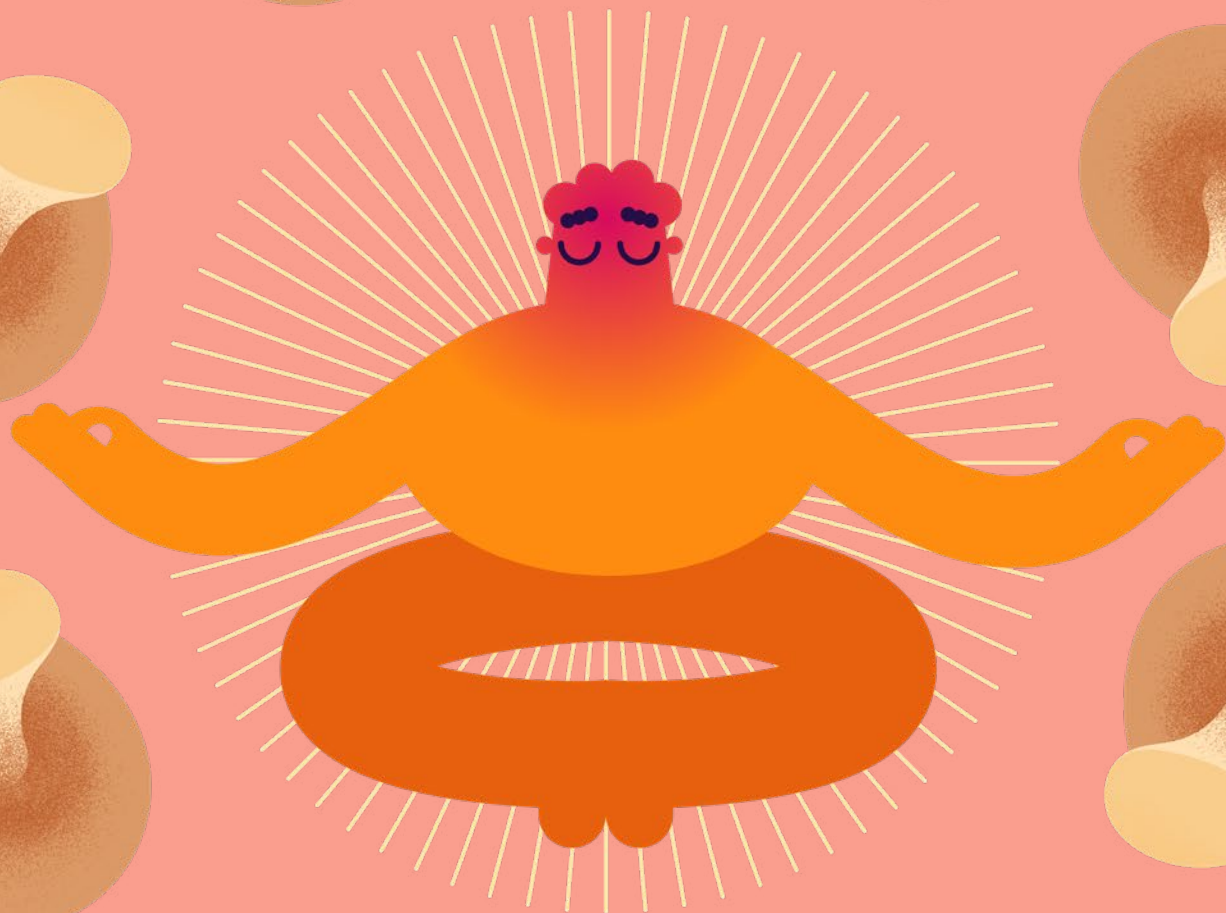


Phenomenon

Teacher Guidebook



**A fresh approach to food
literacy in every subject**

Created by Alice Zaslavsky
Written by Beverley Laing

Welcome to Phenomenom!

It's no accident that this program is named after something out of the ordinary. Kids and vegetables are a combination that seems to evoke strong reactions from parents and teachers alike.

But just like calculus can be fun in the hands of the right teacher, so too can cabbage.

As a teacher on school camps, I was struck by how disconnected my students seemed from fresh food – unable to dice an onion, let alone cook a meal. Yet by the end of the week, these same students were making minestrone and chattering excitedly about what they planned to try their hand at when they got home.

Returning to the classroom buoyed by their enthusiasm, gastronomy began creeping into my Humanities classes – medieval feasts and ancient Egyptian food diaries were just the start!

In my role as Deputy Head of the department, I was constantly on the lookout for resources that engaged students, empowered teachers and were easily accessible. We needed resources that created opportunities to pique students' curiosity about the world around them – because that's what school should be about.

In my discussions with growers through Hort Innovation, they asked me, "How would you make vegetables cool for kids?" I knew that the place to start planting those seeds was the classroom, where kids were already spongy to new ideas and open to having their beliefs challenged.

Not only would this help shift attitudes in favour of veg, but it would also give students the opportunity to see clear connections between their lessons and the real world. I wanted to engage them with the content and create conscientious citizens and consumers.

The support of levy funds ensure that the program is completely free to all teachers. And so, with the expertise of curriculum specialist Beverley Laing in tow, we set about creating a tool that could be used by any teacher, in any subject, to meet students where they are – be it through video content, podcast or in-classroom learning activities.

Whether you're looking to dip in and out, or want to design a unit for an entire semester (yes, please), these resources are full of fun and meaningful content that'll have students engaged and enriched.

Take a splash around to see what you can find!



Springboards for learning!

Phenomenom is designed to tickle students' tastebuds for learning.

Phenomenom springboard videos and Nomcast podcasts follow a group of students (the Super Naturals) in a classroom of the very near future as they explore the world with their teacher, Alice, and a few unusual characters.

Each Phenomenom episode or Nomcast podcast comes with a whole suite of free Australian Curriculum-aligned learning resources.

Want to know about how and why people throughout history established elaborate long-distance trade routes? Just follow the journey of carrots, tomatoes or chillies around the world as they appear on plates in Peru, Asia and Australia.

Were carrots always orange? Not on your life.

Why does salt change the freezing point of water – and how can we use this science knowledge in the kitchen?

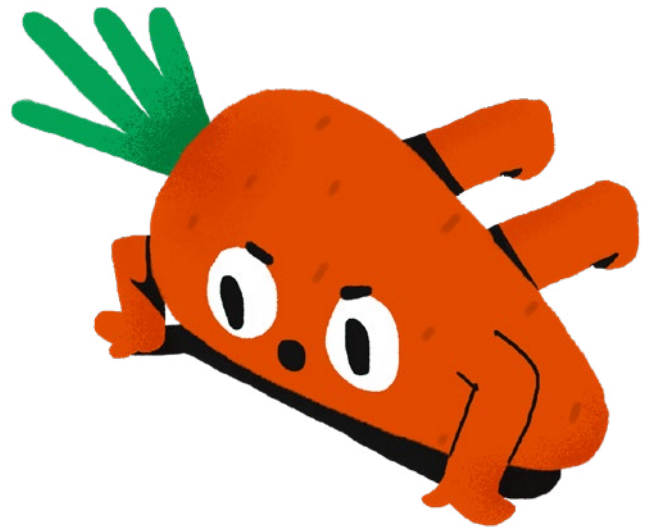
Getting real

Phenomenom videos are fun and tempting, but the real flexing of students' mental muscles happens in the real world. Use the videos as topic generators, feeding discussion and introducing (or confirming) topics the class will investigate in the real world. This is what they are designed for!

If you are using an inquiry-based learning or design thinking approach in your school, you will find the structure of the learning resources familiar.

Phenomenom assumes that kids are curious (especially when the curiosity bone is twanged) – and places them in the driving seat to find out more, synthesize their learning, take action and reflect.

Many of the activities deliberately use social collaboration, movement and time in nature to engage and invigorate student learning.



Where to find Phenomenom

All the episodes and resources are on the website:
www.phenomenom.com.au



Visit the 'Explore' page to browse or search via curriculum code to find every Phenomenom episode or Nomcast podcast, and its associated learning resource/s.

– or –

Browse all learning resources by visiting the 'Lesson Plans' page

Phenomenom on ClickView:

<https://clickview.tv/phenomenom>
(Teacher playlist https://clickv.ie/w/_kYj)

Phenomenom episodes on YouTube:

www.youtube.com/phenomenom

About this Teacher Guide

We've collected together everything you need to know to use Phenomenom to its full potential in school.

There are ideas and (we think) sage advice about the decisions you'll want to make about what works for the kids you work with.

Should you show the video first or not? (page 9)
What if we provide food and they just waste it? (page 6)
What on earth is going on with that talking potato? (page 8)
My kids really only care about sport. Or farms. Or space. (pages 11–12)

Tuberman's Top Twelve Activity Ideas will get you going if you want a quick taste. (page 13)

Perfect planning

If you're in planning mode, there's a list of all the episodes, podcasts and resources (pages 15–19), plus an Australian Curriculum reference matrix, listing all the learning resources by year level and Learning Area (pages 20–22).

Puns and pie

And in the middle – can you smell it? Mmmm. The luscious fragrance of the best pie ever. A recipe for Billy's Best Caramelised Onion and Mushroom Pie. Try making this with students if you cook together.

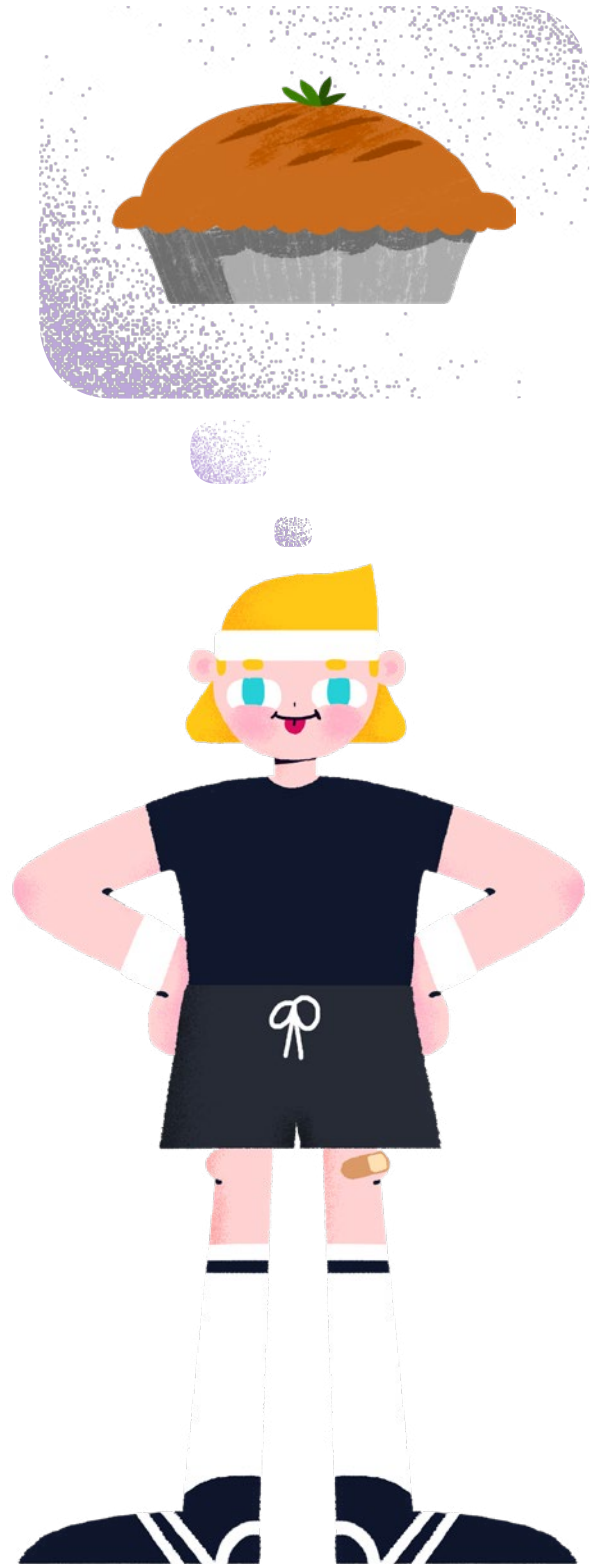
Because Billy was supposed to be learning about π , but all he could think of was pie...

Gettin' curious!

Let us show you how Phenomenom can make students curious about the world, the plants and people within it, and the exciting potential to explore and learn. Phenomenal.

Factastical!

Alliums such as garlic, onions and shallots are small and they keep well. They can be planted if they sprout. The Roman army loved them and took alliums with them all over Europe. The expanding territory of the Roman armed forces can be tracked by the expanding range of cultivated garlic.



The trouble with just eating it

It's natural for adults to get worried, even stressed, about the relationship between kids and food.

Sometimes it feels like riding the juggernaut straight to chicken nugget doom.

We now know that telling kids to eat healthy foods doesn't work (Colmar Brunton, 2017). Particularly as they enter the teen years – an earnest message to eat fresh foods, no matter how passionate and well-meant, only accelerates things the wrong way.

Here's a suggestion: take the quiet road.

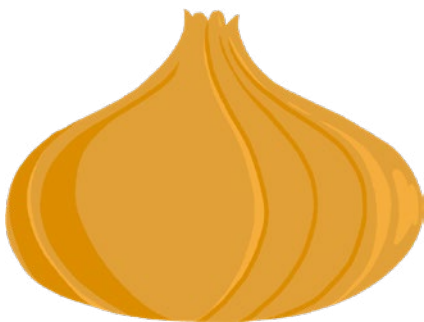
Here's what we mean:

- Let students **use their senses**. It's okay to touch and sniff food that you're not ready to eat. That's how primates decide whether something is edible or not. (See the last bullet below.) Provide small amounts. Have a compost bin.
- **Words are important**. Adults, please ban the word 'healthy' as the key description of a food. Not a healthy apple, but a snappy, crunchy, juicy apple. Similarly, coach students to express their experiences beyond 'yum' and 'yuck' into aroma, texture, comparisons with other foods and combinations with foods. (See resources The Science of Taste and Hot and Cold for lots more to help you do this in the classroom in the context of a real learning activity.)
- **Validate** what they are feeling (yes, the texture of avocado *is* slippery) and might take some time to get used to. (But the smell of avocado, now that we might want to sniff and sniff, mmm.) Don't pressure, just keep putting new fresh foods in the room, on the table, in their lives.
- **Play with food**. Talk about texture. Celebrate scent. Rub the bubbly skin of an orange and compare it to an avocado. Peel apart the layers of an onion – or slice it into domes or rings and let students pop them apart. Play with food and let them play with food – curiosity is the cat that will catch them eventually. Show them how to use all of their senses to explore the world of fresh foods.
- **Above all, keep fresh food in sight**. Research into young people's attitudes towards fresh fruit and vegetables shows that exposure is key. Kids need to see and handle a new food many times (i.e. more than a dozen times) before they are likely to try it. Get a worm farm and let go of worries about waste. Explore small amounts of food, this is not the main meal of the day. And understand that when a child accepts the presence of a hated food, even without touching or eating it, that is still an enormous step in the right direction. Let that be enough. No judgement, no black and white bad-guy, good-guy power plays with food.

Onion Rings

Did you know that the rings of a common kitchen onion are actually scales? Each layer is a leaf base and at the top when the onion grows leaves and a flower, each one of them shoots up into a green spiky leaf.

If you cut off the basal plate (the root end) of an onion and place it in water, the leaves will begin to shoot again.



The Phenomenom videos are designed to be a class of peers for your class. Nomcast extends the curiosity quotient into sound bites for learning anywhere. Not a food program, just interesting kids, telling stories, following their curiosity about the world, and eating a lot of lovely veg as they go.

Research-based behavioural change

Adults are worried about kids and food. Media and health channels lament the low levels of fresh fruit and vegetables Australian children consume – and they're not wrong.

Only 5% of Australian children and adolescents are eating the recommended daily amount.

But how do we move into the zone of taking action on food relationships – turning it up to make eating fresh fruit and veg attractive to kids rather than an instant turnoff?

This is what both parents and teachers want – and this is why we researched how to make it actually work.

Each child has different behaviours and attitudes to fresh food, depending on complex factors such as lack of familiarity with how to try new foods, or fear of challenging sensory characteristics (such as texture and smells).

Fresh food consumption in the home is largely dictated by parents, and factors such as parent unfamiliarity, confidence and skills to prepare fresh food, concerns about cost and wastage – even their own relationship with food will have an effect on the children in the family.

Capture curiosity, be bold

Our research showed that Phenomenom needed to use humour, music, a simple message and the presence of children their own age in all of the material. We did away with overtly 'eat it, it's healthy' messages, as those made adults think they were doing the right thing, but turned children right off.

Crazy skits and sticky facts

Instead, we went for skits, step by step demonstrations, real world examples and very 'sticky' facts. And then we extended all the fun stuff – the curiosity, exploration and hilarity (check out The One with the Sports) – into authentic learning opportunities for the classroom or school kitchen. Linked to the Australian Curriculum, so that learning opportunities are quantified and evident.

Research conducted following Phenomenom's release showed that with a single exposure to the resources, students learnt something new and were specifically interested in finding out more about food and nutrition. They also wanted to watch or listen to more from Phenomenom and to try more vegetables.

Comments from teachers include surprise over student engagement and enthusiasm, and a desire to share with their colleagues. Most importantly, the language around vegetables from their students moved from passive phrases such as 'healthy' and 'have to eat', to 'interesting', 'fun' and 'exciting'.

Familiarisation and exposure, curiosity about people and the world – a good dash of humour and quirk, delivered in a classroom 'of the near future'. This is how eating your greens becomes cool.



Who's Who – The cast of characters



Alice

A new-school teacher with old-school vibes. I believe that learning can (and should!) happen anywhere.



Tuberman

I believe the universe is a dish that's best served with sour cream, chives and a pinch of salt.



Billy

Knock, knock. Who's there? Billy! If you want to know all about me, you'll have to subscribe to my YouTube channel.



Maddy

I love space, science and dance-floor fillers.



Lucy

People tell me I'm a dreamer and a quiet achiever... Unless I'm singing or dancing, that is. I love looking at things from all angles (45 degrees is



Lily

Salt & Vinegar rule! So does reading and writing codes. And going on adventures with camera in hand to document all the things I find.



Jonathan

Asking questions is my second favourite thing to do (after soccer).



Joseph

I'm not Jonathan. (Unless he won something.)



Eddie Woo

Maths man Eddie might just measure your head – but it's all in the name of active learning about the amazing numbers in the world around us.



MYC and the Fun Guys

The universe is a complicated, connected machine, and these fungi folk are the ultimate engineers.



Guest Spot: Belladonna

Watch out for this nightshade, she's pure poison all the way to her dark, dark core.

How to use Phenomenom and Nomcast

It's up to you: you can select an episode or podcast that is likely to fly for your students – or you can start by selecting a Curriculum learning outcome, a learning area – even a theme of interest, such as farms, space or sport.

Linked to learning

If you love a video, don't spend lots of time making up a new lesson around it – we have done that for you! Grab one to go – or modify it to suit your needs. A complete list of episodes and of learning resources is at the back of this teacher guide with a Curriculum matrix (pages 20–22), or you can also find them all on the Phenomenom website.

Linking to inquiry learning

If you are undergoing an inquiry unit with your class, the lists of episodes and resources on pages 15–19 will save you a lot of time. Grab the learning resource that works for you, then play the related video or listen to the Nomcast. Easy. Check out the themes on pages 11–12 which might link to your inquiry.

To start with the video – or not?

Showing videos in class can sometimes lead us to wonder if students are really engaging with the content.

Phenomenom! episodes are designed to have lots of 'sticky' moments that lead to explicit and implicit teaching opportunities. Here are a few ideas about how to use them. Our aim is probably the same as yours – to help those young brains engage with content as critical thinkers rather than passive viewers.

Start it off! Use the video at the beginning of the session

You could, without much ado, start your session with an episode of Phenomenom. The episodes are designed to prevent the viewer from settling into passive mode, and they're short, so the advantage to showing one at the start of a class is the curiosity factor. You want your students to wonder, 'Which theme from this tale of curiosity and exploration will WE be exploring?'

Just be sure to pair the video with discussion so that students are actively critical.

Showing the video first works well if you are using an episode of Phenomenom within a wider unit or inquiry, such as an investigation of insects, or about farming, space or sport. (Check out pages 11–12 to see just some of the themes and their linked learning resources).

After watching the video, ask for insights from the class. What did they witness that they did not expect? What does this make them wonder? If they were one of the Super Naturals in the video, what would they do next?

Most of the learning resources start with discussion prompts of this sort, so you'll have ample ideas to add to your own. To make this easy for you, we've marked the discussions in the learning resources with an icon like this: ?



Sandwich time! Multimedia in the middle

Show the video or play the podcast in the middle of a session if you think your students will benefit from some time exploring prior knowledge, clarification of underlying concepts. Get the whole class working together to develop a key question they want to answer after the video. Sometimes this is the best way to go if you have already embarked on an inquiry on the theme or topic that will run for several weeks.

Every episode is also available as a transcript. Why not get students to read the transcript first (or part of it, for example a factual part), then define a **guiding question** they are thinking about as they watch the video?

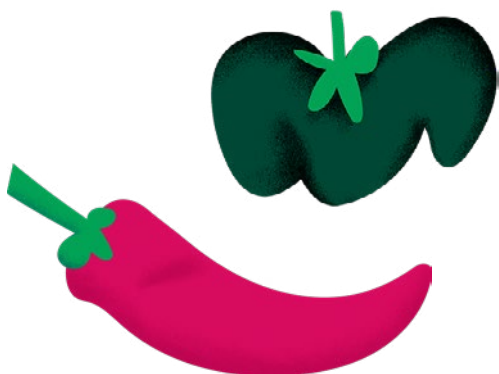
Then watch the video or play the podcast – you can even go around twice – and have students write down ideas and keywords that relate to their question as they watch.

Research shows that students are most capable of critical viewing (thinking while watching) – if they have a clear and strong question they are looking for. Whether you define that question for them, or they define it in discussion or by reading the transcript is up to you.

Examples of guiding questions devised before watching an episode might include:

- E16 The One with the Domes – What does climate have to do with cuisine?
- E15 The One where Billy Burns his Mouth – Why do we say that some vegetables are related?
- E07 The One with the Little Carrot Dude – How are some of the ways people have traded foods around the world and what can happen as a result?

Use ideas from the episode or podcast, explicit links in the related learning resources, and future project and research work by students, to answer – or at least investigate the parameters of – your guiding question.



Finish it off – Phenomenom at the end

Showing a Phenomenom video at the end of a session is less common, but it could be done if the students are gearing up for projects or inquiries that they will take further on their own or in facilitated research sessions.

Choose an episode with lots of information from an expert to start students off on their research path. Use the video or podcast to inspire ideas students will research further. Examples could include:

- E06 The One on a Log – Before research into Australian bush foods.
- E17 The One with a Welcome – Before research into Aboriginal and Torres Strait Islanders histories and cultures.
- E14 The One with the Space Waste – Before research into space or life on Mars.
- E19 The One with the Poo – Before research into the digestive system.
- Nomcast Episode 4 – Sustainable Materials: saddle up your mind with the finest kombucha leather – Before research into sustainable or zero-waste materials.

E14 The One with the Space Waste



Mix and match

If your students are *fans of farms...*

WATCH

- E18 The One with the Tractor
- E19 The One with the Poo

LISTEN

- Nomcast Episode 2 – Mushrooms: we know they can improve breakfast, but can they save the world?
- Nomcast Episode 8 – Against all odds: where in the universe does your garden grow?

LEARN

Why is that Farm Here?	Years 4, 5, 6	HASS & Sustainability
Food Evolution	Years 4, 5, 6	Science, Technologies, HASS Sustainability
Fungi Farming	Years 3, 4, 5, 6	Science, Technologies Asia, Sustainability
ShroomTech & Beyond	Years 5, 6, 7, 8, 9, 10	Technologies, Work Studies

If your students are *exploring world festivals...*

WATCH

- E21 The One with the Granita

LISTEN

- Nomcast Episode 3– Food Festivals: let's tumble, splat and eat til we're (literally) blue

LEARN

Celebrating the Feast	Years 3, 4, 5, 6, 7, 8	HASS, The Arts Aboriginal, Asia
Ghost Pumpkins	Year 3	HASS
Festivals From Around the World	Year 3	HASS Asia

If your students are *awesome authors...*

WATCH

- E12 The One with the Dumplings
- E21 The One with the Granita
(in which we meet the scriptwriter)

LEARN

Bookweek Buzz	Years 3, 4	English
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If your students are *growing a garden...*

WATCH

- E20 The One with the Old Boot
- Interview 1 – Mushroom Farmer

LISTEN

- Nomcast Episode 8 – Against all odds: where in the universe does your garden grow?

LEARN

Grow Your Own	Years 5, 6	Science Sustainability
Why is that Farm Here?	Years 4, 5, 6	HASS Sustainability
Peas in a Pod	Year 3	Mathematics
Food Evolution	Years 4, 5, 6	Science, Technologies, HASS Sustainability
Worms, Worms, Worms!	Years 4, 5, 6	Science Sustainability

If your students are into *art and music...*

WATCH

- E10 The One with the Mandala

LISTEN

- Nomcast Episode 4 – Sustainable Materials: saddle up your mind with the finest kombucha leather
- Nomcast Episode 7 – Food & Sound: listen to what the taste is saying

LEARN

Turnip the Beet!	Years 3, 4, 5, 6	The Arts – Music
Cooking the Beats	Years 3, 4, 5, 6, 7, 8, 9	The Arts – Music
Veg Heads	Years 3, 4	The Arts – Visual Arts
Mandalas	Years 3, 4, 5, 6	Maths, The Arts – Visual Arts

If your students are *stoked about sport...*

WATCH

- E03 The One with a Superstar Fridge
- E25 The One with the Sports

LISTEN

- Nomcast Episode 3– Food Festivals: let's tumble, splat and eat til we're (literally) blue (There are some weird sports in there!)

LEARN

Dietary Diary Data	Years 3, 4	Maths; Health and PE
High Performance Fuel	Years 3, 4, 5, 6	Health and PE

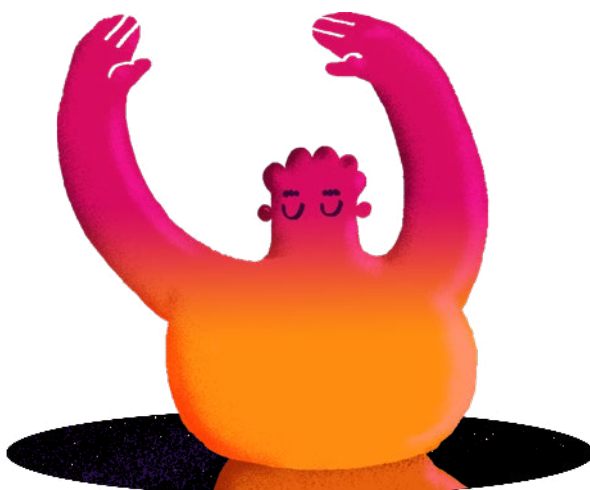
Tuberman's Top Twelve Activity Ideas



1. Test 5 types of nuts and see which ones float in fresh water. What about a 5% salt solution (brine)?
2. Find out what 'Clouds ears' are. How about 'Little pigeons'? (Hint: They're not made of pigeon but they do contain cabbage.) Try making them.
3. Get some seed catalogues and choose the most beautiful veg, the wildest veg and the one that's least familiar to you. Salsify, strawberry trees or bread fruit anyone? Make an outfit for a character inspired by that vegetable and create a story or skit.
4. Can you grow vegetables upside down? Figure it out! Which varieties, and how? How can we design a pot that grows plants upside down?
5. How heavy is the world's record-breaking pumpkin? Measure an equivalent weight in ordinary things you'd find around the school, e.g. books, students, school bags.
6. Spin a globe, stop it with a finger and find a food that comes from that place.
7. Make ginger tea. Smell the fresh ginger first, then slice it and steep (soak) it in boiling water for 5 minutes. Add a squeeze of lime and a spoonful of honey. Compare the smell of the raw ginger to the taste of the tea. How are they different?
8. Take knobbly dead tree branches, paint them bright colours and place them in the garden beds. Crochet string into spider webs between them or hang bunting in the garden for a special day, such as end of term or Harmony Day.
9. Plant secret messages in the garden using radish seeds – they come up quickly and your words will be revealed in a week or two!
M-O-R-E-P-E-A-S-P-L-E-A-S-E
10. Make a big bamboo teepee and grow sweet peas, scarlet runner beans or pigeon peas all around it. Get inside your living cubby!
11. Grow a plant in an old shoe, teapot or rusty wok. (Don't forget the teapot and wok will need a drainage hole or two.)
12. Make colourful stepping stones and have them lead to something special in the garden (a special plant, a bird bath, your teepee or a giant bird's nest made of branches).

Factastical!

Herodotus, the ancient Greek historian, says the Great Pyramid at Giza was built by an onion-fuelled workforce. He records that 16,000 talents, or 960,000 pounds of silver were spent on onions, radishes and garlic to feed to labourers for 20 years. (We hope they got a bit of variety, too!)



Billy's Best pie recipe

Caramelised Onion and Mushroom Pie

45 mins

Basic

Makes 2 pies, or 32 tastes for the classroom

Equipment

Chopping board, knife, frying pan, wooden spoon, 2 pie dishes, baking paper, pastry brush

Ingredients

- **5 tablespoons olive oil**
- **100g of brown or Swiss mushrooms, sliced**
- **8 brown onions, sliced**
- **50g brown sugar**
- **40ml red wine vinegar**
- **Sea salt and cracked black pepper**
- **16 kalamata olives, pitted and cut in half**
- **100g goats cheese, crumbled**
- **4 sprigs thyme, leaves removed**
- **8 sheets frozen puff pastry**
- **1 egg beaten**

Methodology

1. Preheat oven to 210°C.
2. Heat 1 tbsp oil in a large frying pan over a medium-high heat. Fry the sliced mushrooms until they are golden. Set aside in a bowl.
3. Heat 4 tbsp oil in the pan. Add the onions and cook for 20 minutes or until they soften.
4. Add the brown sugar, red wine vinegar, salt and pepper and continue cooking the onions for another five minutes. Remove from the heat and allow to cool (this step can be done way ahead of time). Stir in the mushrooms.
5. Line the pie dishes with pastry and trim to fit.
6. Place the filling in the pie dishes, leaving a 1cm border of pastry. Top with olive halves and a sprinkle of goats cheese and thyme. Then brush the edges with beaten egg and lay another sheet of pastry over the top. Cut to fit and press the edges together. Poke 2-4 slits in the pastry lid with a small sharp knife.
7. Bake for 30 minutes until the pastry is crisp, golden and puffed.



What's on the menu?

Phenomenom! video and podcast guide

Video Episodes	Synopsis	Related learning resources
E01 The One with the Levitating Globe	What's for breakfast? Depends where you are! What people eat for their first meal of the day gives us a lot of information about what's around them, what they're up to, and plenty more! In this clip, students compare and contrast their own breakfast menus with those of kids around the world. Victorian Institute of Sport sports dietitian Kylie Andrew describes the elements that make up a nutrient-rich breakfast, while explaining why it's important to eat a rainbow of fresh foods.	<ul style="list-style-type: none"> ● World Breakfast Globes ● Okonomiyaki Faces ● Transcript
E02 The One with the Green Snot Sorbet	The human body, and its digestive system, is truly remarkable. We tend to focus on what food does to run our bodies – providing nutrients and energy – but this clip helps explore how our nerve-endings and digestive system perceive flavours, particularly the differences when flavours are hot or cold, with the help of taste expert, Dr. Eugeni Roura. Students also get to watch vegetable ice-creams and sorbets getting the tick of approval from some appreciative guests, prompting the question: are we more likely to like foods when we take away any preconceived ideas about them?	<ul style="list-style-type: none"> ● Hot and Cold ● Ice-Crystal Crunch Time! ● Transcript
E03 The One with a Superstar Fridge	This clip begins as a traditional lesson in what a professional football player like AFL champion Chris Judd might eat for peak performance, but takes a hilarious turn when he's "poisoned" by his 10 y/o interviewers. This would be a great springboard into lessons about digestion, nutrition, or even hygiene! You can also take the opportunity to explore acidity and alkalinity by introducing the concept of a natural pH test, as per the resource attached.	<ul style="list-style-type: none"> ● Changing Colours ● Transcript
E04 The One where we Smell Pee for Science	Jonathan thinks he's gravely ill and enlists the help of his friends to get to the bottom of it (in more ways than one). Alice gives the group a masterclass on how to get the most out of their leafy greens. This clip can be used as a springboard for a lesson on digestion, complete with analog digestion station, or as a very different science lesson, through heat transfer. They'll also learn why some foods, like garlic and asparagus, give off pungent odours – both before, or after, they're eaten.	<ul style="list-style-type: none"> ● Pink Pee ● Transcript
E05 The One with the Space Potato	Students are fascinated with Mars, and it's interesting that many of them think living on Mars won't be that difficult within their lifetime. Perhaps they're right! Or perhaps it's harder than the movies make it seem. Mars One Astronaut Candidate Dianne McGrath talks about the challenges of growing food in outer space as this clip explores some of the significant hurdles facing life on Mars, including the serious question: 'what's for dinner?'.	<ul style="list-style-type: none"> ● Space Food ● Planetary Tubers ● Transcript
E06 The One on a Log	Wardandi Bibbulmun Elder Aunty Dale Tilbrook, talks native tubers like youlk and warrine, and dispels a few myths about food production and farming. When we think of agriculture, we tend to envisage large-scale wheat or dairy farms. But farms come in many shapes and sizes. These lessons help students explore some of the assumptions we make about how food was and is grown in this country, whilst role-modelling positive behaviours around trying new ingredients and asking valuable questions.	<ul style="list-style-type: none"> ● Native Tubermans ● Taste the Land ● Transcript

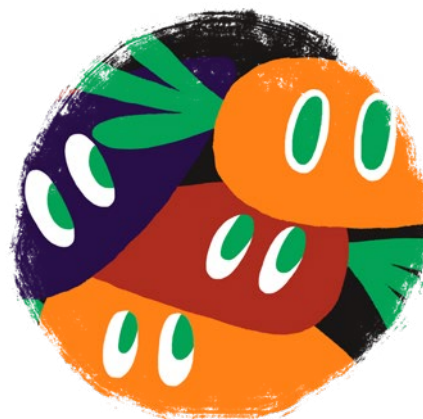
Video Episodes	Synopsis	Related learning resources
E07 The One with the Little Carrot Dude	From corn to kohlrabi, beans to broccolini, in this episode, students discover how modern and ancient farmers have bred vegetables over thousands of years for size, colour, nutrition and flavour. They explore how food words from all over the world have become commonplace in English. This is also a great springboard for discussions around bullying, empathy and resilience, as Lily discovers that it's the grit on the inside that counts.	<ul style="list-style-type: none"> ● Food Evolution ● Take me With You ● Transcript
E08 The One with the Pestering	Alice introduces the Super Naturals to consumer behaviour expert Paul Harrison, who talks to them about how our food choices can be directed by positive memory and persuasion, backed up by Miriam Raleigh the paediatric dietitian, who offers some suggestions around channeling pester power in the home and at school.	<ul style="list-style-type: none"> ● Cracked Commercials ● Turnip the Beet! ● Making Choices ● Transcript
E09 The One with the Nightshades	It seems like familiar foods have always been around, right? It might surprise students to learn that, in the scheme of things, some foods are remarkably recent inventions. Others – the world travellers – have come a long way and look very different to the way they did originally. In this clip, Maddy learns how nightshades made their way around the world, from tomatoes to tomatillos. This clip is also great for Music and/or English lessons around poems, rhythms and beats.	<ul style="list-style-type: none"> ● It's a Wrap! ● Take Me With You ● Transcript
E10 The One with the Mandala	This clip, featuring mural artist Anne Langdon and crochet artist Phil Ferguson, helps art students explore the use of mixed media to create form and shape. Students also learn about mandalas as pattern and as philosophy, exploring radial symmetry, as well as impermanence and practising non-attachment (a good one for sparking a conversation around art as mindfulness/meditation). Phil Ferguson (aka: @ChiliPhilly) teaches students that you can learn any skill you set your mind to by watching videos and doing your own research.	<ul style="list-style-type: none"> ● Veg Heads ● Mandalas ● Transcript
E11 The One with the Taste Prisms	Lucy and Maddy have to help Tuberman, their intergalactic space potato friend, make zucchini slice – except he doesn't quite understand their technical language. This is a great lead-in to lessons around writing for an audience, procedural texts, informative or process writing, as well as beginning to understand how recipes are formed using predictable patterns (something that's sure to hold them in good stead in the classroom and the kitchen).	<ul style="list-style-type: none"> ● Teaching Tuberman ● Food Words ● Building Blocks to Recipes ● Transcript
E12 The One with the Dumplings	In August CBCA Book Week helps us celebrate the delights of reading – they haven't set food as a theme yet but we think they should! This clip is about looking for food references in students' favourite fiction and working out the ways that food, as a narrative device, can move along plot and subtly reveal truths about character. Aunty Dale Tilbrook, Wardandi Bibbulmun Elder, gives the Super Naturals a quick sniff of some native ingredients like river mint, and opens up the opportunity to explore how heat and pressure can change the chemical structure of plants, unlocking flavours, aromas and nutrients.	<ul style="list-style-type: none"> ● Bookweek Buzz ● Transcript
E13 The One with the Opera	Consumer behaviour expert Paul talks to the Super Naturals about subliminal messaging and the psychology of shopping. This clip can become a springboard for lessons around persuasive language, or a media literacy class around how to be more savvy to marketing spin. Jonathan and Joseph meet Vera the Vegetable Clairvoyant, who teaches them the value of building up your nutrient reserves like Lego pieces (a particularly good prompt for a conversation around functional eating). Paul West describes his ideal plate, with plenty of different colours and textures.	<ul style="list-style-type: none"> ● Persuasive Menus ● Transcript

Video Episodes	Synopsis	Related learning resources
E14 The One with the Space Waste	Mars One astronaut candidate Dianne McGrath talks about sustainability in space, and challenges assumptions about how food is and should be grown. Students compare and contrast the benefits of taking waste home, processing it in space, and trying to ensure there is no waste produced. Students will design a scenario that involves growing food under a futuristic dome or in a heavily built-up urban area. Several sessions introduce them to hands-on activities to help them consider the key elements of their final design and ask: how can good design meet the needs of plants and people?	<ul style="list-style-type: none"> ● Space Waste ● Future Food ● Transcript
E15 The One where Billy Burns his Mouth	Lily accidentally mistakes “bell pepper” for “chilli pepper” with hilarious results. Alice explains how the capsicum ended up in Europe. In this clip, students can explore how food words can differ around the world, as well as learning more about the chemical compounds in chilis that make them appear “hot” to us. They’ll also get to learn about how capsicum ended up in Europe, opening up a conversation around trade routes and vegetable evolution.	<ul style="list-style-type: none"> ● Stinky Sulfides ● Transcript
E16 The One with the Domes	A cuisine’s defining flavours don’t exist by accident, they’re intertwined with history, culture, climate and weather. That’s why Thai food is characterised by tropical lime, chilli and Thai basil, while Scandinavian food is known for its cool-climate cold-water fish, potatoes and seasonal berries. Alice shows the Super Naturals why different cuisines use a variety of ingredients and what that tells you about climatic zones. Lily chats to Vera the Vegetable Clairvoyant and Paul West about her favourite foods as a vegetarian.	<ul style="list-style-type: none"> ● Climate, Culture, Food ● Borrowed Words ● Flavour Makers ● Transcript
E17 The One with the Welcome	Senior Wurundjeri Elder Aunty Di Kerr and Wardandi Bibbulmun Elder Aunty Dale Tilbrook explain what the Welcome to Country ceremony means, and explore the similarities and differences of their traditions. This helps facilitate students’ understanding of the connection between culture and the land for Australia’s First Peoples. Students will also begin to understand how Aboriginal and Torres Strait Islander peoples have traditionally relied on an acute knowledge of the cycles of the year for their food supply, whilst recognising Australia’s unique diversity of climatic zones for growers.	<ul style="list-style-type: none"> ● Seasonal Cycles ● Welcome to Country ● Totem ● Transcript
E18 The One with the Tractor	This clip gives students a fly-on-the-wall look into a working vegetable farm, complete with an enthusiastic farmer who’s happy to answer plenty of questions along the way, around soil health and growing food. Billy picks vegetables straight from the ground, learning more about what to do with beetroot, snow peas and other fresh vegetables.	<ul style="list-style-type: none"> ● Peas in a Pod ● Why is That Farm Here? ● Transcript
E19 The One with the Poo	This clip includes an interesting aside about technology – old and new. Aunty Dale tells Billy, Maddy and Lucy how she makes glue out of kangaroo poo, resin and charcoal. Not only does this mean the Noongar people make the greatest possible use of animal products, they’re also creating a flexible, strong, heat-bonded glue that is perfect for making tools. Meanwhile, worm poo also provides a great base for growing in healthy soil, as told to the Super Naturals by Paul West. Students explore more about worms, and build a worm tower for their very own garden bed.	<ul style="list-style-type: none"> ● Worms, Worms, Worms! ● Kangaroo Poo Glue ● Transcript

Video Episodes	Synopsis	Related learning resources
E20 The One with the Old Boot	This clip encourages students to get out into the garden and get planting, using whatever is around, under the watchful guidance of River Cottage Australia host, Paul West. It would be a perfect prompt for an outdoor activity involving the school's garden, or could lead into a science activity around sprouting and germination. Wardandi Bibbulmun Elder Aunty Dale discusses how the soil and environment can affect the taste and aroma of different foods, such as those growing by the beach, like beach banana (pigface).	<ul style="list-style-type: none"> ● Seed Bombs ● Grow Your Own ● Transcript
E21 The One with the Granita	Students will learn about freezing, melting, and changing states of matter. They'll be shown how sugar and salt affects the formation of ice crystals. They'll also be shown a simple cucumber granita recipe, which can be recreated at home or in class. For an English prompt, students meet Sam West, writer of the Phenomenom sketches, whose illustrious writing career has taken him from editor of magazines to Cannes Film Festival as a screenwriter.	<ul style="list-style-type: none"> ● Sweetie or Salty? ● Salty Smooth ● Festivals From Around the World ● Sorbet in a Bag ● Ghost Pumpkins ● Celebrating the Feast ● Transcript
E22 The One with all the Farts	This clip is all about farts – and gas – both in and out of the kitchen. Alice uses puff pastry to explain the effect of heat on gas molecules, whilst Billy takes the opportunity to learn more about why we fart. Students can also experience what gas pressure is all about with a hands-on, jet-powered-bottle activity.	<ul style="list-style-type: none"> ● Gut Gasses ● Get that Gas Outta Here! ● Transcript
E23 The Corn Off	Water, steam, and dry heat all react differently with food. Heat can transfer from object to object and cause chemical changes, such as the way the brassica family of vegetables smell different when they're overcooked. Chef and MasterChef judge George Calombaris helps illustrate this by judging a corn cook off, as well as talking about his favourite vegetable, too.	<ul style="list-style-type: none"> ● Hot Stuff! ● Transcript
E24 The One with the Poop Chart	The Super Naturals keep a food diary and meet with paediatric dietitian Miriam to discuss what foods help humans inside and out. This one's all about helping kids with the basics of data aggregation. Here's a challenge: try running this lesson without ever using the word 'healthy'. It may help students find their curiosity and stay engaged. Students will also learn more about what the human body does with waste; they are probably keen to tell you about poo and wee but are generally less aware about how the human body relies on sweat to excrete certain substances through the skin.	<ul style="list-style-type: none"> ● Dietary Diary Data ● Why Do You Go Orange? ● Transcript
E25 The One with the Sports	For elite athletes, a dietary balance that helps energize their bodies and minds can mean the difference between going for gold and going home. In this clip, Olympic athlete Morgan Mitchell talks through the kinds of foods she eats daily to fuel her performance on the track. Victorian Institute of Sport sports dietitian Kylie Andrew describes the elements that make up a nutrient-rich breakfast, while explaining why it's important to eat a rainbow of fresh foods.	<ul style="list-style-type: none"> ● High Performance Fuel ● Transcript
E26 Eddie Woo and the Fun Guys (who are actually quite serious)	Maths whiz Eddie Woo shows us the patterns in circles that lead to π . But all Billy can think about is pie... This episode acts as a springboard for our own explorations of π in the natural and constructed world and we learn about the remarkable properties of mushrooms and fungi.	<ul style="list-style-type: none"> ● Looking for π (Or is that pie?) ● Concentric Circles ● Mandalas ● ShroomTech & Beyond

Nomcast Episodes

Episodes	Synopsis	Related learning resources
Episode 1 – Onions: tears, mayhem and tasty bass notes	We love onions. They're a key player in our "mmmm that smells good! Whatcha cookin'?" starter pack. But it turns out our bulbous little friends are pretty darn volatile (in more ways than one). Let's peel back the layers and find out more!	<ul style="list-style-type: none"> ● Tears Before Dinner ● Flavour Makers ● Okonomiyaki Faces ● Stinky Sulfides
Episode 2 – Mushrooms: we know they can improve breakfast, but can they save the world?	Butter up the pan and fasten a harness around your favourite truffle pig because it's time to unlock the infinite potential of fungus.	<ul style="list-style-type: none"> ● Fungi Farming ● ShroomTech & Beyond
Episode 3 – Food Festivals: let's tumble, splat and eat 'til we're (literally) blue	The planet is wonderful place. And you might never know just how wonderful it is until you chase a wheel of cheese down a dangerously steep hill. Strap on your splat goggles, it's time to check out the world's weirdest and most wonderful food festivals.	<ul style="list-style-type: none"> ● Celebrating the Feast ● Ghost Pumpkins ● Festivals From Around the World
Episode 4 – Sustainable Materials: saddle up your mind with the finest kombucha leather	The history of plastic goes waaay further back than you might think. Let's find out how the former miracle material turned into a toxic addiction. And take a closer look at some awesome innovations in plant-based sustainability.	<ul style="list-style-type: none"> ● Kombucha Creators ● Worms, Worms, Worms!
Episode 5 – Funky Foods: flavours and functionality from fabulous fermentation	From the battlefields of ancient Japan to the emergency stink zones of contemporary Melbourne, it turns out fermentation has a pretty wild story to tell.	<ul style="list-style-type: none"> ● Kombucha Creators ● Climate, Culture, Food
Episode 6 – Fake or Fact: eating, drinking and living in the post-truth world	Nutrition is a minefield of half-truths and flat out furphies. Let's look at some of the biggest lies in the industry and figure out how to live and eat in the real world.	<ul style="list-style-type: none"> ● Fake or Fact? ● Cracked Commercials ● Seed Bombs
Episode 7 – Food & Sound: listen to what the taste is saying	Did you know taste has a sound, and sound has a taste? Let's lean in close and take a big bite into the bittersweet world of the audio-flavour.	<ul style="list-style-type: none"> ● Cooking the Beats ● Turnip the Beet!
Episode 8 – Against all odds: where in the universe does your garden grow?	The climate is changing, people are adapting and life is sprouting in corners of the world you probably didn't even know existed. It's time to find out how foods survive in some of the harshest conditions of the known universe.	<ul style="list-style-type: none"> ● ShroomTech & Beyond ● Future Food ● Space Food ● Space Waste ● Why Is That Farm Here?



Phenomenom! and the Australian Curriculum

Resource	English	Maths	Science	HASS	The Arts	Technologies	HPE	Work Studies
Bookweek Buzz	Yrs 3–6							
Borrowed Words	Yr 4							
Building Blocks to Recipes	Yrs 3–4							
Celebrating the Feast				Yr 3	Yrs 3–8			
Changing Colours			Yrs 3–6					
Climate, Culture, Food				Yrs 4–5				
Concentric Circles		Yrs 3–4	Yr 3				Yrs 3–4	
Cooking the Beats					Yrs 3–9			
Cracked Commercials	Yr 6				Yr 6			
Dietary Diary Data		Yrs 3–4					Yrs 3–4	
Fake or Fact?	Yrs 6–8				Yrs 7–8		Yrs 3–4	
Festivals from Around the World				Yr 3				
Finding Pi		Yrs 7–8						
Flavour Makers			Yrs 3–4				Yrs 3–4	
Food Evolution			Yr 4	Yr 6		Yr 5		
Food Words	Yr 3							
Fungi Farming			Yrs 3–6			Yrs 3–6		
Future Food			Yrs 5–6			Yr 5		
Get That Gas Outta Here!			Yr 5					
Ghost Pumpkins				Yr 3				
Grow Your Own			Yrs 5–6					
Gut Gasses			Yr 5					
High Performance Fuel	Yrs 3–6						Yrs 3–6	
Hot and Cold			Yrs 3,4,6				Yrs 3, 4, 6	
Hot Stuff!			Yr 3					
Ice Crystal Crunch-Time	Yrs 5–6		Yrs 3, 5, 6					
It's A Wrap	Yrs 5–6				Yrs 5–6			
Kangaroo Poo Glue			Yrs 4–6			Yrs 4–6		
Kombucha Creators						Yrs 3–6		
Making Choices	Yrs 3–5							



Resource	English	Maths	Science	HASS	The Arts	Technologies	HPE	Work Studies
Mandalas		Yrs 3–6			Yrs 3–6			
Native Tuber(man)s				Yrs 3–5		Yrs 3–5		
Okonomiyaki Faces	Yrs 3–4	Yrs 3–4						
Peas in a Pod		Yr 3						
Persuasive Menus	Yrs 4–5							
Pink Pee			Yrs 4–6					
Planetary Tubers			Yrs 3, 5					
Salty Smooth			Yrs 4–5					
Seasonal Cycles				Yrs 3–5		Yrs 3–5		
Seed Bombs			Yrs 4–5					
ShroomTech & Beyond								Yrs 5–10
Sorbet in a Bag			Yr 3					
Space Food	Yrs 5–6		Yrs 5–6					
Space Waste			Yrs 5–6			Yrs 5–6		
Stinky Sulfides			Yr 5					
Sweetie or Salty?			Yrs 3, 5					
Take Me with You			Yrs 4–6	Yrs 4–6				
Taste the Land				Yrs 5–6		Yrs 5–6		
Teaching Tuberman	Yrs 3–4							
Tears Before Dinner			Yrs 4–8					
Totem				Yr 3	Yr 4			
Turnip the Beet!					Yrs 3–6			
Veg Heads					Yrs 3–4			
Way Too Cool for School			Yrs 3, 5					
Welcome to Country				Yrs 3–5				
Why Do You Go Orange?			Yrs 3–5				Yrs 3–5	
Why is that Farm Here?				Yrs 4–6				
World Breakfast Globes							Yrs 3–4	
Worms, Worms, Worms!			Yrs 4–6					



Resource	Aboriginal	Asia	Sustainability
Bookweek Buzz			
Borrowed Words			
Building Blocks to Recipes			
Celebrating the Feast	Yrs 3–8	Yrs 3–8	
Changing Colours			Yrs 3–6
Climate, Culture, Food		Yrs 4–5	Yrs 4–5
Concentric Circles			
Cooking the Beats			
Cracked Commercials			
Dietary Diary Data			
Fake or Fact?			
Festivals from Around the World		Yr 3	
Finding Pi			
Flavour Makers			
Food Evolution			
Food Words			
Fungi Farming			
Future Food			Yrs 5–6
Get That Gas Outta Here!			
Ghost Pumpkins			
Grow Your Own			Yrs 5–6
Gut Gasses			
High Performance Fuel			
Hot and Cold			
Hot Stuff!			
Ice Crystal Crunch-time			
It's A Wrap			
Kangaroo Poo Glue	Yrs 4, 5, 6		Yrs 4, 5, 6
Kombucha Creators			
Making Choices			Yrs 3–5
Mandalas		Yrs 3–6	Yrs 3–6
Native Tuber(man)s	Yrs 3–5		Yrs 3–5
Okonomiyaki Faces		Yrs 3–4	
Peas in a Pod			
Persuasive Menus			
Pink Pee			
Planetary Tubers			
Salty Smooth			
Seasonal Cycles	Yrs 4–5		Yrs 4–5
Seed Bombs			Yrs 4–5
ShroomTech & Beyond			
Sorbet in a Bag			
Space Food			Yrs 5–6
Space Waste			Yrs 5–6
Stinky Sulfides			Yr 5
Sweetie or Salty?			
Take Me with You		Yrs 4–6	
Taste the Land			Yrs 5–6
Teaching Tuberman			
Tears Before Dinner			
Totem	Yrs 3–4		Yrs 3–4
Turnip the Beet!			
Veg Heads			
Way Too Cool for School			
Welcome to Country	Yrs 3–5		Yrs 3–5
Why Do You Go Orange?			
Why is that Farm Here?			Yrs 4–6
World Breakfast Globes		Yrs 3–4	
Worms, Worms, Worms!			Yrs 4–6



Finding Phenomenom

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YouTube: <https://www.youtube.com/phenomenom>

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