OPERATION:

Let's Eat More Vegetables

A teaching and learning resource
supporting healthier eating in

Years 3 – 4

Crunch&Sip®

Supported by

healthway

Cancer Council WA

Contents

Welcome!

Crunch&Sip®, in partnership with Healthway and Cancer Council Western Australia are delighted to present, Operation: Let's Eat More Vegetables, a teaching and learning resource supporting healthier eating in young West Australians. This curriculum-aligned resource is designed for educators and developed for students in early childhood and primary school years.

Operation: Let's Eat More Vegetables recognises the potential for all Australians to eat healthier and that most Australians don't eat enough vegetables as shown by Australian health data.

Operation: Let's Eat More Vegetables acknowledges and works with the strengths of family food, culture and nutrition literacy.

Operation: Let's Eat More Vegetables is high quality nutrition education repeatedly offering vegetables through fun experiential learning. Therefore, the aim of the resource is to increase the eating of vegetables in young West Australians, now and into their futures.

More specifically, teaching and learning in the resource will:

- broaden student experiences with vegetables;
- celebrate the food diversity of Australian families and schools; and
- promote the eating of vegetables as everyday foods, for health, wellbeing and lifelong healthier eating.

Crunch&Sip®, encourages educators working with this resource to apply professional insight and cultural awareness to further embrace, build and expand student experiences and positive relationships with food and vegetables. Operation: Let's Eat More Vegetables is gender neutral and honours that everyone and all families are unique.

Acknowledgment

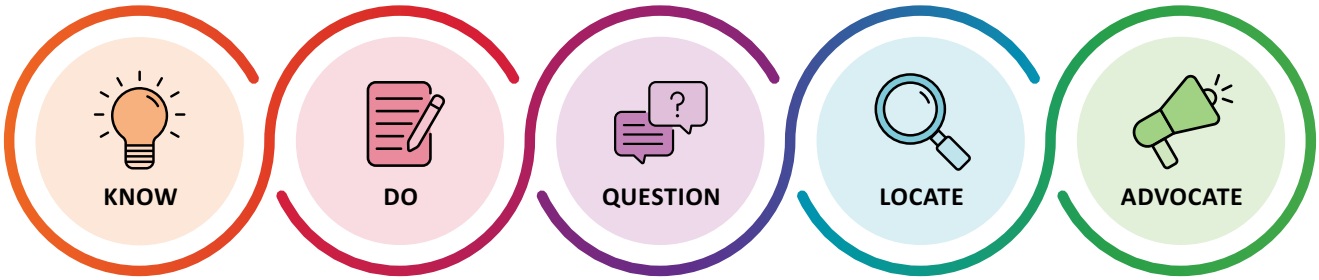
Crunch&Sip® acknowledges and thanks the Northern Agricultural Catchments Council (NACC) for the availability of the teaching resource: Sharing Noongar Knowledge. This significant resource brings to life the strong cultural and environmental connection of Aboriginal peoples to the land, sea, sky and waterways.

How to use this resource

Operation: Let's Eat More Vegetables consists of eight age-appropriate lessons.

Each lesson contains fun, cognitively-developed and sequential learning activities that build student knowledge, understandings and skills relating to fruit, vegetables, and healthier eating.

Operation: Let's Eat More Vegetables is informed by health literacy with learning across the resource developing students who **know, do, question, locate** and **advocate** for own and others' health.



For more information about how health literacy is developed within this resource, please see page 3.

To support programs in schools, the best way to use this resource is to move from activity to activity, from lesson to lesson and complete all eight lessons. Additional activities can be used to extend the lesson or as lesson alternatives. The review lesson is a fun, additional activity to culminate the program.

Educators should:

- Consider printing, laminating and cutting out class sets of the vegetable and fruit cards (Appendix 2) as these cards can be used across a range of activities.
- Consider requesting parent and carer help as additional support is beneficial to the smooth running of some activities whilst extending learning in food literacy into the home of students.
- Check and confirm student allergies and intolerances to foods used in all activities, and that all ingredients are culturally appropriate.

Health Literacy Enabling Framework for School Curriculum

(adapted from Barwood, 2021)

Pedagogy	Teacher Activity	Teaching Method and Learning Activity
 **TO KNOW**	Teacher is the expert sharing factual (theoretical) knowledge	Teacher directed learning with students who are passive recipients of facts and knowledge such as through: • Teacher talk • Brainstorms • Class discussions • Digital media • PowerPoint (digital) presentation • Web quests
 **TO DO**	Teacher is the organiser, guiding the application of knowledge in practice	Teacher and student collaborative in learning, where students apply factual knowledge in practice through participatory and skills-based activity such as: • Hands on practices • Tasting • Trial runs • Puzzles • Role plays
 **TO QUESTION**	Teacher is the facilitator, encouraging critical thinking and questioning	Teacher facilitates individual and group-based learning, where students participate in activities that require them to question, problem solve and make decisions such as: • Responses • Scenarios • Concept mapping • Predictions • Debates • Justifications • Data analysis
 **TO LOCATE**	Teacher is the trusted advisor, advancing self-awareness and a sense of positioning	Teacher promotes meaning making in relation to health of oneself and others by creating learning that contemplates the 'Why' factors. Activities build a sense-of-self and sense-of-belonging such as through: • Critical reflections • Journaling • Future planning • Position statements
 **TO ADVOCATE**	Teacher is the enabler, building sense of citizenship through individual, social and cultural capital	Teacher mentors' students to progress micro and macro health such as: • Request for help • Refusal statements • Narrative to support peer change • Designing local health messages • Strategic planning • Recommendations for the accessing of health care services • The creation of public awareness campaigns Students explore advocacy of safer, healthier, and more physically active living for themselves, peers, family, community, cultural and ethnic groups, and society and the world beyond.

Teaching and learning in Years 3 - 4

Operation: Let's Eat More Vegetables for Years 3 – 4 builds on the learning outlined in the Years 1 – 2 resource. Activities within the Years 3 – 4 resource specifically contribute to students who:

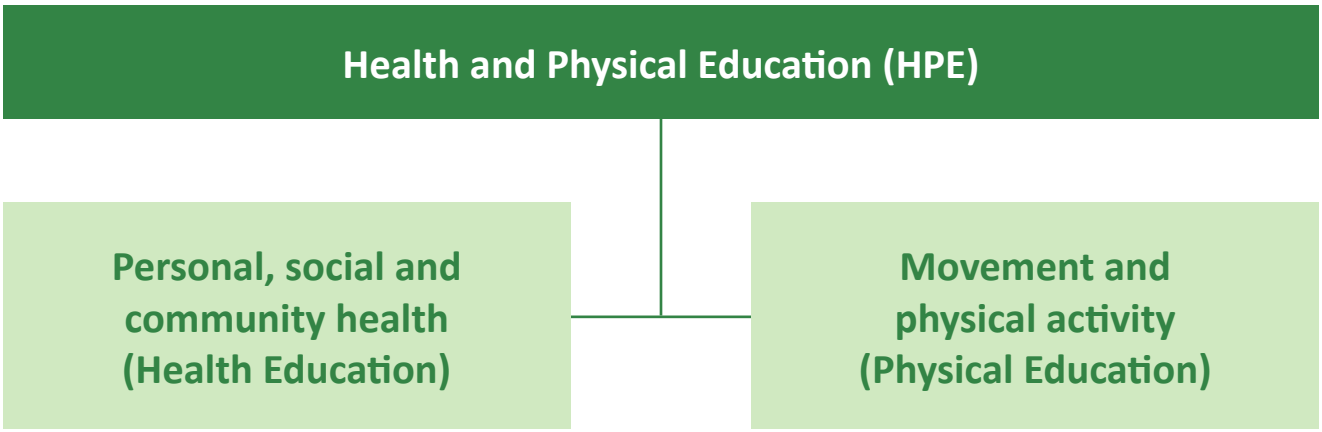
- know vegetables and how they grow;
- know vegetables as everyday foods and a healthier food choice;
- know vegetable nutrients and how nutrient knowledge can support health and wellbeing;
- appreciate that vegetable knowledge, food knowledge and food literacy helps people to make healthier food choices;
- appreciate the barriers and facilitators to eating more vegetables; and
- plan and prepare healthier food choices, now and into the future.

The Western Australian Curriculum

Operation: Let's Eat More Vegetables for Years 3 – 4 is guided by mandated curriculum set out in *The Western Australian Curriculum.*

Health and Physical Education

Learning opportunities situated across the eight lessons of the resource link to content described in the main curriculum learning area of Health and Physical Education (HPE).



Curriculum links to HPE content described in the strand – Personal, Social and Community Health – are mapped below with hyperlinks to the School Curriculum and Standards Authority (SCSA) website for ease of use.

PERSONAL, SOCIAL AND COMMUNITY HEALTH STRAND									
YEAR 3									
Sub-strand	**Curriculum content description and code**	**Lesson**							
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Being healthy, safe and active	Actions in daily routines that promote health, safety and wellbeing • healthy eating • appropriate levels of physical activity *ACPPS036*	✓	✓	✓	✓	✓		✓	✓
Communicating and interacting for health and wellbeing	Choices and behaviours conveyed in health information and messages *ACPPS039*	✓	✓	✓				✓	✓
YEAR 4									
Being healthy, safe and active	Strategies to ensure safety and wellbeing at home and at school, such as: • identifying and choosing healthier foods for themselves *ACPPS036*; *ACPPS040*	✓	✓	✓	✓	✓		✓	✓
Communicating and interacting for health and wellbeing	Ways in which health information and messages can influence health decisions and behaviours *ACPPS039*	✓	✓	✓				✓	✓

Other Curriculum Areas

Operation: Let's Eat More Vegetables for Years 3 – 4 includes activities that connect to the curriculum areas of English, Humanities and Social Sciences (HASS), Mathematics, Science, Technologies and The Arts. For each lesson, activities are mapped to the SCSA website with hyperlinks for ease of use.

Year 3 connections to other curriculum areas are visually displayed below for quick links.

Learning area	Curriculum content description and code	Lesson							
		1	2	3	4	5	6	7	8
English	Plan and deliver short presentations, providing some key details in logical sequence *ACELY1677*				✓				
	Plan, draft and publish imaginative and persuasive texts demonstrating increasing control over text structures and language features and selecting print, and multimodal elements appropriate to the audience and purpose *ACELY1682*		✓			✓	✓		
	Write using joined letters that are clearly formed and consistent in size *ACELY1684*	✓				✓			
HASS	Language groups of Australia's Aboriginal and Torres Strait Islander Peoples divides their Country/Place and differs from the surveyed boundaries of Australian state and territories *ACHASSK066*						✓		
	Locate and collect information from a variety of sources (e.g., photographs, maps, books, interviews, internet) WAHASS28 *(no hyperlink available as this is WA curriculum only)*						✓		
	Record selected information and/or data (e.g., use graphic organisers, develop note-taking strategies) WAHASS29 *(no hyperlink available as this is WA curriculum only)*						✓		
Mathematics	Recall addition facts for single-digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation *ACMNA055*			✓					
	Collect data, organise into categories and create displays using lists, tables, picture graphs and simple column graphs, with and without the use of digital technologies *ACMSP069*			✓	✓				

Learning area	Curriculum content description and code	Lesson							
		1	2	3	4	5	6	7	8
Science	Living things can be grouped on the basis of observable features and can be distinguished from non-living things *ACSSU044*		✓	✓	✓	✓			
	Science knowledge helps people to understand the effect of their actions *ACSHE051*		✓	✓	✓	✓			
	With guidance, plan and conduct scientific investigations to find answers to questions, considering the safe use of appropriate materials and equipment *ACSIS054*					✓			
TECHNOLOGIES									
Design and Technologies	Types of food and fibre produced in different environment, cultures or time periods, including the equipment used to produce or prepare them *ACTDEK012*				✓	✓	✓		
THE ARTS									
Drama	Improvisations skills (breaking patterns) to develop drama *ACADRM032*	✓							
Media Arts	Production of media work, using codes and conventions to enhance the story or message for an intended audience *ACAMAM060*							✓	
	Appropriate responses to, and respect for media work from different social, cultural and/or historical contexts *ACAMAR061*								✓
Visual Arts	Exploration of visual art elements, in conjunction with different materials, media and/or technologies, when creating artwork *ACAVAM111*					✓	✓		

Year 4 connections to other curriculum areas are visually displayed below for quick links.

Learning area	Curriculum content description and code	Lesson							
		1	2	3	4	5	6	7	8
English	Plan, rehearse and deliver presentations incorporating learned content and taking into account the particular purposes and audiences *ACELY1689*				✓				
	Plan, draft and publish imaginative, informative and persuasive texts containing key information and supporting details for a widening range of audiences, demonstrating increasing control over text structures and language features *ACELY1694*		✓			✓	✓		
	Write using clearly-formed joined letters, and develop increased fluency and automaticity *ACELY1696*	✓				✓			
HASS	Aboriginal and Torres Strait Islander Peoples' ways of living were adapted to available resources and their connection to Country/Place has influenced their views on the sustainable use of these resources, before and after colonisation *ACHASSK089*						✓		
	Locate and collect information from a variety of sources (e.g., photographs, maps, books, interviews, internet) WAHASS28 *(no hyperlink available as this is WA curriculum only)*						✓		
	Record selected information and/or data (e.g., use graphic organisers, develop note-taking strategies) WAHASS29 *(no hyperlink available as this is WA curriculum only)*						✓		
Mathematics	Select and trial methods for data collection, including survey questions and recording sheets *ACMSP095*			✓					
	Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values *ACMSP096*			✓	✓				

Learning area	Curriculum content description and code	Lesson							
		1	2	3	4	5	6	7	8
Science	Living things have life cycles *ACSSU072*				✓	✓			
	Living things depend on each other and the environment to survive *ACSSU073*		✓	✓	✓	✓			
	Natural and processed materials have a range of physical properties that can influence their use *ACSSU074*		✓	✓	✓				
	Science involves making predictions and describing patterns and relationships *ACSHE061*				✓	✓			
	Science knowledge helps people to understand the effects of their actions *ACSHE062*		✓	✓	✓				
	With guidance, plan and conduct scientific investigation to find answers to questions, considering the safe use of appropriate materials and equipment *ACSIS065*					✓			
TECHNOLOGIES									
Technologies	Types of technologies used in food and fibre production or processing, including how they are used to meet consumer needs *ACTDEK012*				✓	✓		✓	
	Identify and choose the appropriate resources from a given set WATPPS22 *(no hyperlink available as this is WA curriculum only)*			✓					
THE ARTS									
Media Arts	Use narrative structure to produce fictional and no-fictional media work to engage an audience *ACAMAM060*							✓	
	Considered responses to, and respect for a variety of media from different social, cultural and/or historical contexts *ACAMAR061*								✓
Visual Arts	Use of visual art elements and selection of materials, media and/or technologies to create specific artwork *ACAVAM111*					✓		✓	

General Capabilities

Operation: Let's Eat More Vegetables for Years 3 – 4 draws on the general capabilities described in the Australian Curriculum. Learning opportunities within the Years 3 – 4 resource work to develop the following capabilities.

	1	2	3	4	5	6	7	8
Literacy		✓	✓		✓	✓	✓	✓
Numeracy	✓		✓	✓				✓
ICT capability			✓		✓		✓	
Critical and creative thinking	✓	✓	✓	✓	✓	✓	✓	✓
Ethical understanding				✓	✓			
Personal and social capability	✓	✓	✓	✓	✓		✓	✓
Intercultural understanding	✓			✓		✓	✓	✓

More information regarding the general capabilities is available at
https://www.australiancurriculum.edu.au/f-10-curriculum/general-capabilities/

Resource overview

Lesson		Lesson overview	Health literacy
1	Vegetables are an everyday food	Students examine vegetables as everyday foods, supporting health and wellbeing now and into the future.	TO KNOW TO LOCATE TO ADVOCATE
2	Let's understand why vegetables are amazing	Students learn vegetables contain nutrients, and eating vegetables can provide health benefits.	TO KNOW TO DO TO QUESTION TO LOCATE TO ADVOCATE
3	Let's explore a vegetable rainbow	Students explore different coloured vegetables to understand that eating a rainbow of vegetables provides different nutrients and the greatest health benefit.	TO KNOW TO DO TO QUESTION TO LOCATE TO ADVOCATE
4	Let's understand how plants and vegetables grow	Students learn where plants grow and that parts of an edible plant are eaten as vegetables. They learn that plants make their own food through photosynthesis.	TO KNOW TO DO TO ADVOCATE
5	Let's grow edible plants together	Students learn the plant growth cycle and experiment with plant growth. They understand that plants need care and the right conditions to grow.	TO KNOW TO DO TO QUESTION
6	Let's explore bush tucker	Students are introduced to Australian Bush Tucker foods and the significance of bush foods in traditional Indigenous Australian culture.	TO KNOW TO LOCATE
7	Let's increase vegetables in our meals	Students examine barriers and facilitators to eating more vegetables. They explore creative solutions to increase vegetable consumption.	TO KNOW TO QUESTION TO LOCATE TO ADVOCATE
8	Let's make healthier food choices with vegetables	Students make healthier food choices to support health and wellbeing including recommended serve sizes for vegetables. They learn food advertising promotes everyday foods and sometimes foods.	TO KNOW TO QUESTION TO LOCATE TO ADVOCATE
Review		Students revisit key learning points in a fun conclusion to the program.	

LESSON 1:

Vegetables are an everyday food

Lesson overview

In this lesson students examine vegetables as everyday foods supporting health and wellbeing now and into the future. They explore food choices to promote and maintain health.

Learning intentions

- Understand that vegetables are everyday foods and eating a variety of vegetables can support health and wellbeing
- Understand that vegetables provide energy to run and play, help young people grow, feel good and keep from getting stick
- Understand that food choices today support health and wellbeing now and into the future
- Appreciate that all families are different and that different people eat different and similar foods

Curriculum links

YEAR 3					
HPE	**English**	**Mathematics**	**Science**	**Technologies**	**The Arts**
ACPPS036	*ACELY1684*				

YEAR 4					
HPE	**English**	**Mathematics**	**Science**	**Technologies**	**The Arts**
ACPPS036 *ACPPS040*	*ACELY1696*				

General capabilities

- Numeracy (extension)
- Critical and creative thinking
- Personal and social capability
- Intercultural understanding

Resources

- ☐ Appendix 1 – Parent/carer letter
- ☐ Appendix 2 – Vegetable and fruit cards
- ☐ Appendix 3 – The vegetable song
- ☐ Worksheet 1 – 10 most popular vegetables in Australia
- ☐ Worksheet 2 – Match the vegetables
- ☐ Worksheet 3 – The meals I eat in a day
- ☐ PowerPoint 1 – Vegetables are eaten many ways

- [ ] Scissors – one per student
- [ ] Online video – *Foods we need to eat less often*
- [ ] *15 Ways to Crunch&Sip®*
- [ ] *Don't forget to pack Crunch&Sip® every day*
- [ ] *Healthy swaps* by Crunch&Sip®
- [ ] *Crispy Roasted Chickpeas* by Crunch&Sip®

Preparation

- [ ] Send parent/carer letter before the program to support content in Activity 3 (Crispy roasted chick peas recipe) and for later lessons – Appendix 1
- [ ] Check and confirm that students do not have allergies or intolerances to any of the foods used and all ingredients are culturally appropriate
- [ ] Print and cut out Appendix 2 – consider laminating (develop class sets)
- [ ] Print Worksheet 1 (if required)
- [ ] Print Worksheet 2 – one per student
- [ ] Print Worksheet 3 – one per student (alternatively, students draw own table)
- [ ] PowerPoint 1 – reduce slides if preferred or add your own culturally and community appropriate images to slides from free downloadable image sites like *Pixabay* or *Pexels*
- [ ] Print *'Don't forget to pack Crunch&Sip® every day'* for parents/carers
- [ ] Prepare a vegetable platter
- [ ] Prepare Crispy Roasted Chickpeas
- [ ] If selected, obtain access to an audio visual device for online viewing material

Crunch&Sip® supporting resources

- [ ] To support student participation in this program of work see: *Overcoming barriers to participation* by Crunch&Sip®
- [ ] *How to Crunch&Sip® A guide for teachers* explains Crunch&Sip®
- [ ] Visit what to do *if students don't bring Crunch&Sip®*

Educator support notes

- Lesson 1 revisits concepts developed in the Year 1 – 2 resource, however, content in this lesson does not require prior learning.
- Health is more than the absence of disease, taking into consideration the state of physical, mental and social wellbeing. *The Australian Institute of Health and Welfare* note that a person's health is dependent on the determinants that influence health (wealth, environment, education, etc), and the actions and resources taken to support, improve and maintain health.
- *Wellbeing* – the state of being satisfied, happy and/or healthy. Relates to effective social functioning and spiritual health and the dispositions of optimism, openness, curiosity and resilience.
- Y Chart – a three-way visual display of information.
- *Top 10 most popular fresh vegetables.*
- Physical or manual sorting/ordering of vegetables using students (physically move students as a vegetable) or a cut-out vegetable card (students move the card) supports executive functioning skills and brain development. Physical sorting/ordering over abstract sorting/ordering allows students to visualise, manipulate and make connections with and between the order and placement.
- PowerPoint – 32 images can be reduced to suit context.
- Additional resources and teacher materials are available at Crunch&Sip®.

Activities

Activity 1: Do I know vegetables?

1. Every student must wash and dry hands.
2. Begin by asking students to name a vegetable. Discuss.
3. Distribute Worksheet 1 and invite students to complete, either individually, in pairs or in small groups.
4. Ask students:
   - What do you know about vegetables?
   - What is your favourite vegetable?
   - Who has eaten a vegetable or vegetables today? What vegetable(s)?
5. Tell students that vegetables are good to eat. We can eat vegetables and fruit every day. Vegetables and fruit help us feel good, they give us energy to run and play, help us grow and keep from getting sick. Vegetables and fruit are everyday foods.
6. ***Option (if suitable)***
   - Teach students 'The Vegetable song' (Appendix 3) and invite student participation.
   - Teach students 'The Vegetable song' and invite students to experiment with body language and dramatic action by developing own actions, movements and/or facial expressions.
7. Distribute 'Don't forget to pack Crunch&Sip® every day' to students.
8. Conduct a class discussion on Crunch&Sip® using the following questions as a guide:
   - What is Crunch&Sip®?
   - Why do we eat and drink Crunch&Sip®?
   - What kinds of foods are suitable for Crunch&Sip®?
   - What can we sip on?
   - Why choose vegetables instead of fruit for Crunch&Sip®?
9. Distribute '15 Ways to Crunch&Sip®' and discuss.
10. Break for Crunch&Sip® and distribute the vegetable platter. Invite students to try but don't force. Discuss taste, texture, smell, appearance and preparation.
11. Remind students to grab a drink of water.
12. Distribute the vegetable and fruit cards (Appendix 2) and invite students to sort into vegetables and fruit they know and don't know. Discuss. Invite students to share the vegetables they would like to try and consider recording this information for future lessons.
13. ***Provocation:***
   - Why are vegetables and fruit everyday foods?
   - Does it matter what we eat today, tomorrow? Why?
   - Why are vegetables good for health and wellbeing?
   - In what ways does Crunch&Sip® support health and wellbeing.
14. Tell students that they can ask for more vegetables and fruit by putting up a hand and using the words: "Can I please have more?" Allow students to ask for more.

Activity 2 - Part A: Most popular vegetables in Australia

1. Tell students that vegetables are eaten everyday by families in Australia. Some vegetables are eaten more regularly (more popular) by families than other vegetables. Discuss.

2. Ask students:
   - What is the vegetable you eat most in your family? Why?
   - What do you think is the most popular vegetable eaten by families in Australia?
   - Do all families in Australia eat the same vegetables? Why or why not?

3. Invite students to predict the most popular vegetable in Australia. Record student responses on the whiteboard. Create a tally for each vegetable shared by students (see extension activity point 9). Discuss.

4. Explain that the class will now explore and guesstimate the top 10 vegetables eaten in Australia. Use the below information to inform this activity but don't reveal the order until the end.

1. Carrots	2. Potato	3. Tomato	4. Onions	5. Broccoli
6. Mushroom	7. Lettuce	8. Capsicum	9. Pumpkin	10. Zucchini

Option 1

- Select the top 10 vegetables from Appendix 2 (Vegetable and fruit cards) and select 10 students from the class:
  - » Invite the 10 students to the front of the class.
  - » Distribute one vegetable card to each of the 10 students.
  - » As a whole class, discuss the vegetables, decide and re-order the students/vegetables (array numerically) from one to 10 (left to right = most to least).

Option 2

- Distribute Worksheet 1 and invite students, either individually, in pairs or in 10 small groups to:
  - » Cut out the vegetables from the list (remove this step if preferred and students are capable and use as a worksheet with students applying a number to a vegetable).
  - » Instruct students to order the vegetables from most popular (top) to least popular.
  - » Discuss order as a whole class.
  - » Note – this activity could also be conducted as a pop quiz/competition.

5. Discuss student responses and reveal the correct order (see point 4). Ask:
   - Does your family eat these vegetables?
   - Would these vegetables be the same vegetables in other countries? Why or why not?
   - What conditions contribute to the vegetables that are eaten in Australia?
   - Could the order of vegetables change over time? Over seasons? Why or why not?
   - Does the order represent your family? Why or why not?

6. Remind students that families eat a range of vegetables. Families are different but families are also similar. Some families eat the same vegetables but some families eat different vegetables. All families are unique and this makes families special.

7. Provocation:

- Why are families similar but different?
- What conditions contribute to families being similar or different?
- Why do families eat vegetables?
- Why do families eat different vegetables?

Activity 2 - Part B: Vegetable meals we eat

1. Split the class into 10 groups. Attribute one vegetable to each group. Instruct groups to identify and/or name foods and meals they eat that contain the vegetable, for example, tomato salsa, potato bake, pumpkin soup. Record student responses and explore student ideas and food preferences. Discuss vegetable and food meal preferences.

2. ***Extension:***
   - Conduct this activity as a graffiti activity – rotate the 10 vegetables around the groups, with each group adding at least one food/meal.
   - Use the vegetable list as spelling words, focusing on letter-sound relationships and syllables.
   - Select five vegetables – using joined letters to develop text to describe and express opinion regarding the vegetables.
   - Estimate – the percentage of households eating potatoes and carrots weekly (over 60%).
   - Calculate and solve problems or develop a data display using data from point 3.

3. Using Worksheet 3 (alternatively, instruct students to draw a similar table on an A4 paper), invite students to draw four meals eaten in a day. Use student drawings to gauge the vegetables eaten.

4. Working in pairs, students swap Worksheet 3 and partner's attempt to identify the meals from the drawings.

5. ***Ask students:***
   - Who ate vegetables in every meal?
   - What meal contained the most vegetables?
   - Did any meal not include a vegetable?
   - Could vegetables be added to a meal?

6. Brainstorm with students the ways in which vegetables can be eaten such as raw, baked, steamed, roasted, barbecued, stir-fried, etc. Discuss.

7. Show PowerPoint 1. Explain that families eat vegetables in many different ways. Families are different but families are also similar. Some families prepare and eat the same vegetables but some families prepare and eat different vegetables in different ways. All families are unique and this makes families special. Consider asking students if they've eaten the vegetables in the ways presented on the slides. Discuss the versatility of vegetables and the ways vegetables can be prepared.

8. Remind students that eating vegetables every day is good for health and wellbeing.

Activity 3: Everyday foods and sometimes foods

1. Every student must wash and dry hands.

2. Explain – Vegetables and fruit can be eaten every day and are called 'everyday foods'. We can eat vegetables and fruit every day because they help us feel good.

3. Ask:
   - What does it feel like to be well and healthy?
   - Why is it important to be well and healthy?
   - What choices can we make to support health and wellbeing?
   - Why is it important to make health supporting choices now and into the future?

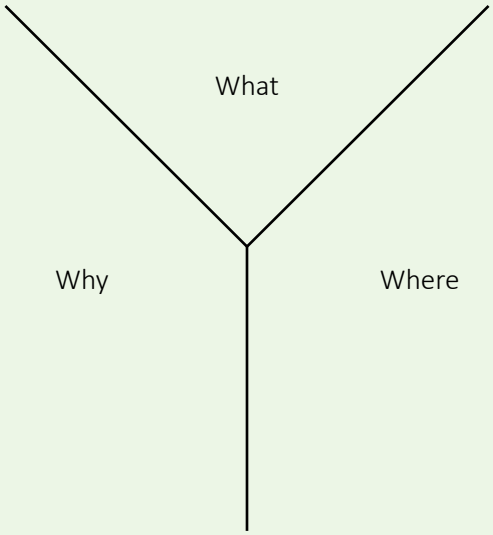
Activity 3: Everyday foods and sometimes foods *(continued)*

4. Tell students that eating vegetables every day is an action and choice we make to support our health and wellbeing. Cleaning our teeth daily is an action and choice that keeps our teeth strong and mouths fresh. Washing our hands after the toilet is an action and choice to remove toilet bugs from our hands and stop us getting sick. Holding a parent/carer's hand while crossing the road is an action and choice to keep us safe with traffic. Eating vegetables every day is an action and choice to support our bodies by giving us:
   - energy to run and play
   - brain power to think and concentrate
   - growing power to be get bigger and strong
   - mending power to repair our bodies when we are injured or sick
   - protection to keep us from getting sick

5. Explain – All foods are not the same. Some foods we eat are not necessary for health and wellbeing but we like to eat them from time to time. These foods are called 'sometimes' foods. Eating too much of these types of foods can impact our health and the way we feel. We should only eat these foods 'sometimes' like on a weekend, on a special occasion such as a birthday or from time to time as a treat. We don't eat sometimes food every day.

6. ***Option for additional learning:*** view the online resource: *Foods we need to eat less often.*

7. On a whiteboard brainstorm the sometimes foods that the students eat using the below Y Chart. Draw a line between the food (what), the location it is eaten (where) and the reason (why). Repeat until the Y Chart is saturated.



8. Select one example of a sometimes food from the Y Chart and discuss where the food was eaten and why. Ask students:
   - If you weren't at that location (Where), would you eat the sometimes food?
   - In what ways does the location impact our food choices and contribute to eating sometimes foods?
   - Are the reasons for eating sometimes foods similar or different? Is there a pattern as to why we eat sometimes foods?
   - Can we restrict/impact why we eat sometimes foods? How?

Activity 3: Everyday foods and sometimes foods *(continued)*

9. Ask students to swap/replace a sometimes food with a vegetable such as swap chocolate for chick peas at the movies. On the whiteboard, complete the below sentence but keep the location where the sometimes food is eaten the same.

   At the movies I can eat *chick peas* because _____.

10. Invite students to select three more examples of sometimes foods from the Y Chart or develop their own. Instruct them to complete three new sentences as per point 8. If required, repeat the sentences with fruit. Discuss and explore student replacement ideas. Ask:
    - Is it hard to replace sometimes foods?
    - Why should we limit sometimes foods?
    - Can I replace a sometimes food I eat for lunch?
    - Can I replace a sometimes food I eat at school?

11. Explain to students that being prepared allows us to replace sometimes foods with healthier food choices. Choosing to eat vegetables and choosing to replace sometimes foods with vegetables or fruit supports health and wellbeing now and into the future.

12. Show the students Crunch&Sip® *Healthy swaps.* Discuss.

13. Invite the students to enjoy some *Crispy Roasted Chickpeas.* Offer and encourage students but don't force to try. Discuss students' liking or dislike.

14. Tell students that they can ask for more chickpeas by putting up a hand and using the words: "Can I please have more?" Allow students to ask for more.

Additional activities

1. Optional viewing – *Foods we need to eat less often*
2. Read the story book 'Too many carrots' by Katy Hudson
3. Share the story *'Mr Bunny's carrot soup'* by 6 year old student Parampreet Singh as inspiration for students to write own vegetable-based stories.

 Apple	 Apricot	 Asparagus	 Avocado	 Banana
 Beetroot	 Bitter Melon	 Blueberries	 Broccoli	 Capsicum
 Carrot	 Cauliflower	 Celery	 Corn	 Cucumber
 Daikon	 Dates	 Eggplant	 Fennel	 Fig
 Garlic	 Globe Artichoke	 Grapes	 Honeydew Melon	 Iceberg Lettuce
 Jackfruit	 Kiwi Fruit	 Kumara	 Leek	 Lemon

Mandarin

Mango

Mushroom

Nashi Pear

Nori

Okra

Onions

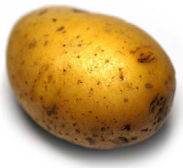
Orange

Pawpaw

Pear

Peas

Pineapple



Potato

Pumpkin

Quandong

Quince

Radish

Rockmelon

Snow Peas

Starfruit

Strawberry

Tamarillo

Tomato

Turnip

Vine Leaves

Watermelon

Warrigal Greens

Wombok

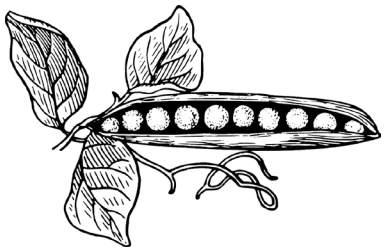
Yams

Zucchini

Words	Actions
"Vegetables give me energy to run and play"	Run on the spot, pumping arms
"Vegetables help me grow"	Squat like a ball, jump up into a star shape
"Vegetables help me not get sick"	Hand outstretched in front of body for stopping motion
"Vegetables help me be strong"	Arms bend to flex muscles
"Vegetables help me feel good, now and into my future"	Both hands circle out and into the body to point at ground [now], then open arms, extend to Y shape [future]

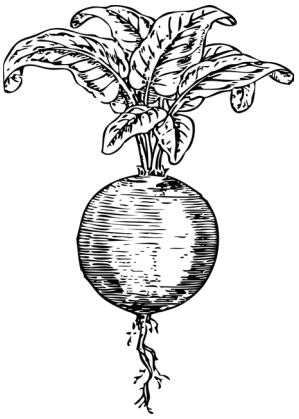
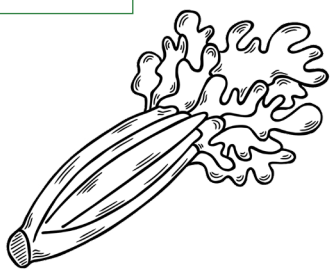
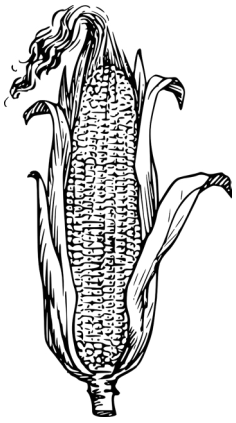
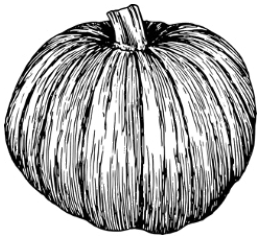
Draw a line to connect the vegetable to its name:

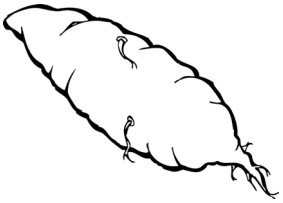
- Celery
- Asparagus
- Lettuce
- Eggplant
- Sweet potato
- Avocado
- Cauliflower
- Mushroom
- Pumpkin
- Broccoli
- Cabbage
- Onion
- Carrot
- Peas
- Corn
- Beetroot

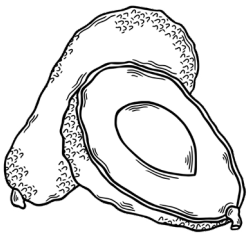
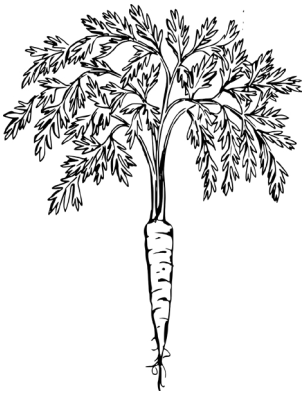


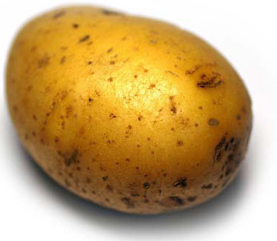






Order the vegetables from 1 - 10
(most to least popular)

BREAKFAST	LUNCH
DINNER	SNACKS

LESSON 2:

Let's understand why vegetables are amazing

Lesson overview

In this lesson students are introduced to the health benefits of vegetables. They learn that plants produce nutrients to protect themselves from disease, insects and the weather, and by eating vegetables the nutrients can help to protect us from sickness. Students explore the different and complimentary nutrients found in vegetables to understand how eating vegetables supports health and wellbeing.

Learning intentions

- Understand that vegetables produce nutrients including minerals, vitamins and fibre
- Understand that vegetables contain water, which helps to hydrate our bodies
- Understand that eating vegetables provides health benefits and eating a range of vegetables delivers the best benefits
- Appreciate that nutrient knowledge helps people make healthier food choices

Curriculum links

YEAR 3					
HPE	**English**	**Mathematics**	**Science**	**Technologies**	**The Arts**
ACPPS036 *ACPPS039*	*ACELY1682*		*ACSSU044* *ACSHE051*		

YEAR 4					
HPE	**English**	**Mathematics**	**Science**	**Technologies**	**The Arts**
ACPPS036 *ACPPS039* *ACPPS040*	*ACELY1694*		*ACSSU073* *ACSSU074* *ACSHE062*	WATPPS22	

General capabilities

- Literacy
- Critical and creative thinking
- Personal and social capability

Resources

- ☐ *Foods we need to eat less often*
- ☐ Worksheet 4 – Nutrients are the superpowers of vegetables
- ☐ Worksheet 5 – Superpowered vegetables
- ☐ Worksheet 6 – Vegetable superpower soup
- ☐ PowerPoint 2 – Vegetables and fruit

- [ ] Fruit platter with lots of different vegetables and fruit
- [ ] Plates – students to place vegetable/fruit

Preparation

- [ ] Obtain access to a PowerPoint display
- [ ] Print Worksheet 4, 5 and 6 – one per student
- [ ] Prepare vegetable and fruit platters

Educator support notes

- Health and wellbeing discussions – try to focus conversations on feeling healthy, strong and energetic as opposed to feeling sick or ill (sympathetic to those who are unwell or have a family member who is unwell). Don't avoid discussing sickness or ill-health, but try to steer conversations toward a positive description of health.
- Vegetables contain nutrients (vitamins, minerals and fibre) and no one nutrient is more important than the other. Eating across the colour group (rainbow) of vegetables provides the greatest health benefits.
- Vitamins and minerals in vegetables can stop us from getting sick. They help us feel healthy, provide energy to run and play, and help us grow and think clearly.
- Fibre in vegetables helps to keep our belly/stomach feeling full and contributes to us being able to toilet regularly. Vegetable fibre stops us from getting constipated.
- Future health – although children tend to live for the day and think less about their futures, it is important to start the conversation that eating well today helps them to be strong, have energy and grow well into their future. Future health issues may appear less important to them at the moment so focus on decisions today supporting the way we feel tomorrow. Knowing about food and how it relates to health can support healthier food choices.
- *REACH OUT* state that setting goals gets you to the places you want to go. It's a process that turns dreams into reality.
- Crunch&Sip® *A to Z of Fruit and Vegetables.*

Activities

Activity 1: Being healthy and well is important

1. Begin by asking students if they can name an everyday and sometimes food. Discuss.

2. Explain that everyday foods are good for health and wellbeing. To be healthy and well is to have:
   - energy to run and play
   - brain power to think and concentrate
   - growing power to be get bigger and strong
   - mending power to repair our bodies when we are injured or sick
   - protection to keep us from getting sick

   Remind students that vegetables are everyday foods providing health and wellbeing benefits.

3. Tell the students that being healthy and well is the body's way of saying or signalling that it is working properly *(if required, provide some examples of things that work properly e.g., a light that turns on or an umbrella that opens properly).* Being healthy and well enables us to do the things in life we like and love such as playing in the park, solving a jigsaw puzzle, building a Lego tower or even growing old with family and friends. Ask:
   - What activities do you do that indicate you are healthy and well?
   - Can you think of new words to describe being healthy and well and your health?
   - What decisions do you make to support your health and wellbeing?

4. Tell students that being healthy and well means that we are not sick. It means we are feeling good, have energy to participate and concentrate at school. Being healthy and well is super important because it allows us to do the things we love to do and achieve our life goals. Discuss goals (short-term and long-term).

5. Invite students to plot activities and life goals on a timeline (select a suitable timeframe based on cognitive capability of class).

6. Display timelines in the classroom. Discuss.

Activity 2: Superpowered vegetables

1. Every student must wash and dry hands.

2. Offer, encourage but don't force class members to take vegetable/fruit from the platter. Discuss.

3. Explain to the students that bodies are just like cars. There are all sorts of cars, all sorts of people and all sorts of bodies. But, cars, like bodies, need good quality fuel to work. You can't put a milkshake into a car and expect it to run properly, it needs good quality fuel to get to a destination. Bodies work in much the same way as cars and require good quality fuel and water to work properly, now and into the future. We, therefore, need to take care of our bodies by what we eat and drink so that we can run and play today, tomorrow, next week, next year and into the future. Vegetables are a great choice of fuel as vegetables are everyday foods that support our health and wellbeing.

4. Ask students:
   - Do you know the specific reasons why vegetables are so good for us?

Activity 2: Superpowered vegetables *(continued)*

5. Tell students that vegetables are fuel for bodies because they contain special qualities called nutrients. We can't see nutrients because they are inside the vegetables and in the vegetable's skin. Nutrients are very special because they protect plants and vegetable plants from diseases, the weather and insects. Nutrients are a bit like superpowers that protect and strengthen the plant or vegetable and because vegetables are bursting with lots of different superpowered nutrients, when we eat them, we consume these nutrients. By eating vegetables, the nutrients help to keep us healthy and well. It's easy for us to know that vegetables are good for us because nutrients are often responsible for the bright and beautiful colours of vegetables and fruits. It's also easy for us to choose vegetable nutrients over other foods because vegetables taste so good.
6. Tell students because they've eaten some vegetables and fruit today, they've also eaten superpowered nutrients.
7. ***Option:***
   - Show the video – *Show younger children why eating fruit and veg is good for them.*
   - Discuss.
8. Distribute Worksheet 4 and instruct students to complete.
9. Re-offer the vegetable and fruit platter if appropriate.
10. Tell students that they can ask for more vegetables and fruit by putting up a hand and using the words: "Can I please have more?" Allow students to ask for more.
11. ***Extension:***
    - Why are vegetable nutrients mutually beneficial to plants and us?
    - What could happen if we don't eat vegetables?
    - What role do vegetables play in our survival?

Activity 3: Superpowered vegetable soup

1. Ask students to recall the special qualities in vegetables?
2. Work through PowerPoint 2 from slide 1 – 5. Discuss each slide and the specific health benefits of the vegetable nutrients.
3. Show slide 6 and invite students to create a superpowered vegetable soup using Worksheet 5. Students should select vegetables from each superpower category to construct their superpowered soup. In the 'why' column, students explain the reason for the vegetable selection. For example, "I like to feel good" or "I like to play sport". Students should consider how the superpowered soup contributes to an activity or a goal.
4. Invite students to share their recipe with the class and allow students to take home to share with parents/carers. Consider inviting parents/carers to make the soup with their child and take a photograph to share with the class.

5. ***Provocation:***
    - Why is nutrient knowledge important?
    - How does knowledge of vegetable nutrients help us make healthier food choices?
    - How can knowledge of foods help people make healthier food choices today and tomorrow?
    - Who should know about vegetable nutrients? Why?
6. Distribute Worksheet 6 and ask the students to come up with a character name for each vegetable, for example, Aspara-Gus, or T-mato. Invite students to colour in the character and then draft an imaginative text about how the vegetable characters helped to achieve a goal. For example, Aspara-Gus provided energy to play netball, Bertie-Beet strengthened a student's heart to run the school's cross country event and Carly Carrot helped the student read a storybook. The story should centre on how the characters' nutrient superpowers supported an activity or a goal!
7. Tell students that vegetables are everyday foods because they are bursting with nutrients that support health and wellbeing.

Additional activities

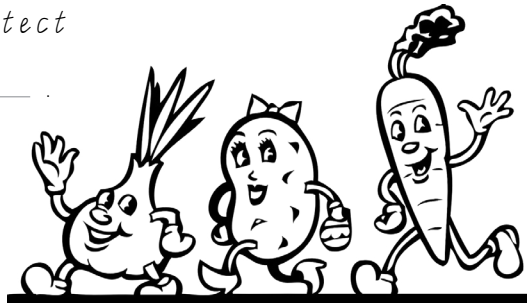
1. Crunch&Sip® *Vegetable Riddles.*
2. Read the storybook 'Growing vegetable soup' by Lois Ehlert.

Extension activity

1. Play the ABC's *Indigestion* game.

FIND THE MISSING WORDS

Vegetables contain _____ to protect them from disease and _____ . Eating lots of different vegetables can give us the _____ of vegies!

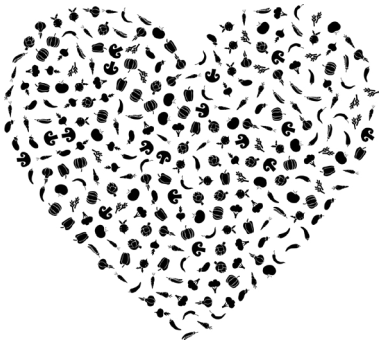


(superpowers. insects. nutrients)

Vegetables contain _____ . Fibre keeps our digestive system _____ and helps us go to the _____ regularly. Broccoli and _____ are high in fibre.

(healthy. carrots. toilet. fibre)

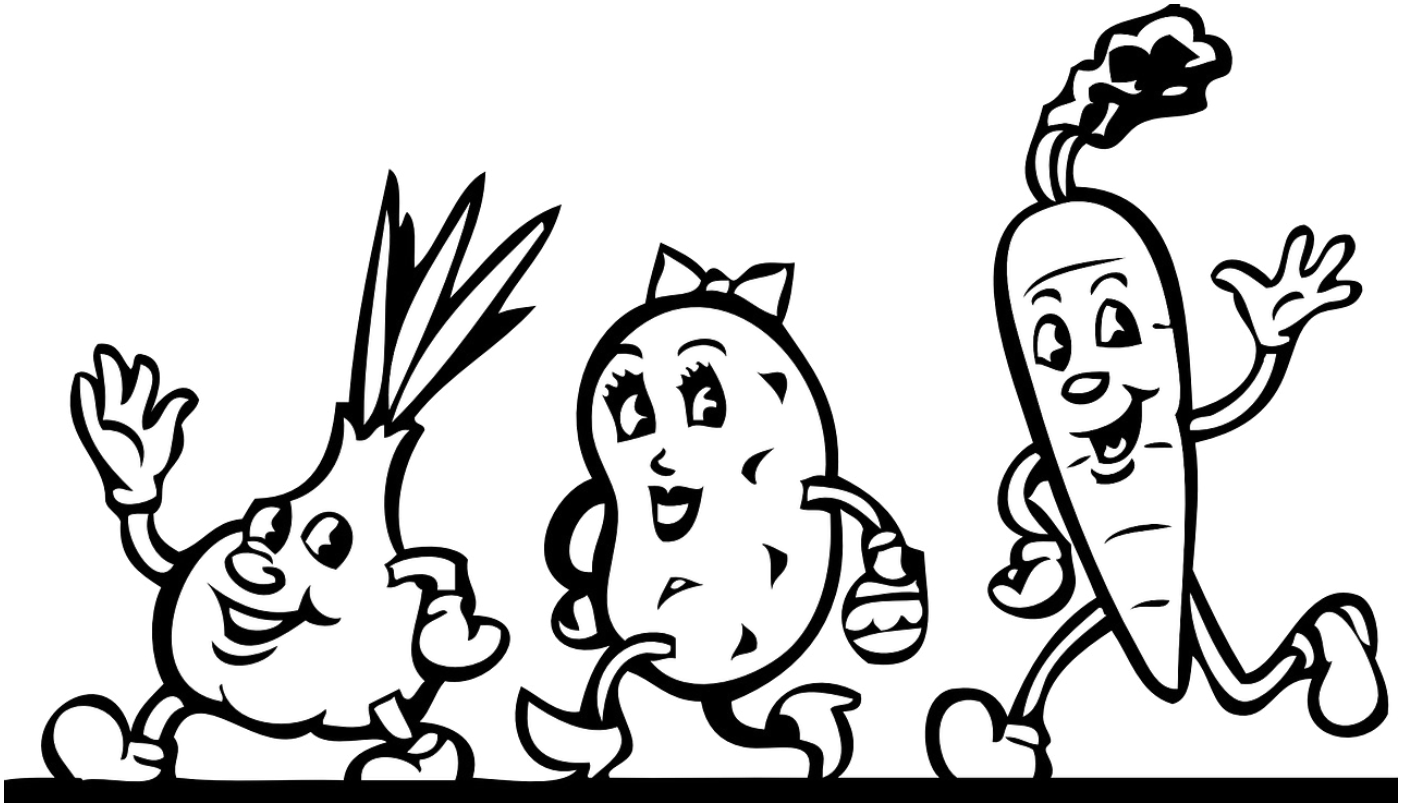
Vegetables contain different _____ and minerals. Vitamins and _____ help move oxygen around the _____ . help our muscles _____ and keep our _____ and skeleton strong!



(heart. minerals. vitamins. work. body)

I eat plenty of different coloured vegetables because:

Superpower	Vegetable(s)	Why
Provides Energy		
Helps brain power		
Supports growth		
Helps vision		
Repairs the body		
Protects the body		
Helps the heart		
Strengthens the body		



Give the superpowered vegetable a name!

LESSON 3:

Let's explore a vegetable rainbow

Lesson overview

In this lesson students explore different coloured vegetables containing different and complimentary nutrients to understand that eating a variety of vegetables from across the rainbow will confer the greatest health benefit. Students construct and consume a vegetable rainbow flag to appreciate the many ways vegetables can be eaten.

Learning intentions

- Understand that vegetables are everyday foods
- Understand that vegetables contain nutrients such as vitamins, minerals, fibre and water to support health and wellbeing
- Understand that vegetables can be classified by colours and eating a range of vegetables from the five colour groups supports health and wellbeing
- Appreciate that nutrient knowledge helps people make healthier food choices
- Prepare a vegetable rainbow flag to eat

Curriculum links

YEAR 3					
HPE	**English**	**Mathematics**	**Science**	**Technologies**	**The Arts**
ACPPS036 *ACPPS039*		*ACMNA055* *ACMSP069*	*ACSSU044* *ACSHE051*		

YEAR 4					
HPE	**English**	**Mathematics**	**Science**	**Technologies**	**The Arts**
ACPPS036 *ACPPS039* *ACPPS040*		*ACMSP095* *ACMSP096*	*ACSSU073* *ACSSU074* *ACSHE062*	WATPPS22	

General capabilities

- Literacy
- Numeracy
- ICT capability
- Critical and creative thinking
- Personal and social capability

Resources

- ☐ Appendix 1 – Parent/Carer letter
- ☐ Appendix 4 – Vegetables
- ☐ Worksheet 7 – Vegetable colour groups
- ☐ Worksheet 8 – Recording vegetable data

- [ ] PowerPoint 3 – Vegetable rainbow
- [ ] Recipes:
  - *Classic hummus*
  - *Carrot and ricotta dip*
  - *Guacamole*
  - *Beetroot hummus*
  - *Mediterranean hummus*

Preparation

- [ ] Send parent/carer letter to support food preparation (dips), food content (vegetables) and participation in Activity 3 (vegetable rainbow flag) – Appendix 1
- [ ] Print Worksheet 7 – one per group (five)
- [ ] Print Worksheet 8 – one per student
- [ ] Print and cut up Appendix 4 – five copies (one per group)
- [ ] Obtain access to an audio visual device for online viewing material
- [ ] Obtain access to PowerPoint display for PowerPoint

Educator support notes

- When talking about nutrients with students emphasis that no one nutrient is more important than the other and that the biggest health benefit is seen when eating across the colour groups to get a range of different nutrients (eating a massive amount of one nutrient won't give you superpowers)
- For information and resources on the nutrients in different vegetables visit *Veggycation*
- Some examples of vegetables from different colour groups and some of the key nutrients they contain are shown below:

Colour group	Vegetable examples	Key nutrients
RED	Tomato, red capsicum, red kidney beans, radish, red skinned potato, red onion, red cabbage	Phytonutrients like lycopene, carotenoids and flavonols. Some red vegetables are also high in vitamin C.
YELLOW and ORANGE	Orange and yellow capsicum, corn, squash, swede, yellow tomatoes	Carotenoids like beta-carotene, lutein and zeaxanthin. Some orange and yellow vegetables also contain good amounts of vitamin A, potassium and vitamin C.
GREEN	Spinach, broccoli, Asian greens, celery, green capsicum, asparagus, cabbage, Brussel sprouts, peas, cucumber, avocado, lettuce, zucchini, kale, green beans, snow peas, sugar snap peas, artichoke, gherkin	A range of phytonutrients including carotenoids, flavonoids and indoles (cabbage, bok choy and broccoli). Leafy greens also contain folate and vitamin K.
BLUE and PURPLE	Eggplant, beetroot, purple cauliflower, purple carrot, purple cabbage, purple asparagus, purple potato, purple capsicum, kohlrabi, purple lettuce	The purple-blue hue shows the presence of anthocyanin, an antioxidant.
WHITE and BROWN	Cauliflower, onion, chickpeas, lentils, leeks, mushroom, potato, garlic, ginger, parsnip, turnip	Commonly contain inulin and allium sulphur compounds. Some members of this group are a source of potassium, vitamin C and folate.

Activities

Activity 1: Vegetable colour groups

1. Split students into five groups. Consider groupings if support is needed especially for point 4 (below) as some students may require assistance to read and pronounce the names of vegetables on the vegetable cards.

2. Remind students that vegetables are everyday foods because vegetables and fruit contain superpowered nutrients that support health and wellbeing. Eating a range of vegetables and fruit is the best way to get the superpowered nutrients contained in different vegetables.

3. Ask students to recall the nutrients in vegetables (minerals, vitamins, fibre and water) and the superpowers that eating vegetables can provide:
   - energy to run and play
   - brain power to think and concentrate
   - growing power to be get bigger and strong
   - mending power to repair our bodies when we are injured or sick
   - protection to keep us from getting sick

4. Use PowerPoint 3 and slide 1 to introduce students to a rainbow of vegetables and fruit.

5. Use PowerPoint 3 and slide 2 to introduce students to the colour groups but don't use the slide animation to reveal the vegetables. Distribute Appendix 4 (vegetables) to each group and instruct students to sort into the five colour groups.

6. Using slide 2, go through each colour group and ask students to name vegetables for that colour. Use the slide animation facility to reveal a list of vegetables for each colour. Read from the list to expand student knowledge of vegetables. Discuss if preferred.

   Note – some vegetables listed on the slide are not included in the vegetable cards (to reduce the amount of cards).

7. Invite students to reorganise the vegetables into colour groupings to match the correct colour as per slide 1. Ask the students:
   - Which vegetable(s) did you colour wrong? Why?
   - Which vegetable(s) were not familiar to you?

8. ***Provocation:***
   - Why is eating a range of vegetables important?
   - Why might we know some vegetables but not others?

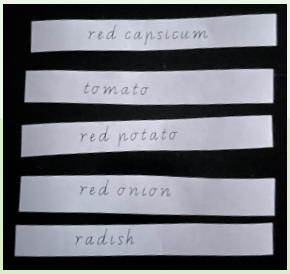
Activity 2: Reporting vegetable colours

1. Students to remain in five groups.

2. Attribute one colour to each student group. Using Appendix 4 (vegetables), instruct each student group to select five vegetables from their colour grouping (for example, green = spinach, broccoli, lettuce, asparagus and cucumber). Using Worksheet 7, the group must record data pertaining to the vegetables. The students create a tally for who has eaten the vegetable, who likes the vegetable and who dislikes the vegetable. Use the below as a guide.

Colour	Vegetable	Eaten		Like		Dislike	
Red	Tomato	𝍸 I	6	𝍸	5	I	1
	Red capsicum	IIII	4	IIII	4		0
	Radish	I	1		0	I	1
	Red onion	II	2	I	1	I	1
	Red potato	IIII	4	III	3		0

3. Instruct the group to sort the five vegetable cards from least to most preferred vegetable on a table (create a tower). Least preferred at the bottom of the tower and most preferred at the top. Students negotiate card placement.



4. Instruct student groups to rotate to a new colour so that each student group visits and records data for each new vegetable. Invite students to discuss and re-arrange the vegetable cards into a new order if required. Repeat rotations until student groups have collected data on each vegetable colour.

5. Distribute Worksheet 7 to each student.

6. Select one vegetable from each colour group. Use a whiteboard to record data as per the below guide (slide 2). Invite each group to share their data for the vegetable. Guide students to follow and record group data onto Worksheet 8.

		Groups					
		1	2	3	4	5	Total
Red vegetable	Eaten						
	Liked						
	Disliked						

7. Instruct students to work as a whole group, individually, in groups or with support to total data for the vegetables: eaten, liked and disliked. Using knowledge of students, invite or support to compute and answer the 10 questions on Worksheet 7.

8. As a whole class, work through and explain the answers.

9. ***Extension:***
   - Construct a data display(s) with or without the use of digital technologies such as a column graph or picture graph to display vegetable data.
   - Evaluate the effectiveness of different data displays.
   - Organise vegetable data according to number sequences such as most liked to least liked.
   - Use text to describe data.
   - Solve word problems containing vegetable data by using number sentences involving multiplication or division where there is no remainder.

Activity 3: Vegetable rainbow flag

1. Every student must wash and dry hands.

2. Ask students:
   - Why is eating a rainbow of vegetables important for health and wellbeing?
   - What nutrients can be found in vegetables?
   - How does knowledge of nutrients in vegetables help us make healthier food choices?
   - What is an everyday food?
   - What is a sometimes food?

3. Remind students that vegetables come in lots of different colours and different coloured vegetables contain different nutrients. If you eat a rainbow of vegetables you will get all the nutrients you need to be healthy.

4. Let students know that they will work to create a vegetable rainbow flag that can be eaten.

5. Remind students of the importance of following kitchen safety rules when preparing and cooking food. Discuss the rules below. See if students can suggest some consequences of following the rules (e.g., don't get burnt, safe from knife injuries).

Food Safety	**Kitchen Safety**
• Wash and dry your hands before preparing food and after coughing or sneezing • Long hair needs to be tied back • Make sure cooking equipment and benches are clean before preparing food • Make sure cooking equipment and benches are cleaned properly when finished • Keep cold food cold and hot food hot • All rubbish and food scraps go into the bin or compost • Wash fruit and vegetables before preparing • Don't let raw meat touch other food	• Have an adult supervising at all times • Wipe up spills immediately • Use safe knife cutting techniques • No running where food is being prepared • Turn handles of saucepans towards the back of the stove/cooktop will cooking • Use oven mitts when taking something out of the oven • Wear closed in shoes • Don't put knives in the sink

6. Divide the students into five groups and assign each group one of the following roles:
   - Prepare and chop red capsicum into slices for a capsicum platter.
   - Prepare and chop orange carrots into slices for a carrot platter.
   - Prepare and chop celery sticks into slices for a celery platter.
   - Prepare and chop tortilla into strips for a tortilla platter.
   - Prepare and chop apples into strips for an apple platter.

   Each group is required to create a platter with the vegetable and tortilla slices/strips.

7. Position dips and platters at five stations in the classroom.

8. Distribute a plate and safety knife to each student. Alternatively have one or two safety knives at each station for dip spreading.

Activity 3: Vegetable rainbow flag *(continued)*

9. Invite students to collect five vegetable strips/slices from each vegetable platter and using the safety knife, spread a different vegetable dip onto each of the vegetables. For example, guacamole onto a tortilla strip. Invite students to arrange their vegetables strips to create a unique vegetable rainbow flag. Consider taking a photo of the student with their vegetable rainbow flag.
10. Enjoy eating their vegetable rainbow flag creation.
11. Tell students that they can ask for more vegetables and fruit by putting up a hand and using the words: "Can I please have more?" Allow students to ask for more.
12. Clean up food preparation area and wash and dry dishes.

Additional activities

1. Create recipe cards to describe and record vegetable rainbow flag creations.
2. Construct a media story reporting the vegetable rainbow flags.
3. Explore natural vegetable dyes to create vegetable inspired art:
   - *Use onion skins and leaves to dye eggs*
   - *Use beetroot dye to paint*
   - *Making natural dye using vegetables*
   - *How to make natural paint for kids from food at home*

Extension activity

1. Detailed vitamin and mineral information is shared at *Fruit and Veggies Nutrition Song.* Suitable for extension students only.

TOMATO	RED CAPSICUM
RADISH	POTATO
ONION	CABBAGE
CARROT	PUMPKIN
SWEET POTATO	SWEET CORN
SPINACH	BROCCOLI
CELERY	ASPARAGUS
BRUSSEL SPROUT	PEAS
CUCUMBER	AVOCADO
LETTUCE	ZUCCHINI
KALE	GREEN BEANS
SNOW PEAS	EGGPLANT
BEETROOT	PURPLE CARROT
PURPLE CABBAGE	CAULIFLOWER
CHICKPEA	LEEK
MUSHROOM	GARLIC
PARSNIP	TURNIP

Colour	Vegetable	Eaten	👍	👎
RED				
ORANGE/ YELLOW				
GREEN				
PURPLE/BLUE				
WHITE/BROWN				

Colour	Task	1	2	3	4	5	Total
RED	Eaten						
	Liked						
	Disliked						
ORANGE/ YELLOW	Eaten						
	Liked						
	Disliked						
GREEN	Eaten						
	Liked						
	Disliked						
PURPLE/BLUE	Eaten						
	Liked						
	Disliked						
WHITE/BROWN	Eaten						
	Liked						
	Disliked						

1. How many students had eaten the red vegetable? _____
2. How many students liked the white/brown vegetable? _____
3. How many students disliked the green vegetable? _____
4. How many of the students who had eaten the orange/ yellow vegetable had not liked it? _____
5. How many more/less students had eaten the red vegetable than the purple/blue vegetable? _____
6. In total, how many red and green vegetables were eaten? _____
7. Which vegetable was disliked the most? _____
8. Which vegetable was liked the most? _____
9. How many vegetables were eaten in total? _____
10. Which group had eaten the most green vegetables? _____

LESSON 4:

Let's understand how plants and vegetable grow

Lesson overview

In this lesson students learn that plants and vegetables grow below, above and along the ground. They explore the parts of edible plants eaten as vegetable. Students learn that plants have a growth cycle and make their own food through a process known as photosynthesis. Student conduct an experiment to grow carrot tops.

Learning intentions

- Understand that plants and vegetables grow above, below and along the ground
- Understand that vegetables are part of an edible plant and different vegetables come from different parts of edible plants including seeds, root, leaves, stem and fruit
- Understand plants have a growth cycle and need the right conditions to grow
- Prepare vegetables for eating

Curriculum links

YEAR 3					
HPE	**English**	**Mathematics**	**Science**	**Technologies**	**The Arts**
ACPPS036	*ACELY1677*	*ACMSP069*	*ACSSU044* *ACSHE051*	*ACDEK012*	

YEAR 4					
HPE	**English**	**Mathematics**	**Science**	**Technologies**	**The Arts**
ACPPS036 *ACPPS040*	*ACELY1689*	*ACMSP096*	*ACSSU072* *ACSSU073* *ACSSU074* *ACSHE061* *ACSHE062*	*ACDEK012*	

General capabilities

- Numeracy
- Critical and creative thinking
- Ethical understanding
- Personal and social capability
- Intercultural understanding

Resources

- ☐ Appendix 1 – Parent/carer letter
- ☐ A4 signs for the letters – A, B, C and D

- [ ] A4 signs for the words – seed, root, stem, leaves, flower and fruit
- [ ] PowerPoint 4 – Where and How do plants grow?
- [ ] PowerPoint 4 – Choose-a-Corner activity for parts of a plant
- [ ] ABC Education – *Plant Scan Game*
- [ ] Worksheet 9 – Photosynthesis
- [ ] Storybook 'Photosynthesis' by Rebecca Woodbury
- [ ] Carrots (preferably with stems and leaves), knife, chopping board, shallow dish/container, cotton wool and water
- [ ] Permanent markers
- [ ] Worksheet 10 – Carrot Tops Growing Journal
- [ ] Vegetable peelers, soup bowls, spoons and soup cooking equipment such as a thermos cooking device
- [ ] *Carrot soup recipe* and ingredients – carrots, onions, garlic, vegetable stock, salt and pepper

Preparation

- [ ] Send parent/carer letter to support food preparation (soup), food content (carrots), thermo cooking devices and participation in Activity 3 (carrot soup) – Appendix 1
- [ ] Print A4 signs – A, B, C, D, seed, root, stem, leaves, flower and fruit
- [ ] PowerPoint 4 – Explore PowerPoint animations for slide 5
- [ ] PowerPoint 4 – Pre-select from either slide 15 or 16, using knowledge of the class. Note – slide 15 is more detailed with complex information in comparison to slide 16. Slide 16 will require additional unpacking
- [ ] Access storybook 'Photosynthesis' by Rebecca Woodbury or review additional resources ideas for online learning
- [ ] Obtain access to an audio visual device for online viewing material
- [ ] Obtain access to PowerPoint display for PowerPoint
- [ ] Print Worksheet 9 and 10 – one per student

Educator support notes

- Plants need the right conditions to grow. Most plants need soil, sunlight, water, air and food (nutrients) to grow. However, these conditions differ from plant to plant, for example, some plants don't need soil to grow such as pea sprouts.
- Plants grow in, above and along the ground.
- Plant growth cycle = seed, sprout, small plant and adult plant. The seed sprouts roots and a shoot (seedling). The shoot grows leaves (small plant). The plant continues to grow to produce flowers and fruit (adult plant).

- Plants make food through a special process called photosynthesis. Photosynthesis is a process where plants convert light from the sun into food. Photosynthesis is a bit like a recipe where special ingredients are used to make plant food. Photosynthesis takes place in the leaves of a plant. Leaves contain chlorophyll (a substance that gives leaves their colour) which traps the sunlight to produce food.
- Try to access and utilise small carrots with stems and leaves as these carrots show the whole plant and are often sweeter when eaten.
- There are lots of carrot soup recipes available online. The recipe chosen is Australian (measurements) and very simple. Ingredients such as onions and garlic could be reduced or removed but will effect taste. An all-in-one thermo cooker or cooking blender would speed up the cooking process.

Activities

Activity 1: What do we know about vegetable plants?

1. Begin by asking students: "Do you know where vegetables grow?" Show PowerPoint 4 – slide 1.
2. Use PowerPoint 4 and share slides 2-5. Discuss each slide and ask for other vegetable examples for each slide.
3. Remind students that vegetables are bursting with nutrients that support our health and wellbeing. We grow and eat vegetables because they are good to eat and bursting with nutrients. Different vegetables are different parts of an edible plant.
4. Show slide 6 and ask students do they know how plants grow? Move to slide 7 and use the animations to review or teach the plant growth cycle. Discuss.
5. ***Option:*** Show the video: *Growing Beans Time Lapse.*
6. Ask students to indicate via a show of hands, if they have heard of the term(s): edible plant, seed, root, stem, leaves, flower and fruit. Use student responses to guide point 4 below. Remind students it is ok not to know these terms as today's lesson will explore the parts of a plant and how plants work.
7. Introduce students to Choose-a-Corner activity using PowerPoint 4 (slide 8). Point to the four letters in each corner of the room (A, B, C and D) and use the animations on slide 8 to explain the activity. Use below as a guide.
   - Slide: students will be required to choose a corner in response to a question.
   - Question: "Which vegetable on the slide is different or does not fit with the rest?"
   - Move: students are to move to the corner of the room that represents the vegetable that does not fit – the vegetable that is the odd one out.
8. Progress to slide 9 and instruct students to choose and move to the correct corner of the room. If required, support students to recognise the difference between the vegetables. Discuss. Repeat and discuss for slides 10-14.
9. ***Option:***
   - Select and use either slide 15 or slide 16.
   - Explain each part of a plant and go through examples.
10. Distribute vegetable and fruit cards – Appendix 2 and invite students to organise according to seed, root, stem, leaves, flower and fruit. Discuss.
11. Explain that edible plants are good to grow because the parts we eat are delicious and full of nutrients. The remainder parts can be given to animals for food or used to create new plants and garden compost.
12. ***Option:***
    - Assist students to access and play the *Plant Scan Game.*
13. Discuss the game.

Extension activity: Student graph

1. Place A4 signs: seed, root, stem, leaves, flower and fruit at different points in a classroom.
2. Ask students to move to the sign, the part of an edible plant they like to eat the most.
3. Remind students that it is ok to like different vegetable parts to friends or peers. Explain that sometimes we eat the same vegetables as our friends, peers or other families but we also eat different vegetables too and this is ok. What we like to eat makes us similar but also different and similarities and differences makes us special.
4. Record student data numerically on a whiteboard.
5. Students work individually, in pairs or in groups:
   - Select and transfer numerical data into a picture graph or column graph.
   - Use digital technologies to display data.
6. Students share and explain data displays.

Activity 2: What do plants need to grow?

1. Ask students to share stories of when they have grown plants at home.
2. Ask the class what things plants need to grow (soil, sunlight, water, air, nutrients). Relate that plants are like children and need the right conditions to grow. Students need food, water, sleep, care, safety and lots of love to grow. Plants need soil, sunlight, water, air, nutrients and some care to grow.
3. Explain – plants are very special because plants can make their own food. Plants make food through a special process called photosynthesis. Photosynthesis is a process where plants convert light from the sun into food. Photosynthesis is a bit like a recipe where special ingredients are used to make plant food. Photosynthesis takes place in the leaves of a plant. Leaves contain chlorophyll (a substance that gives leaves their colour) which traps the sunlight to produce food.
4. ***Option:***
   - Watch and discuss the online learning: How plants work – ABC Education.
   - Watch and discuss the online learning: *Photosynthesis – Dr Binocs Show.*
5. Distribute Worksheet 9 and instruct students to fill in the missing words and colour in the objects. Assist where needed.
6. ***Option:***
   - Read the storybook 'Photosynthesis' by Rebecca Woodbury. Discuss the characters, storyline and the use of images.
   - View alternatives online by searching: 'Photosynthesis teaching resources'.

Activity 2: What do plants need to grow? *(continued)*

7. Support students to develop a summary of photosynthesis, providing key details in logical sequence. Consider using content frames to develop the summary. Use the below as a guide or simplify further.

Plants make their own food			
Carbon dioxide is absorbed from the air by small particles in the leaves called stomata.	Water is absorbed by the roots and passes through the stem on the way to the leaves.	Sunlight is absorbed by a green chemical in the leaves called chlorophyll.	Photosynthesis takes place in the leaves of plants. Photosynthesis produces oxygen + glucose. Oxygen is expelled in the air and glucose is plant food.

8. Remind students that plants and vegetable plants are the only living thing that can produce their own food. Humans can produce food at a special time and this food is breastmilk for babies. Mothers of newborn babies are able to produce milk for their babies but they must also eat vegetables and other animals to produce milk. Therefore, plants not only contain nutrients but produce their own food. Eating vegetables plants is a choice we can make to support health and wellbeing.

9. ***Extension:***
   - Students create a PowerPoint to share summary notes.
   - Students present summary to class using notes.
   - Students rehearse and present summary with limited notes.

Activity 3: Growing carrot tops

1. This activity is best supported with parent/carer supervision.
2. Every student must wash and dry hands.
3. Inform students that they will be growing carrot tops from carrots to collect carrot seeds.
4. Explain that carrot tops will not grow into the root vegetable or a carrot. Once you remove the root vegetable from the plant, it can't regrow. This is a bit like we can't regrow a finger or an arm. However, carrot tops can grow the leaves of the carrot plant, which if grown for long enough will produce flowers and then seeds.
5. Distribute carrots, chopping boards, cottonwool, container, permanent markers and knives to students. Instruct students to:
   - Write their name on the container using the permanent marker.
   - Use knife skills to safely chop 2-3cm from the top of the carrot.
   - Place a layer of cottonwool balls into a container and soak but don't flood with water.
   - Place and press the carrot top into the cottonwool.
   - Place in a sunny position in the classroom.
6. Observe plant growth and record observations on Worksheet 10.

Activity 3: Growing carrot tops *(continued)*

7. ***Differentiation:***
   - Option 1 – Invite students to peel and chop the remainder carrots to share for Crunch&Sip®.
   - Option 2 – Invite students to collaborate with parent/carer help to prepare carrot soup.
8. Break for Crunch&Sip® and invite students to share carrot selection (point 7) together but don't force. Enjoy.
9. Tell students that they can ask for more carrots or carrot soup by putting up a hand and using the words: "Can I please have more?" Allow students to ask for more.
10. Remind students that carrots can be eaten every day and are an everyday foods. We can eat vegetables and fruit every day because they help us feel good. Vegetables give us energy to run and play, they help us grow and keep from getting sick. We also drink water to survive.

Additional activities

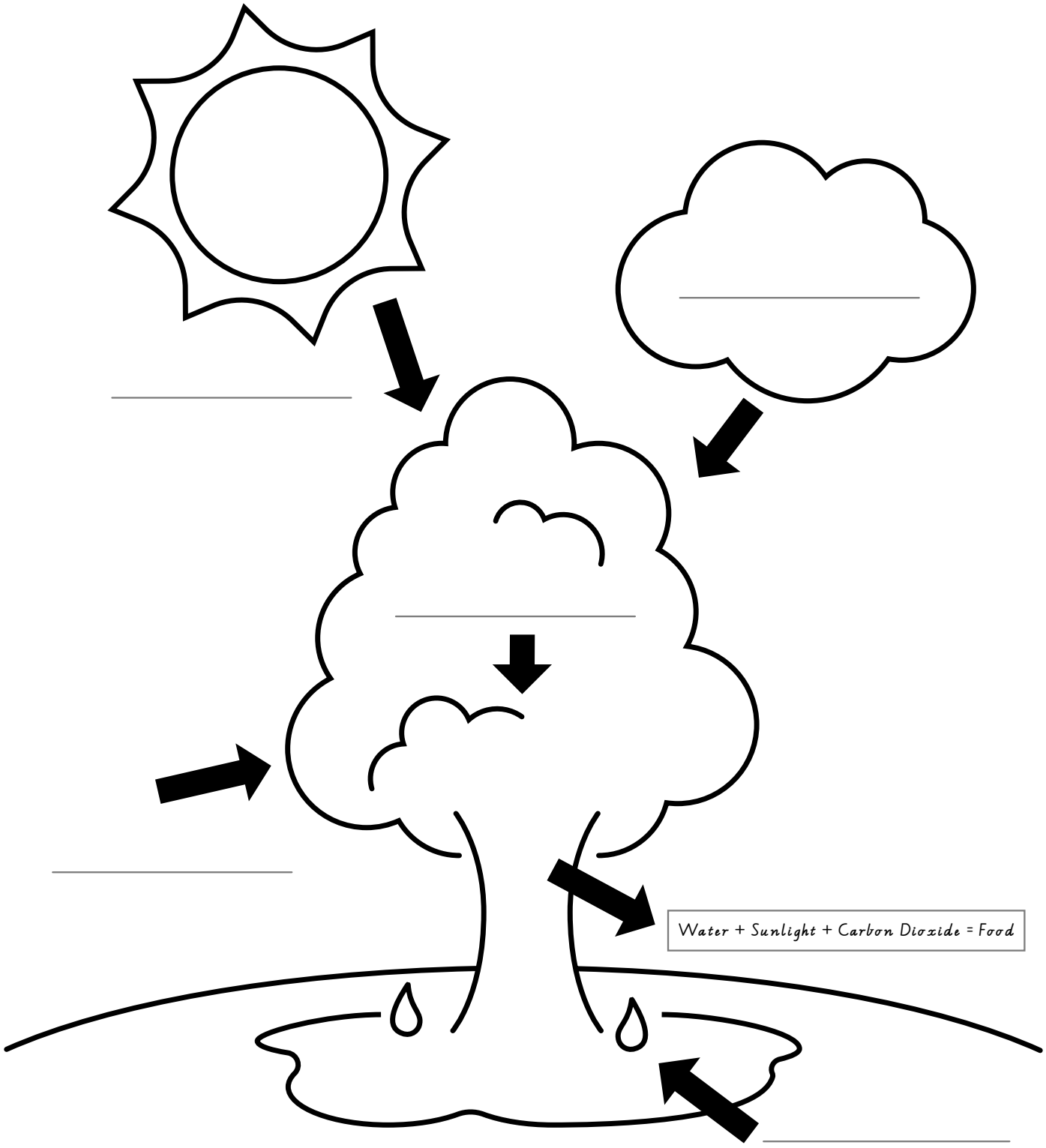
1. Watch the animated video: *What is germination of a seed?*
2. Watch the animated video: *Parts of a plant for kids.*
3. *Photosynthesis* song.
4. *Learn about photosynthesis* song.
5. Chlorophyll experiment – place a healthy leaf by a window for several days. Cover part of the leaf. Compare the uncovered to covered part of the leaf. Chlorophyll gives leaves their colour and without sunlight, the leaves lose that colour.
6. *Chromatography* experiment.

Want to take the next step in growing a vegetable garden in your school?

- Radishes and salad greens are a great vegetable to start with when gardening with children as they are quick to grow and can be planted most of the year.
- Check out the *Stephanie Alexander Garden Foundation* resources to help get you started with a kitchen garden or other great projects and check out the *Instagram* page for inspiration.
- Apply for *Junior Landcare Grants* to get garden beds or other garden projects started at your school.
- Many local councils offer school groups the opportunity to apply for a small grant to fund projects such as developing a food garden, composting system or worm farm. Visit the website of your local Government council for further details.

Want to take the next step in growing a vegetable garden in your school? *(continued)*

- Check out Bunnings *Garden Corner* for more information on growing plants. Alternatively and when permitting, Bunnings regularly helps schools and kindergartens by providing hands on assistance with their projects. If you would like further information contact Bunnings *Workshop Community* or visit your local Bunnings store.
- *Beyond Gardens* deliver garden workshops for school and community groups throughout the Perth Metropolitan area and Regional WA.
- Rural, Remote and Indigenous Gardens is an evolving and dynamic space sharing knowledge of garden projects to support food security and wellbeing. Use an Internet search engine to explore, and expand this space.
- The Eon Foundation build edible gardens in remote Aboriginal schools and communities for more information go to *Growing Healthier Communities.*

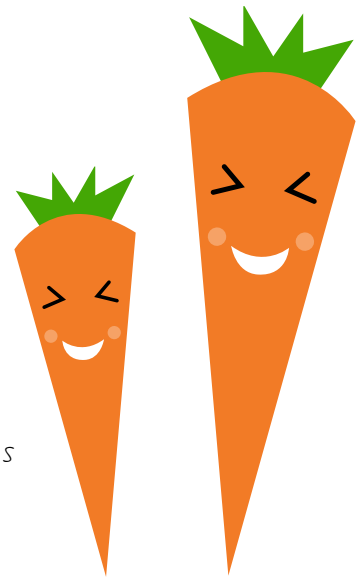


Find the right place for the below words:

Sunlight. Rain. Water. Carbon Dioxide. Chlorophyll in the leaves

In the boxes, draw a picture of your vegetable plant and write down any observations you make e.g., size, colour, number of leaves, any insects present.

You could also take photos of your plant each week and create a photo diary!



DAY 1

Notes:

DAY 2

Notes:

DAY 3

Notes:

DAY 7

Notes:

WEEK 2

Notes:

WEEK 3

Notes:

WEEK _

Notes:

LESSON 5:

Let's grow edible plants together

Lesson overview

In this lesson students plan a simple experiment to see the effect of light on seed germination and plant growth. Students gain knowledge and skills in the scientific method as well as developing confidence in growing plants. This hands on activity is designed to engage students and increase their understanding of how the food they eat is produced.

Learning intentions

- Understand plants need the right conditions to grow
- Understand that plant growth is dependent on light and we can intervene to support plant growth
- Prepare and plant seeds for growing

Curriculum links

YEAR 3					
HPE	**English**	**Mathematics**	**Science**	**Technologies**	**The Arts**
ACPPS036	*ACELY1682* *ACELY1684*		*ACSSU044* *ACSHE051* *ACSIS054*	*ACDEK012*	*ACAVAM111*

YEAR 4					
HPE	**English**	**Mathematics**	**Science**	**Technologies**	**The Arts**
ACPPS036 *ACPPS040*	*ACELY1694* *ACELY1696*		*ACSSU072* *ACSSU073* *ACSHE061* *ACSHE062* *ACSIS065*	*ACDEK012*	*ACAVAM111*

General capabilities

- Literacy
- Critical and creative thinking
- Ethical understanding
- Personal and social capability

Resources

- ☐ Carrots grow underground by Mari Schuh
- ☐ Obtain access to the *Fair Test Game* available on Scootle
- ☐ Obtain clear planter pots at local garden centers or hardware stores

- [ ] Water spray bottle
- [ ] Obtain microgreen seeds at local garden centres
- [ ] Cotton wool and small re-useable food containers (must be able to take water)
- [ ] Obtain microgreen growing trays from local gardening stores or replace with reuseable containers
- [ ] Obtain carrot seeds from local garden stores
- [ ] Worksheet 11 – Growing carrots story board
- [ ] Worksheet 12 – Class growing journal

Preparation

- [ ] Obtain access to storybook 'Carrots grow underground' by Mari Schuh
- [ ] Obtain access to audio visual display or student viewing technology such as laptop or tablet
- [ ] Print Worksheet 11 and 12 – one per student or as preferred
- [ ] Collate carrot and microgreen growing materials

Educator support notes

- Plants need the right conditions to grow. Most plants need soil, sunlight, water, air and food (nutrients) to grow. However, these conditions differ from plant to plant, for example, some plants don't need soil to grow such as pea sprouts.
- Plants make food through a special process called photosynthesis. Photosynthesis is a process where plants convert light from the sun into food. Photosynthesis is a bit like a recipe where special ingredients are used to make plant food. Photosynthesis takes place in the leaves of a plant. Leaves contain chlorophyll (a substance that gives leaves their colour) which traps the sunlight to produce food.
- Western Australia (WA) is perfect for growing vegetables.
  - » Sunny
  - » Lots of space for vegetables to grow
  - » Good soil conditions with drainage
  - » Availability of additional food fertilizer or compost
  - » Mild winters and hot summer for year-round production
- Carrots
  - » WA produces high quality carrots that are grown for more than 15 countries worldwide
  - » Highest or top vegetable grown in WA
  - » 16 weeks form sowing in warmer months and 24 weeks in cooler months
  - » Highest nutritional value of beta-carotene, which give carrots the bright orange colour
  - » Purple carrots contain different nutrients and antioxidants to orange carrots
- To explore the right time to grow vegetables and fruit in Perth/WA explore the *Seasonal Food Guide.*

Activities

Activity 1: Carrots grow underground

1. Begin by explaining that today we will explore carrots as a way to explore the plant growth cycle and understand how to grow carrots.

2. Share with students that carrots are high in a nutrient called beta-carotene, which supports heart health, vision and health and wellbeing. We know carrots have the special nutrient called beta-carotene because of the bright orange colour. Purple carrots contain other nutrients which are just as good for health and wellbeing.

3. Read the storybook 'Carrots grow underground'. Discuss the storyline and carrot growth cycle with students.

4. ***Provocation:***
   - What type of book is this storybook?
   - How is the book organised? Why?
   - How is language used to describe the setting in the text?
   - How are images used to support the text?
   - Is there a plot? Why or why not?

5. Explain to students that they will develop a storyboard using Worksheet 11 to document how carrots grow. Students will be assisted by a short timelapse video to develop a sequence of plant growth similar to the storybook.

6. Share a few facts about carrots and growing vegetables:
   - WA is a great place to grow carrots because it has lots of sun and mild winters.
   - WA produces high quality carrots that are grown for sale to more than 15 countries worldwide.
   - Carrots are the top vegetable grown in WA.
   - Carrots take approximately 16 weeks form sowing to harvest in warmer months and about 24 weeks in cooler months.
   - Different vegetables and fruit require different conditions to grow. For example, Mangoes are grown in the far north of WA due to the climate in this area.
   - Some vegetables and fruit are seasonal, growing better at particular times of the year. For example, strawberries grow better in spring and summer. See the *Seasonal Food Guide* for more information.

7. ***Differentiation:***
   - Option 1 – whole class activity
     - » Show the online video: *Carrot Growing from Seed Time Lapse – 100 Days*.
     - » Invite students to take notes and develop a sequence of growth – discuss notes.
     - » Use notes to complete the storyboard.
   - Option 2 – individual or pair activity
     - » Students view the online video at own pace, take notes and develop a sequence of events.
     - » Use note to complete the storyboard.

8. Create a gallery wall of student storyboards and invite students to observe others work.

9. ***Extension:***
   - Students create story books with art work and text.
   - Students create storybooks using technology, photographs or art work, and text.

Activity 2: Growing microgreens and carrots

1. Inform students that they will be designing an experiment to see the effect of light on plant growth.
2. Invite students to think about the conditions that plants need to grow. Explain that Western Australia is perfect for growing vegetables.
3. ***Provocation:***
   - What do plants take from the environment in order to grow (sunlight, water, air, nutrients).
   - What interventions can we create to support plants to grow?
   - How can knowledge of plant growth cycles impact vegetable choices?
   - How can knowledge of plant growth cycle support health and wellbeing choices?
4. Remind students that plants require light for photosynthesis and growth.
5. As a class students will design an experiment to test how different amounts of light effect plant growth. Discuss how you will vary the different amount of light different plants receive (e.g., position some plants in full sunlight, some away from direct sunlight, and some covered in a box).
6. Students will develop a hypothesis about which light condition make plants grow the quickest. Explain that a hypothesis is an educated guess about what will happen.
7. As a class, plant microgreen seeds on cottonwool in a container and carrot seeds in pots (consider see-through pots to view plant growth). Place the pots in different classroom locations so they receive different amounts of light.
8. ***Option:***
   - Place some carrot pots outdoors in different locations.
   - Plant carrot seeds in growing beds outdoors.
   - Allow students to take seeds home to plant.
9. Decide on a watering roster and choose a time each week to measure the height of the plant using a ruler. Record this information in the table on the 'Class growing journal' (Worksheet 12).
10. Students may also take photos of their plants each week. Photos can be printed out and used to create a poster showing plant growth under different light conditions.
11. Once the data has been collected over a number of weeks, discuss the results as a class. Some example discussion questions include:
    - Under which light conditions did seedlings first emerge for the soil? (i.e., plants in full sunlight, limited sunlight, shade, or in the darkness.
    - Under which light conditions did plants grow the quickest?
    - Was there a difference in the colour of plants grown under different light conditions? Why this might be?
    - How do your observations compare with what you expected to happen?
    - What can you conclude about the relationship between sunlight and plant growth from this experiment?
12. Microgreens will grow quickly and can be consumed in Crunch&Sip® break.

Additional activities

1. *Crunchy carrots from farm to fork* is an excellent video production by the multinational grocery merchandiser Tesco, capturing the growth and production for sale of carrots. However, this video production is from the United Kingdom so adaption for Australian audiences is required, specifically with reference to the country and time when to grow carrots. Don't be put off as suitable explanation is an easy fix and the video is an engaging and succinct watch for young children.
2. Cover the front and back of a leaf on a plant with paper and tape to block the light. Continue to provide the plant with water. After seven days, uncover the leaf and observe the results.
3. As a class, create a line graph or picture graph to show how plant height over the time for the three light conditions.
4. Write up a lab report for the experiment including a title, aim, hypothesis, materials, method, results and conclusions. This can be done as an assignment task.
5. Access from the App store Edith Cowan University's educational game *Farm to Fork.*

Extension activity

1. Use the online game *Fair Test* to explore the effect of varying environmental conditions (light intensity, light duration, temperature or nitrogen) on the growth of vegetable plants.

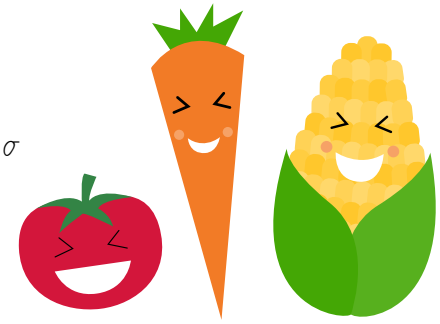
Additional or alternate resources

- ☐ Lettuce grows on the ground by Mari Schuh
- ☐ Tomatoes grow on vines by Mari Schuh
- ☐ Blueberries grow on a bush by Mari Schuh
- ☐ Apples grow on a tree by Mari Schuh

WORKSHEET 11: GROWING CARROTS STORY BOARD

Each week record the height of your vegetable plants grown in full sun, part sun and with no sun. Record any other observations you notice.

You could also take photos of your plants each week to create a photo diary!



Week	Light conditions	Height (cm)	Other observations
1	No sun		
	Part sun		
	Full sun		
2	No sun		
	Part sun		
	Full sun		
3	No sun		
	Part sun		
	Full sun		
4	No sun		
	Part sun		
	Full sun		
5	No sun		
	Part sun		
	Full sun		

LESSON 6:

Let's explore bush tucker

Lesson overview

In this lesson students are introduced to Australian bush tucker foods and conduct research to learn more about one of the bush tucker vegetables. The significance of bush foods in traditional Aboriginal Australian culture is explored.

Learning intentions

- Understand bush tucker as food native to Australia
- Understand bush tucker as nutritious and healthy
- Appreciate the significance of Aboriginal knowledge and connection to the land, sea, sky and waterways
- Appreciate the significance of Noongar seasons to Noongar food choices and health and wellbeing

Acknowledgment

Crunch&Sip® acknowledges and thanks the NACC for the availability of the teaching resource: *Sharing Noongar Knowledge.* This significant resource informs learning in Lesson 6.

Curriculum links

YEAR 3					
HPE	**English**	**HASS**	**Science**	**Technologies**	**The Arts**
	ACELY1682	*ACHASSK066* WAHASS28 WAHASS29	*ACSHE050*	*ACTDEK012*	*ACAVAM111*

YEAR 4					
HPE	**English**	**HASS**	**Science**	**Technologies**	**The Arts**
	ACELY1694	*ACHASSK089* WAHASS28 WAHASS29	*ACSHE061*	*ACTDEK012*	*ACAVAM111*

General capabilities

- Literacy
- Critical and creative thinking
- Intercultural understanding

Resources

- ☐ PowerPoint 5 – Bush tucker
- ☐ *Bush Food* – ABC

- [ ] *Sharing Noongar Knowledge* is a free downloadable resource available from the *NACC Educational Resources*
- [ ] Worksheet 13 – Word sleuth A
- [ ] Worksheet 14 – Word sleuth B

Preparation

- [ ] Obtain access to PowerPoint display for PowerPoint
- [ ] Print Worksheet 13 or Worksheet 14
- [ ] Print or download *Sharing Noongar Knowledge*

Educator support notes

- Bush tucker or bush foods are native foods to Australia and used by Aboriginal peoples for sustenance.
- Hunter gatherers' live a lifestyle whereby food is collected by foraging for plants and hunting for wildlife or animals.
- Tree sap or gum carries nutrients, minerals, energy and food to the branches of trees in growth time, and supports new growth (buds) in spring-time. Sap can be compared to the blood or nutrient delivery system of trees. Sap or gum is made of sugars from the process of photosynthesis and can be sticky and thick, and jam like or looser in consistency like syrup that is drizzled over biscuits or pancakes. The most well-known edible sap is from the Sugar Maple tree, which is sold in supermarkets as Maple Syrup. Sap oozes from trees at points where the tree has been damaged, just like we bleed when injured. You don't want to get sap onto clothes as it is very difficult to remove.
- Worksheet 13 is less complex than Worksheet 14. Select the most appropriate word sleuth for your class.
- Gambay – *First languages map* is an easy resource to establish the Aboriginal and Torres Strait Islander languages favoured by a local community.

Activities

Activity 1: Bush food

1. Show PowerPoint 5 and invite students to identify the bush fruits on the slides. Consider taking a tally count to record student knowledge. Discuss student knowledge or lack of knowledge.

2. Ask students:
   - Have you heard the term bush tucker? What is it?
   - Has anyone tried any bush tucker? Where? When? Why?
   - Has anyone grown any bush tucker?

3. Explain to students that life in Australia was very different before European settlement. Aboriginal people lived a hunter gatherer lifestyle (ask if anyone knowns what the term hunter gatherer means) and they had to have good knowledge of the land and plants in order to survive. In WA, traditional Noongar people were guided by the Noongar seasons (six) when hunting and gathering foods. They relied on nature to tell them what vegetables and fruit were available and bountiful, and to make healthier food choices. The kind of vegetables and fruit that Aboriginal people ate during these times was very different to what we see in the supermarket today.

4. Tell the students that bush tucker and bush foods are nutritious, everyday foods supporting health and wellbeing. Bush tucker provides energy to run and play, nutrients to help us feel good, grow, concentrate and make decisions, and keep from getting sick. Some bush tucker foods are specifically used for medicinal purposes.

5. Show students the online video *Bush Food.*

6. Discussion questions:
   - What bush foods were mentioned in the online video?
   - Do you ever see bush foods at the supermarket?
   - Why is it important for younger generations to learn about bush tucker?

7. ***Optional activities:***
   - Obtain and share bush foods for student tasting and/or observation.
   - Explore bush tucker cooking.
   - Explore *Noongar seasons* and how Aboriginal use this knowledge to gather food.
   - Investigate the name of the traditional owners of the land on which the school is built. Refer to the Aboriginal Australia language map to assist.
   - Investigate other languages and ask students what they notice about the language groupings? (Many different languages, no dominant language).
   - Explain that Country is defined by the different language groupings and each language group has unique customs, beliefs, history and laws.
   - Compare Aboriginal language groupings to Australian state and territory boundaries.

8. Introduce students to the resource *Sharing Noongar Knowledge – Bush Food.* Explain that the resource explores bush foods available in WA. Other bush foods are available in other areas of Australia such as Warrigal greens and Lemon Myrtle (Queensland). Discuss the resource.

Activity 1: Bush food *(continued)*

9. Using the resource *Sharing Noongar Knowledge – Bush Food* and any additional research, and working individually, in pairs or in small groups, instruct students to:
   - ***Option 1:*** Identify and compile a report on one bush tucker vegetable or fruit (e.g., Warrigal greens, bush tomato, bush yam, milk maids).
   - ***Option 2:*** Assign a bush tucker vegetable for students' to compile a report.
10. Students develop the report, with or without the use of digital technologies. They include information such as:
    - Scientific name.
    - Describe or draw what the plant looks like.
    - What part of the plant is eaten.
    - What regions in Australia the plant grows.
    - Interesting fact about the plant.
11. Display student reports in the classroom and/or compile a classroom report to be shared with parents/ carers or the school community (as per Option 2).
12. Invite students to share vegetables and fruit specific to other and/or their cultures. Discuss.
13. Remind students that sometimes we eat the same vegetables as other families but we also eat different vegetables and this is ok. What we eat makes us similar but also different and similarities and differences makes us special.

Activity 2: Bush tucker word sleuth

1. Distribute either Worksheet 13 or Worksheet 14 using knowledge of students.
2. Invite students to complete. Discuss additional bush tucker foods.

Activity 3: Collecting Jam Tree Gum

(This activity is taken from the teaching resource Sharing Noongar Knowledge - Bush Food)

1. Ask students:
   - What does 'native' mean when we talk about plants and animals?
   - How many native plants and animals can you list?
   - Have you heard of eating the gum or sap from a tree?
   - What do you think it might taste like?
2. Show the video: *Collecting Jam Tree Gum.*
3. Discuss with students:
   - How did the people in the video describe the gum from the Jam Tree?
   - What are the different ways that gum can be used?
   - How did the child and his grandmother learn about the gum from the Jam Tree?
   - Why do you think it is important that this knowledge is passed on?

Activity 3: Collecting Jam Tree Gum *(continued)*

4. Additional questions to support the above learning:
   - Why is important to know the difference between the Jam Gum Tree and the Manna Gum Tree?
   - What medicinal qualities does Jam Tree Gum contain?
   - What happens when a person is constipated?
   - Why did Aboriginal people use bush medicine?

5. Remind students bush tucker and bush foods are nutritious, everyday foods supporting health and wellbeing. Bush tucker provides energy to run and play, nutrients to help us feel good, grow, concentrate and make decisions, and keep from getting sick. Some bush tucker foods are specifically used for medicinal purposes.

6. Invite students to experiment with a variety of techniques to create artwork depicting Jam Tree Gum collection.

Other video resources

- ☐ *Tuckerbush schools program*
- ☐ *Australian bush tucker food with Helen Lee*
- ☐ *Bush tucker garden*
- ☐ *Native Australian fruit and vegetables*

Additional supporting resource

- ☐ Behind the news – *Bush Food* activity
- ☐ *Noongar Six Seasons* by Edith Cowan University
- ☐ Articles on *Beating around the bush* – The Conversation

Name: _____

BUSH TUCKER VEGETABLES AND FRUIT

A	R	A	O	X	P	S	A	M	P	H	I	R	E	J	W	M	M
U	R	A	C	A	C	I	A	S	E	E	D	S	Y	T	X	P	B
Y	D	A	V	I	D	S	O	N	P	L	U	M	F	T	C	M	U
O	B	P	I	G	F	A	C	E	L	U	A	F	I	J	T	K	S
M	A	C	A	D	A	M	I	A	N	U	T	S	E	A	K	W	H
X	F	I	N	G	E	R	P	L	U	M	S	Q	D	L	I	I	P
T	C	X	W	A	R	R	I	G	A	L	G	R	E	E	N	S	O
M	C	F	D	Z	A	M	I	A	N	U	T	R	H	A	M	F	T
S	T	H	R	E	D	B	U	S	H	A	P	P	L	E	D	E	A
R	O	S	E	L	L	A	Q	U	A	N	D	O	N	G	E	E	T
Z	I	R	U	B	Y	S	A	L	T	B	U	S	H	T	I	R	O
U	L	P	L	L	L	I	L	L	Y	P	I	L	L	Y	E	A	A

Find the following words in the puzzle

Words are hidden → ↓ and ↘

Acacia Seeds
Bush Potato
Davidson plum
Finger Plums
Lilly Pilly
Macadamia Nuts
Pigface
Quandong
Red Bush Apple
Rosella
Ruby Saltbush
Samphire
Warrigal Greens
Zamia Nut

Name: _____

BUSH TUCKER VEGETABLES AND FRUIT

X	D	F	M	B	J	A	L	K	G	R	F	I	N	G	E	R	P	L	U	M	S	S
Z	D	O	A	W	E	U	W	G	A	F	E	B	B	R	Y	D	C	A	S	T	R	I
U	A	H	C	B	A	E	K	A	L	N	I	D	B	T	O	H	J	Z	A	U	I	I
S	V	H	A	C	U	T	F	B	R	I	G	N	B	C	P	S	K	G	J	N	B	E
E	I	S	D	G	A	S	T	S	U	R	L	A	G	U	V	O	E	E	A	A	E	Q
A	D	U	A	N	P	M	H	L	T	S	I	L	R	E	S	F	C	L	P	I	R	S
P	S	B	M	O	Q	I	S	T	E	E	H	G	Y	O	R	H	R	W	L	M	R	D
A	O	T	I	D	R	L	G	A	O	S	A	P	A	P	O	L	A	Q	X	A	I	E
R	N	L	A	N	Z	K	R	F	M	M	E	K	O	L	I	A	I	P	Z	Z	E	E
S	P	A	N	A	S	M	U	P	A	P	A	E	F	T	G	L	P	M	P	N	S	S
L	L	S	U	U	E	A	E	Z	M	C	H	T	D	U	A	R	L	P	E	L	Y	A
E	U	Y	T	Q	V	I	H	L	G	T	E	I	O	L	N	T	E	Y	L	S	E	I
Y	M	B	S	G	T	D	X	S	V	K	K	F	R	E	S	G	O	E	L	E	F	C
C	P	U	J	H	P	S	Z	P	H	E	X	E	U	E	S	O	U	H	N	H	O	A
K	S	R	Y	L	I	L	E	T	A	L	O	C	O	H	C	E	K	S	D	S	Z	C
D	S	M	U	L	P	U	D	A	K	A	K	A	R	E	J	T	Y	K	Z	W	X	A

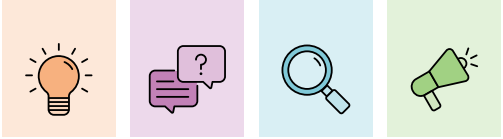
Find the following words in the puzzle

Words are hidden ↓ ↑ → ← and ↘

Acacia Seeds
Beefsteak Fungus
Bush Potato
Chocolate Lily
Davidson plum
Finger Limes
Finger Plums
Kakadu Plums
Kangaroo Apple
Kytjera
Lilly Pilly
Macadamia Nuts
Milk Maids
Pigface
Quandong
Red Bush Apple
Riberries
Rosella
Ruby Saltbush
Samphire
Sea Parsley
Warrigal Greens
Wattleseed
Zamia Nut

LESSON 7:

Let's increase vegetables in our meals



Lesson overview

In this lesson students explore influences on food choices. They consider the barriers to eating more vegetables and develop strategies to overcome these barriers. Students explore strategies for increasing the amount of vegetables in meals and snacks.

Learning intentions

- Understand that vegetables are everyday foods
- Understand that peoples' food preferences impact food choice
- Understand that external or structural barriers and facilitators can impact what we eat and the eating of vegetables
- Plan for vegetables to be added to meals
- Prepare a healthy sandwich
- Appreciate that food knowledge (food literacy) helps people to make healthier decisions

Curriculum links

YEAR 3					
HPE	**English**	**Mathematics**	**Science**	**Technologies**	**The Arts**
ACPPS036 *ACPPS039*	*ACELY1682* *ACELY1684*			*ACTDEK012*	*ACAMAM060*

YEAR 4					
HPE	**English**	**Mathematics**	**Science**	**Technologies**	**The Arts**
ACPPS036 *ACPPS039* *ACPPS040*	*ACELY1694* *ACELY1696*			*ACTDEK012*	*ACAMAM060*

General capabilities

- Literacy
- Critical and creative thinking
- Personal and social capability
- Intercultural understanding

Resources

- ☐ Worksheet 15 – Breaking down the barriers to eating vegetables
- ☐ Worksheet 16 – Breaking down the barriers to eating vegetables
- ☐ Vegetable platter

- [ ] PowerPoint 1 – Lesson 1
- [ ] Sandwich building ingredient ideas – carrot, beetroot, tomatoes, capsicum, mushrooms, mixed greens, corn, avocado, microgreens, bread, wrap, crackers, rice cakes, cheese, egg or protein. Plus a spread.
- [ ] *Packed with Goodness Sandwich Builder*

Preparation

- [ ] Obtain access to PowerPoint display for PowerPoint
- [ ] Print Worksheet 15 – one per student. Alternatively students draw two columns in student workbooks or on A4 paper
- [ ] Print Worksheet 16 – one per student
- [ ] Prepare vegetables for the vegetable platter
- [ ] Prepare sandwich building ingredients
- [ ] Download and print the resource – Packed with Goodness Sandwich Builder – one per student
- [ ] Send parent/carer note asking for students to bring Crunch&Sip® to the next lesson

Educator support notes

- In this lesson the barriers and facilitators to eating vegetables are discussed. If you are comfortable to do so, it may be useful to share personal stories of your own barriers and facilitators to eating vegetables. Care should be taken to avoid stigmatising students with strong barriers to eating vegetables. A discussion of external or structural factors outside of an individual's control such as family meals, access and the high cost of some fresh vegetables can be helpful in this context.
- Factors that influence food choices include but not limited to:
  - biological – hunger, appetite, taste, dietary requirements
  - economic – cost, income, availability
  - physical – access, education, skills and time
  - social – culture, family, peers and meal patterns
  - environmental – setting, atmosphere, location, policy and marketing
- The largest influence on young children's eating is parent/carers.
- Food advertising utilises multiple media platforms to specifically target children and influence their food choices through repetition rather than persuasive intent.
- Food advertisements saturate free-to-air and on-demand TV such as YouTube with unhealthy messages to undermine healthy eating form parents/carers, schools, communities and governments.
- Food advertising can use celebrity endorsement to connect with young children.
- Foods are healthy for most people but some foods can make people sick. For more information see *Allergy & Anaphylaxis Australia* and specifically, *allergyAware* for a great range of school resources suitable for students in years 3 – 4.

Activities

Activity 1

1. Explain that vegetables and fruit are everyday foods bursting with nutrients that give us energy to run and play, help us grow and be strong, think, make decisions and concentrate when at school, and keep from getting sick. Different vegetables and fruit contain different nutrients and eating a range or a rainbow of vegetables is the best way to get superpowered nutrients.

2. Distribute Appendix 2 (vegetable and fruit cards) and invite students to sort according the vegetable and fruit they like and don't like. Remind students its ok not to like all vegetables and fruit but it is good to eat a range. Consider recording the vegetables students 'like' on the whiteboard and reporting as a tally to indicate preferred vegetables.

3. Ask:
   - Why do you eat vegetables?
   - What makes a vegetable appealing to you?
   - What makes a vegetable unappealing to you?
   - In what ways can vegetables be prepared to change the taste and texture?
   - What contributes to vegetables being eaten in your home?
   - What contributes to vegetables be added to your lunch?
   - What part of an edible plant do you like the best? Why?

4. ***Provocation:***
   - Under what conditions should an individual not eat a particular vegetable, fruit or food?

5. Tell students what they eat is mostly determined by parents and carers but at times, what they eat can be influenced by other factors. For example, celebrations – Easter, dietary requirements – allergies, food policy – traffic light system in school canteens, marketing – advertisements on TV, YouTube, etc.

6. Draw two columns onto the whiteboard or project Worksheet 15 onto the whiteboard. Record as 'Me and my parents/carers' = internal and parent/carer influences and 'Other influences' = external influences.

7. Discuss internal and parent/carer influences to the food we eat and brainstorm examples. For example, food preferences, allergies or food intolerances. Record these examples in the Me and my parents/carers circle of Worksheet 15 and invite students to follow along with you.

8. Discuss external influences to the food we eat and brainstorm examples. For example, what is available or on offer, where you are, who is providing the food, food advertising and marketing, what peers are eating, and food cost. Record these examples in the 'Other influences' circle of Worksheet 15 and invite students to follow along with you.

9. Reiterate, that most food choices young people eat are decided by parents/carers but other influences impact what we eat. It is always ok to ask to eat vegetables because vegetables are bursting with nutrients and everyday foods.

10. Every student must wash and dry hands.

11. Offer the vegetable platter to students but don't force to try.

12. Tell students that they can ask for more vegetables by putting up a hand and using the words: "Can I please have more?" Allow students to ask for more.

Activity 2: Breaking down the barriers to eating vegetables

1. Explain to students that they will be working in pairs or small groups and acting as reporters for a local newspaper. Their role is to conduct interviews with other members in the class to find information that can support a local news story titled: Breaking down barriers to eating vegetables. As reporters the students will investigate the barriers that prevent students from eating vegetables? Discuss.
2. Distribute Worksheet 16.
3. Instruct student to:
   - Discuss and decide one reason as to why vegetables are not eaten or included in a meal. Students' report their agreed response as '1' on Worksheet 16.
   - Conduct interviews of 5-10 (more if needed) student pair/group's in the classroom. For each pair/group, ask: "What is a barrier to the eating of vegetables?"
   - Record each pair/group response in the column titled: BARRIER.
   - After all interviews are conducted and barriers are recorded, work together to develop a strategy to break down each reported barrier to eating vegetables. Record the strategy in the column titled: STRATEGY.
   - From the interview data, select one barrier and the strategy.
4. Invite student pairs to share the vegetable barrier and strategy to break down the barrier with the class.
5. ***Extension:***
   - Work with students to collate student barrier and breaking down the barrier. That is, try to organise pairs to collate different findings, if possible.
   - Invite students to reproduce the data and findings from Worksheet 18 using simple software.
   - Using media technology, support students to record and report data and findings for an intended audience such as students in another class, parents/carers or a recorded digital presentation at the school assembly.

Activity 3: Increasing vegetables at school

1. Read the following scenario to students:

   The canteen manager has come to your class looking for some advice. The Manager would like to put more vegetables on the canteen menu, and would like some ideas from students how to do this.
2. Re-show PowerPoint 1 from Lesson 1 (reduce slides if preferred). For each slide invite students to indicate if they think the vegetable meal could be included in the canteen menu. Discuss why or why not?
3. Provide each student pair or small group with a copy of the canteen menu. Instruct students to write down 5 possible changes to the menu to increase vegetables. The examples below can be used to guide students.

Recess	• Add vegie sticks and hummus • Include vegetables on cheese toasties • Add savory muffins or pikelets with grated carrot and zucchini • Offer baked vegie chips • Offer corn on the cob • Pea sprouts

Activity 3: Increasing vegetables at school *(continued)*

Sandwiches, rolls and salads	• Add extra salad like grated carrot, lettuce, tomato, sprouts or strip of capsicum to sandwich and rolls • Include a baked beans, grated vegies and cheese toasted sandwich option • Offer a super salad filled with vegies and microgreens, a small portion of protein foods (e.g., tuna, chicken, egg, lean meat, beans and sunflower seeds) and a small portion of grains/cereals (e.g., pasta, brown rice, couscous, quinoa, corn)
Hot food	• Offer pumpkin soup and bread • Offer vegetable stir fry • Offer vegetable pasta • Offer vegetable taco • Include a salad on the side of hot meals • Add extra vegies like mushroom, capsicum, tomato and spinach to pizzas, lasagne, shepherd's pie or stuffed potatoes • Add kidney beans, diced celery, corn, grated carrot, grated zucchini and diced capsicum into tomato based pasta or nacho sauce
Crunch&Sip®	• Include more vegetables options such as celery, cucumber, capsicum, cauliflower, snow peas, cherry tomatoes, broccoli and mushrooms

4. Discuss and share student ideas.

Activity 4: Building a healthy sandwich/wrap/roll

1. Every student must wash and dry hands.
2. Share with students the resource: *Packed with Goodness Sandwich Builder.* Allow the students to peruse and discuss.
3. Introduce students to the sandwich building ingredients and invite them to create a sandwich packed with goodness.
4. Consider taking a photo of students to share in the school newsletter and display in the classroom.
5. Enjoy.

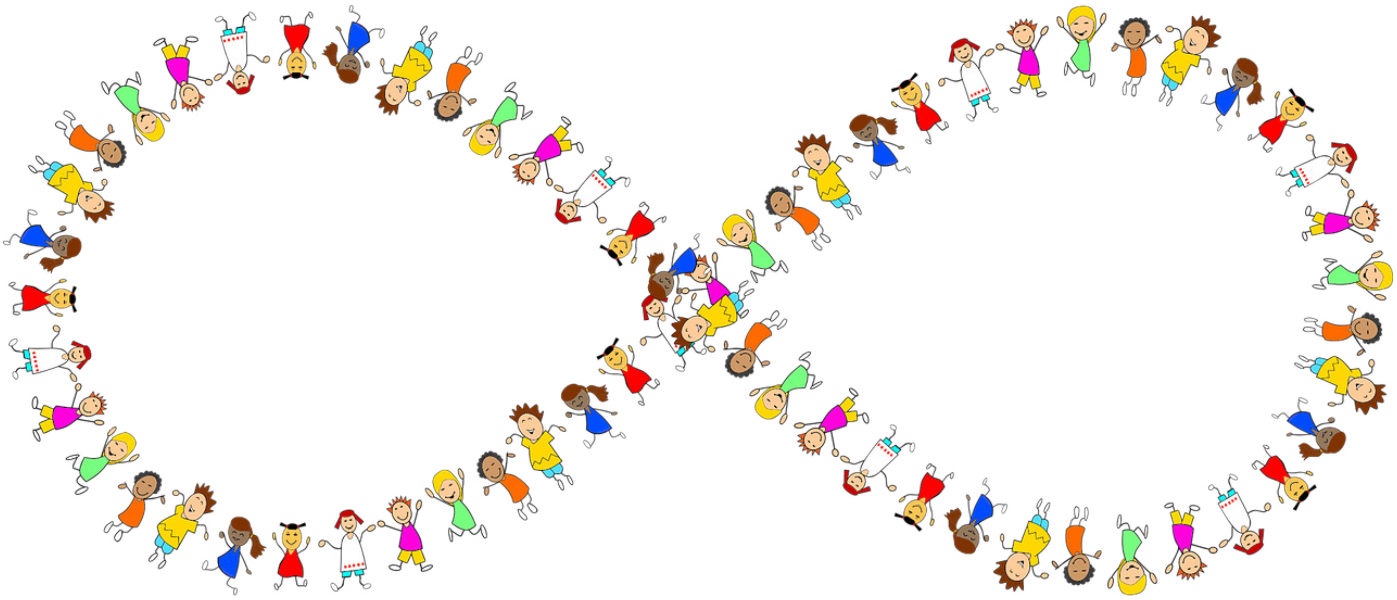
Additional activities

1. Invite students to play the *build a healthy lunch box* online activity.
2. Book a session with Crunch&Sip® to explore *Packed with Goodness* ideas, so parents can learn the same content and discuss in the home.
3. Students explore *Sandwich filling ideas* at the Cancer Council.

WHAT INFLUENCES THE FOOD I EAT?

Me and my parents/carers

Other influences



Pair or group	BARRIER What is the barrier to eating vegetables?	STRATEGY How can we break the barrier?
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

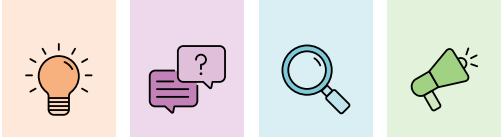
Select one barrier from the above

1. What is the barrier to eating vegetables?

2. What can we do to break this barrier?

LESSON 8:

Let's make healthier food choices with vegetables



Lesson overview

In this lesson students explore ways to make healthier food choices to support health and wellbeing including recommended serve sizes for vegetables. They explore advertising as a way to convey health messages and develop an advertising concept to promote vegetable eating to primary school students.

Learning intentions

- Understand that vegetables are everyday foods
- Understand the 'ways' food is presented to children on free-to-air and paid TV or online viewing platforms
- Recognise food advertisements as promoting everyday foods or sometimes foods
- Plan to add vegetables to meals
- Appreciate that food knowledge (food literacy) helps people to make healthier decisions

Curriculum links

YEAR 3					
HPE	**English**	**Mathematics**	**Science**	**Technologies**	**The Arts**
ACPPS036 *ACPPS039*	*ACELY1682* *ACELY1684*	*ACMNA055* *ACMSP069*		*ACTDEK012*	*ACAMAR061*

YEAR 4					
HPE	**English**	**Mathematics**	**Science**	**Technologies**	**The Arts**
ACPPS036 *ACPPS039* *ACPPS040*	*ACELY1694* *ACELY1696*	*ACMSP095* *ACMSP096*		*ACTDEK012*	*ACAMAR061*

General capabilities

- Literacy
- Numeracy
- Critical and creative thinking
- Personal and social capability

Resources

- ☐ Online video: *Go for 2 and 5 Animation Two*
- ☐ Appendix 2 – Vegetable and fruit cards
- ☐ Worksheet 17 – Creating a healthy message for young people
- ☐ Worksheet 18 – Vegetable record
- ☐ Worksheet 19 – Crunch the numbers

- [ ] Worksheet 20 – Storyboard
- [ ] 1 cup of raw vegetables
- [ ] ½ cup of cooked vegetables
- [ ] Rainbow platters of raw vegetables for Crunch&Sip®

Preparation

- [ ] Obtain access to an audio visual device for online viewing material
- [ ] Print Worksheets 17, 18 and 19 – one per student
- [ ] Print Worksheet 20 – one per group
- [ ] Prepare serving sizes of raw and cooked vegetables

Educator support notes

- A storyboard is a depiction of how a story will play out, scene by scene. It is made up of a series of images, with accompanying notes.

Activities

Activity 1: Health messages and food advertising

1. Ask students:
   - Have they heard of the term vegetable serving sizes?
   - Do you know how many serves of vegetables to eat each day?

   Show the online video *Go for 2 and 5 Animation Two*.

2. ***Provocation:***
   - What is the intention of the media artwork? What is it trying to achieve?
   - What type of food is the media artwork promoting? Everyday foods or sometimes foods?
   - What is the health message?
   - How is the media artwork effective?
   - Who is the media artwork targeting?

3. Discuss the media artwork and how it promotes a positive health message by promoting vegetable serving sizes which are an everyday food.

4. Ask the students to recall advertisements that promote sometimes foods:
   - What is the advertisement?
   - Where did they see the advertisement?
   - What was the message or meaning to the advertisement?
   - How effective was the advertisement?
   - Who did it target?

5. Explain to the students that advertisements promote and prompt a particular response (behaviour). The response could be to eat everyday food or a sometimes food. Advertisements use many different techniques to encourage us to respond favourably like buying a chocolate bar or putting on sunscreen. Some techniques include using bright colours, famous people, catching tunes, cute characters and even where the advertisement is placed like at the movies, on television or a poster. It is important to know that sometimes foods are advertised to encourage people to eat sometimes foods every day. Sometimes foods are not everyday foods and should only be eaten on a special occasion.

6. Distribute Worksheet 17 and invite the students to develop a positive health message for each image. Discuss.

7. Display student work in the classroom.

Activity 2: Vegetable servings

1. Show students serving sizes of vegetables:
   - Raw vegetables = 1 cup
   - Cooked vegetables = ½ cup
   - Five serves from a range of vegetables

2. Ask if they are surprised by the amount of vegetable servings that is recommended and how a serving is calculated.

Activity 2: Vegetable servings *(continued)*

3. Distribute Worksheet 18 and instruct students to document the vegetables they ate yesterday. Ask students if they ate five serves. For each student, record their total amount of servings on the whiteboard. Discuss.

4. Instruct students to work in pairs to calculate the following:
   - How many cups of vegetables would you need to eat each week if you only ate raw vegetables? (1 cup x5 serves x 7 days = 35 cups)
   - How many cups of vegetables would you need to eat each week if you only ate cooked vegetables? (½ cup x 5 serves x 7 days = 17.5 cups)
   - How many cups of vegetables would you need to eat each week if you ate 3 servings of raw vegetables and 2 servings of cooked vegetables? ([3 x 1 x 7 = 21] + [2 x ½ x 7 = 7] = 28)

5. Distribute Worksheet 19.

6. Using Worksheet 19 and the student data from point 3 above (how many serves of vegetables the class ate over the 24 hours), instruct student pairs to create a column graph to present this data.

Activity 3: Promoting vegetables to primary school children

1. Write on a whiteboard and remind students that *vegetables and fruit are everyday foods bursting with nutrients that give us energy to run and play, help us grow and be strong, think, make decisions and concentrate when at school, and keep from getting sick. Different vegetables and fruit contain different nutrients and eating a range or a rainbow of vegetables is the best way to get superpowered nutrients.*

2. Tell the students to imagine an advertisement that promotes this message on television. Ask:
   - What character or characters could convey this message?
   - What images could convey the message?
   - What sounds or music could support the message?
   - What scene or setting could be used?

3. Split the students into small groups and instruct them to come up with a concept for the television advertisement.

4. Show students:
   - *How to storyboard* and/or
   - *What is a storyboard?*

5. Distribute Worksheet 20.

6. Working in groups, students develop a simple storyboard that maps out the sequence of shots in the advertisement using Worksheet 20.

7. In the notes section encourage students to describe other relevant elements of the advertisement such as costumes, music, sounds, dialogue, text etc.

8. Allow groups to present their storyboards to class and discuss ideas.

9. Break for Crunch&Sip® and enjoy.

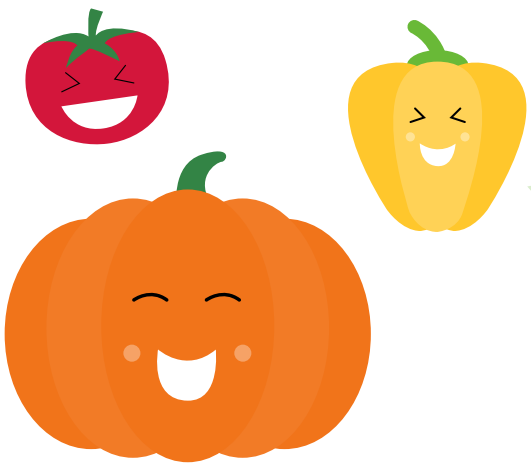
Write a healthy message for each image

Name: _____ Date: _____

Time	Vegetable(s) eaten	Raw or cooked?	Amount of vegetable in cups	Number of vegetable serves
			Total serves	

FUN FACT!

The heaviest pumpkin ever grown on record weighed an astonishing 1226 kg and was grown in Italy in 2021 – that's the size of a large cow.



REMEMBER!

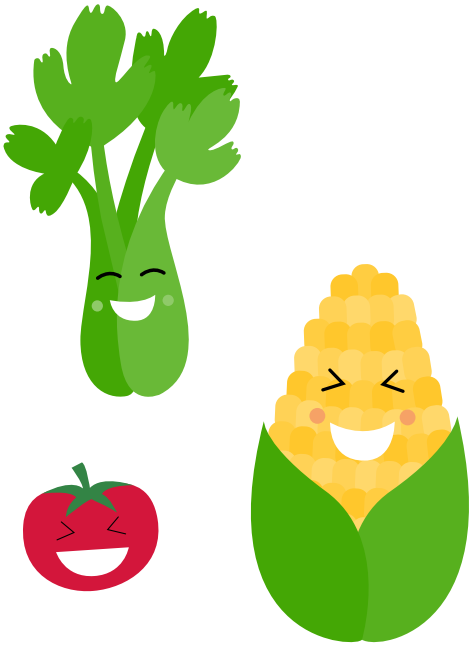
One serve of vegetables is equal to 1/2 cup for cooked vegetables and 1 cup for raw vegetables.

Consider using the search function on the website for Guinness World Records to explore fun vegetable facts.

Activity 1

Fill in the table below.

Number of vegetable serves	Number of students
2 or less	
3	
4	
5 or more	



Activity 2

Display your data in a **column graph** on the graph paper below.
Make sure to label your x-axis and y-axis and give your graph a title.

Title: _____

1

Notes:

2

Notes:

3

Notes:

4

Notes:

REVIEW

These activities summarise some of the key learning points students have learnt about vegetables during this resource. The activities are designed to be a fun conclusion to the program and allow students to explore vegetables.

Resources

- ☐ Investigation stations – asparagus, tomatoes or cherry tomatoes, mango or melon, onion (chopped), radish, eggplant, avocado, orange, corn, sweet potato
- ☐ Text cards – Edible, Variety, _ _ S
- ☐ Free letters – E, E, Y, D
- ☐ *Eggplant* available from Pixabay
- ☐ *Beetroot* available from Pixabay
- ☐ *Potato* available from Pixabay
- ☐ *Dragon Fruit* available from Pixabay
- ☐ *Fig* available from Pixabay
- ☐ Appendix 5 – The secret message clues
- ☐ Worksheet 20 – Solve the secret message
- ☐ Crunch&Sip® to eat

Preparation

- ☐ Invite parent/carers to contribute vegetables for the investigation
- ☐ Invite parent/carers to help at the stations
- ☐ Download images, print and laminate (eggplant, beetroot, potato, dragon fruit, fig)
- ☐ Print Appendix 5, laminate and cut out card for each station
- ☐ Print Worksheet 21 – one per student
- ☐ Send parent/carer request for students to bring Crunch&Sip®. Consider inviting parents/carers to join in

Activities

Activity 1: Memory game

1. Students work in pairs or small groups.
2. Introduce students to the memory game:
   - Vegetable and fruit cards (Appendix 2) are placed face down in the centre of the table.
   - One student selects a card (unseen).
     - » Option 1 – The student reveals the image to the partner but covers the name of the vegetable or fruit with their hand. The partner must correctly identify the vegetable or fruit.
     - » Option 2 – The student looks at the card and describes the vegetable or fruit such as colour, part of plant, texture, taste or any identifying fact.
   - If the card is guessed correctly, the student gets to keep the card.
   - If guessed wrong it can either be placed back into the pile to be guessed again or put aside.
   - The student with the most cards (most vegetables and fruit correctly identified is the winner).
3. Distribute Appendix 2 and play the memory game.
4. Enjoy.

Activity 2: Vegetable investigation

1. Every student must wash and dry hands.
2. Students work individually or in pairs.
3. Tell the students that a secret message has been left in the classroom and as investigators their job is to uncover the secret message. Explain that the message is hidden but can be revealed by visiting 20 vegetable stations and answering the question. For all but one station, the first letter of the answer is the code letter for the secret message. At one station, the second letter is the code letter.
4. Place the 20 clues and vegetable tubs/bags around the classroom. Explain to the students that they can smell, taste and look at the vegetable/image or clue to answer the question. This will help them to uncover the secret letter. Encourage students to taste the vegetables but don't force.
5. Provide Worksheet 21 – one per student.
6. Instruct students to move from station to station answering the questions. They don't need to start at station 1 but can commence the activity at any station. Some stations are a free clue to ensure student success at a station.
7. Students solve the secret message!
8. Discuss the stations with students. Remind students that vegetables can have different tastes, texture, looks and smells. Some vegetables like onions we can add a small amount to get a lot of flavour, whilst other vegetables you need a larger amount to get the same flavour.

Activity 2: Vegetable investigation *(continued)*

9. Remind students that we can eat vegetables and fruit every day. Vegetables and fruit help us feel good, they give us energy to run and play, help us grow and keep from getting sick. Vegetables and fruit are everyday foods. We also drink water to survive.

10. Invite students and parents/carers for a Crunch&Sip® break and enjoy!

Additional activities

1. Visit the *Guinness World Records Website* and use the search function at the top right of the page to explore fun facts about vegetables.

2. *What's that vegetable or fruit?*

3. *Design a Crunch&Sip® advertisement.*

THE SECRET MESSAGE CLUES

Cut out the clue and place at each station with the hidden vegetable/fruit/word/image/letter.

Clue 1	Clue 2
E	Inside the bag is this vegetable! It grows above the ground. It looks like a spear and it smells too! ***What is it?***
Clue 3	**Clue 4**
This vegetable grows on a vine and is the fruit of the plant. Eyes closed, take a piece and taste it. If you don't want to, take a look ***What is it?***	This is not a vegetable, it is a fruit. Try smelling it before you taste it. ***What is it?***
Clue 5	**Clue 6**
This vegetable smells very strong! It is the root of the plant. Be careful, it might make you cry! ***What is it?***	This vegetable grows very fast. It is also the root of the plant. It has a strong taste like pepper! Take a look before you taste. ***What is it?***
Clue 7	**Clue 8**
E	This word describes the type of plants that can be eaten. ***What is it?***
Clue 9	**Clue 10**
This word describes a rainbow of vegetables and is another word for 'range'. We should eat a _____ of vegetables! ***What is it?***	This vegetable is the fruit of a plant. It's purple. ***What is it?***

THE SECRET MESSAGE CLUES

Cut out the clue and place at each station with the hidden vegetable/fruit/word/image/letter.

Clue 11	Clue 12
This is a part of a plant that grows below the ground. Beetroot and potato are this. ***What is it?***	Y
Clue 13	**Clue 14**
This exotic fruit is named after a mythical flying creature that shoots fire. It's called _____ Fruit. ***What is it?***	This plant you would have eaten before. Eyes closed, take a piece and taste it. If you don't want to, take a look. ***What is it?***
Clue 15	**Clue 16**
Saying _____ S to vegetables is good for health and wellbeing. ***What is the word?***	This fruit grows above ground and on a tree. Take a look. ***What is it?***
Clue 17	**Clue 18**
This fruit grows above ground. Eyes closed and take a deep smell. Try not to take a look! ***What is it?***	Use the second letter and not the first letter of this vegetable. ***What is it?***
Clue 19	**Clue 20**
D	This plant grows below ground. Eyes closed and take a feel of it. ***What is it?***

THE SECRET MESSAGE ANSWERS

Clue 1	Clue 2
Free Letter	**Asparagus** *Place in brown paper bag*
Clue 3	**Clue 4**
Tomatoes *Chop and place in a tub or use cherry tomatoes*	**Mango or Melon** *Chop and place in a tub*
Clue 5	**Clue 6**
Onions *Chop and place in a tub*	**Radish** *Chop and place in a tub but have whole too*
Clue 7	**Clue 8**
Free Letter	**Edible** *Display as text*
Clue 9	**Clue 10**
Variety *Display as text*	**Eggplant** *Display a photo*
Clue 11	**Clue 12**
Root *Display a photo of beetroot and potato*	**Free Letter**
Clue 13	**Clue 14**
Dragon Fruit *Display as a photo*	**Avocado** *Place an avocado in a brown paper bag*
Clue 15	**Clue 16**
_ _ S *Place the above text with missing letters in a brown paper bag*	**Fig** *Place an image or a fig in a brown paper bag*
Clue 17	**Clue 18**
Orange *Place sliced in a brown paper bag*	**Corn** *Place in brown paper bag*
Clue 19	**Clue 20**
Free Letter	**Sweet Potato** *Place in brown paper bag*

SOLVE THE SECRET MESSAGE

Station	Letter code	What is the vegetable or word?
	B	Banana
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		

Use the first or second letter of the vegetable/word as the letter code