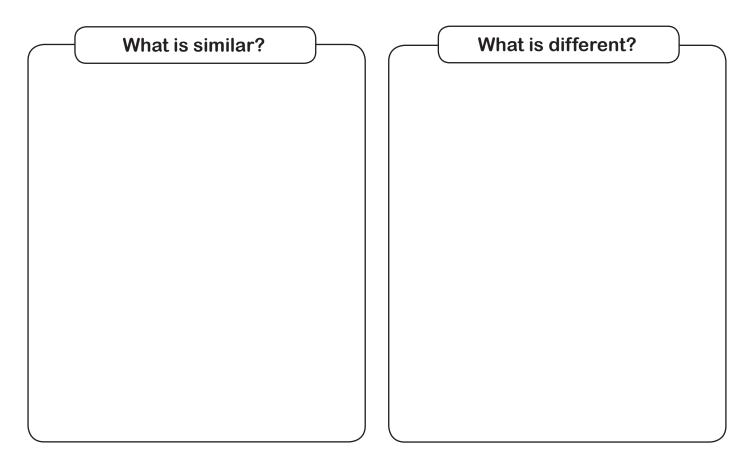


## Tuesday 5 May, 2020

View this episode after screening at https://iview.abc.net.au/show/in-my-shoes-china

#### After the episode:

1. Compare your daily life to Wei Qing's.



2. If you could spend some time living overseas, where would you live and why?

**Follow-up activity:** Have a conversation with someone that has travelled or spent time overseas. Where did they travel? What did they experience? How was life in that country similar and different to life in Australia?





## Wednesday 6 May, 2020

**Program:** History Hunters **Episode title:** Age Of Exploration

Time: 10:55am on ABC ME

**About:** Why exploration flourished, how maps were made up and all the wonderful tastes, sights and smells that went global thanks to explorers! Plus how lemons really could save your life!

#### Before the episode:

1. Why do you think humans are driven to explore? Write or draw places that you would like to explore further.

#### After the episode:

1. The Age of Exploration is an important event in history. The explorers used ships to explore far away lands. How do we explore other lands today?





## Wednesday 6 May, 2020

View this episode after screening at https://iview.abc.net.au/show/history-hunters

2. Some of the foods that make our lives more interesting today were brought back to Europe during the Age of Exploration. Draw lines to match the items below with their description.











This squishy, red fruit arrived in Europe from the Americas in the 16th century. It is now a staple of most Italian and Spanish cooking.

Spanish conquistador Don Hernán Cortés bought cocoa beans back from Central America in 1528. A drinkable version became very popular across Europe.

Originating in Mexico, this yellow grain was introduced to Europe by Christopher Columbus in 1492 and is now used in a variety of products.

Portuguese sailors bought this peelable, yellow fruit to Europe from West Africa in the 15th century. It is thought to have originated New Guinea.

Originally from Ethiopia, this bitter drink arrived in Europe during the 15th century and was banned for a period of time by the church.

3. The Age of Exploration mentioned in this episode happened around 500 years ago. Where do you imagine the explorers of the future will go and how?

**Follow-up activity:** Write a short story or diary entry from the perspective of an explorer from any time in history (or possibly the future). In your writing, discuss where you are exploring and why, what drives you to explore and what you and your crew hope to find along the way.



## Thursday 7 May, 2020

**Program:** Look Kool **Episode title:** Origami

Time: 11:20am on ABC ME

**About:** Hamza is packing for a vacation, but he can't fit all of his stuff in his suitcase. Origami to the rescue - he takes a nod from the art of Japanese paper folding to make things with a lot of surface area take up less space.

#### Before the episode:

1. Write or draw a list of objects around your house that can fold and unfold. Can you identify a reason why each of these objects has been designed to fold and unfold?

#### After the episode:

- 1. To complete this activity you will need a square piece of paper and a coloured pencil or marker.
  - Fold your square paper in half to form a rectangle.
  - Fold your rectangle in half to form a square.
  - Fold your square in half to form a triangle.
  - Fold your triangle in half to form a smaller triangle.
  - Colour in one side of your triangle.
  - Completely unfold your paper to return to your original square.
- 2. What fraction of your original square is the coloured triangle? Write or draw an explanation on the unfolded paper. How many folds did you make? Is there a relationship between the number of folds you made and the fraction you found?







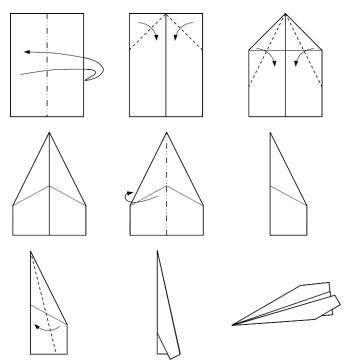
## Thursday 7 May, 2020

**Upper primary** 

View this episode after screening at https://iview.abc.net.au/show/look-kool

**Paper plane challenge**: Your task is to build a paper plane that will fly as far as possible. To complete this task you will need:

- A sheet of A4 paper
- A measuring tape
- 1. Build a paper plane by following the steps provided. At this stage, do not make any modifications to your plane.
- 2. Find a safe, open space to fly your plane. If possible, extend the measuring tape along the ground and lock it in place.
- Use the measuring tape to make a prediction about how far your plane will fly. Record your prediction in the table.
- 4. Make three flights with your paper plane and record your results in the table.
- 5. Find the average flight distance by adding the three results together and dividing the answer by 3.
- Make a modification to your paper plane. You can use one of the suggested modifications or come up with a modification of your own.
- 7. Repeat steps 3-5 of the experiment, recording your new results in the table.



#### **Possible modifications**

- Attach a paper clip or coin to your plane for extra weight.
- Add an extra fold to the wings to bend them up slightly
- Try adding some elevator flaps to the rear of the wings
- Create a new plane from cardboard or A3 paper
- Start with a square piece of paper

	Prediction	Flight 1	Flight 2	Flight 3	Average
Original design					
Modified design 1					
Modified design 2					

**Follow-up activity:** Did your modified paper planes fly further on average than your original design? Develop an explanation why your modified planes did or did not fly further?



## Friday 8 May, 2020

Program: The Storybuilding Tool KitEpisode title: ComedyTime: 1:25pm on ABC MEAbout: Learn how to find funny ideas all around you and then supersize them until they become hilarious.

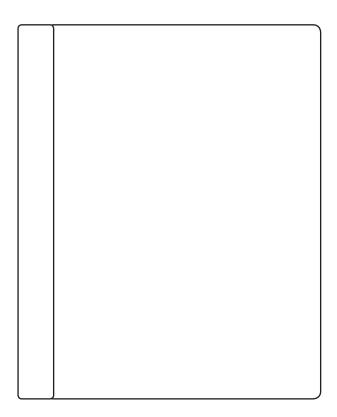
#### Before the episode:

1. Create a top ten list of things that you find really funny!

1.	6.
2.	7.
3.	8.
4.	9.
5.	10.

#### After the episode:

 Design a book cover for a parody version of a well-known nursery rhyme (for example, 'Goldilocks and the Three Warts'). Write a short blurb outlining what might happen in the story.



## Write a short blurb





## Friday 8 May, 2020

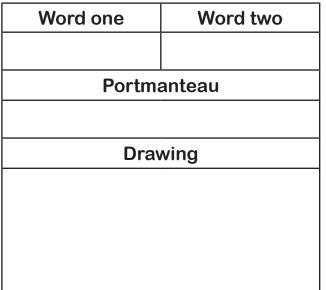
View this episode after screening at https://iview.abc.net.au/show/storybuilding-tool-kit

2. A portmanteau (sometimes called a 'mash up') combines two existing words to create a new word. These can be used to add humour to your writing. Use the tables below to invent some nonsense portmanteaus.

Word one	Word two				
porcupine	pineapple				
Portma	Portmanteau				
'porcupi	'porcupineapple'				
Drawing					

Word one	Word two
Portma	anteau
Drav	ving

Word one	Word two
Portma	anteau
Drav	wing



Follow-up activity: Write a short, humorous story which is either:

- based on the parody version of your well-known nursery rhyme; or
- features one of your portmanteaus as a main character or key item in the story.





