



# Australian Avocados

## Our green gold superfood

### TEACHER GUIDE



YEARS 7/8

# Introduction

'**Australian Avocados: Our Green Gold Superfood**' is a five lesson course designed for Year 7 and 8 students to support their learning in Design and Technologies. The content gives particular focus to two main technologies contexts: **Food and fibre production** and **Food specialisations**. The course provides students with the opportunity to design and produce various products, including experimenting with food preparation and presentation techniques.

There are two different ways that students can access the course:

## ➤ 1. Student workbook

Download the PDF version of the student workbook. The workbook contains five separate lessons — each lesson will require students to read or view important information. Some lessons will require students to complete quizzes based on the information they have learnt. The answers to these quiz questions are provided within this teacher guide. Students will complete a range of activities based on what they have learnt and record their learning in the space provided in the student workbook. This can then be submitted to the teacher for marking.

## ➤ 2. Primezone Academy online course

Lessons are also presented in an online capacity through Primezone Academy. Students can visit [primezoneacademy.edu.au](http://primezoneacademy.edu.au) and sign up for an individual account (for free) using their own email address. They can work through the lesson content online and record their learning in the online learning journal provided. This can be saved and submitted to the teacher for marking at the conclusion of the course. To pass each online quiz, a score of at least 80% will be needed in order to progress to the next lesson.



# Course outline

<b>Year Level</b>	<b>Year 7 &amp; 8</b>
<b>Learning Area</b>	<b>Design and Technologies</b>
<b>Content description</b>	<b>Elaborations</b>
<p><b>Knowledge and Understanding</b></p> <p><b>Technologies context:</b> <b>Food specialisations</b></p> <ul style="list-style-type: none"> <li>Analyse how properties of foods determine preparation and presentation techniques when designing solutions for healthy eating.</li> </ul> <p><b>(AC9TDE8K05)</b></p>	<ul style="list-style-type: none"> <li>Explaining how food preparation techniques impact on the sensory properties, such as flavour, appearance, texture and aroma of food.</li> <li>Investigating the relationship between food preparation techniques and the impact on nutrient value including how a recipe can be modified to enhance health benefits.</li> <li>Analysing food preparation techniques used in different cultures including those from countries across Asia and the impact of these on nutrient retention, aesthetics, taste and palatability.</li> </ul>
<p><b>Knowledge and Understanding</b></p> <p><b>Technologies context:</b> <b>Food and fibre production</b></p> <ul style="list-style-type: none"> <li>Analyse how food and fibre are produced in managed environments and how these can become sustainable.</li> </ul> <p><b>(AC9TDE8K04)</b></p>	<ul style="list-style-type: none"> <li>Investigating how plant and animal crops are grown and the ethical and sustainable techniques used to increase food production, for example recognising the need to increase food production using cost-efficient, ethical and sustainable production techniques.</li> <li>Outlining physical and chemical characteristics of soil and their effects on plant growth when producing food and fibre products, for example comparing the soil characteristics of different farming practices.</li> </ul>
<b>General capabilities</b>	<b>Cross curriculum priorities</b>
<p><b>Critical and Creative Thinking</b></p> <p><b>Analysing</b></p> <ul style="list-style-type: none"> <li>Draw conclusions and provide reasons.</li> <li>Interpret concepts and problems.</li> </ul> <p><b>Inquiring</b></p> <ul style="list-style-type: none"> <li>Identify, process and evaluate information.</li> </ul>	<p><b>Asia and Australia's Engagement with Asia</b></p> <p><b>Knowing Asia and its diversity</b></p> <ul style="list-style-type: none"> <li>The interrelationships between people and the diverse environments and systems across the Asia region have global implications.</li> </ul>

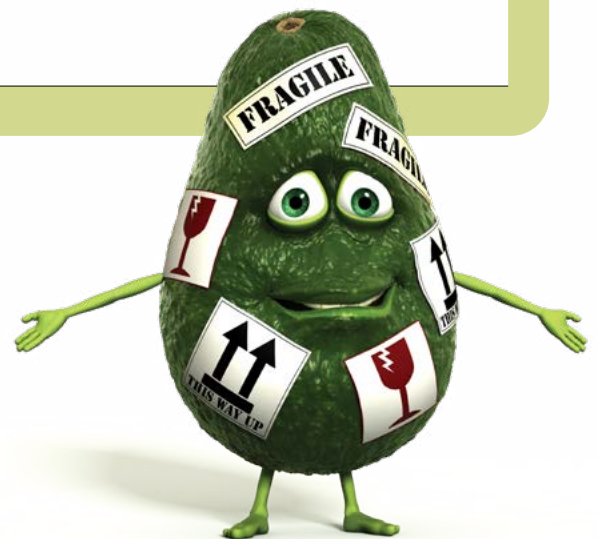
# Lesson overview

Lesson	Content overview	Australian Curriculum link
<p><b>Lesson 1</b></p> <p><b>Australian avocados</b></p>	<p><b>Students investigate:</b></p> <ul style="list-style-type: none"> <li>• How avocados grow.</li> <li>• Where avocados grow.</li> <li>• Weather, soil and growing conditions needed for avocado production.</li> <li>• The avocado supply chain (farm to plate).</li> </ul>	<p><b>AC9TDE8K04</b></p> <ul style="list-style-type: none"> <li>• Investigating how plant and animal crops are grown and the ethical and sustainable techniques used to increase food production, for example recognising the need to increase food production using cost-efficient, ethical and sustainable production techniques.</li> <li>• Outlining physical and chemical characteristics of soil and their effects on plant growth when producing food and fibre products, for example comparing the soil characteristics of different farming practices.</li> </ul>
<p><b>Lesson 2</b></p> <p><b>Superfood!</b></p>	<p><b>Students investigate:</b></p> <ul style="list-style-type: none"> <li>• The nutritional and health benefits of eating avocados and avocado products.</li> <li>• Food preparation techniques and their impact on nutritional value.</li> <li>• The benefits of eating avocados for particular groups of people e.g. diabetic people, pregnant women, babies and toddlers.</li> </ul>	<p><b>AC9TDE8K05</b></p> <ul style="list-style-type: none"> <li>• Investigating the relationship between food preparation techniques and the impact on nutrient value including how a recipe can be modified to enhance health benefits.</li> </ul>
<p><b>Lesson 3</b></p> <p><b>Avocados around the world</b></p>	<p><b>Students investigate:</b></p> <ul style="list-style-type: none"> <li>• Different ways that avocados are used and prepared in meals in various countries and cultures around the world.</li> <li>• Comparisons between how these different recipes and uses would impact on the taste, aesthetics and nutrition of the avocado.</li> </ul>	<p><b>AC9TDE8K05</b></p> <ul style="list-style-type: none"> <li>• Analysing food preparation techniques used in different cultures including those from countries across Asia and the impact of these on nutrient retention, aesthetics, taste and palatability.</li> </ul>

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## Lesson overview (continued)

Lesson	Content overview	Australian Curriculum link
<p><b>Lesson 4</b></p> <p><b>A healthy alternative</b></p>	<p><b>Students investigate:</b></p> <ul style="list-style-type: none"> <li>• How avocados can be used as an alternative or substitution for less healthy ingredients, e.g. replacing ingredients such as butter, sour cream or oil in baking.</li> <li>• How avocado substitution in recipes can reduce saturated fats with 'good fats', and the health benefits of this.</li> </ul>	<p><b>AC9TDE8K05</b></p> <ul style="list-style-type: none"> <li>• Investigating the relationship between food preparation techniques and the impact on nutrient value including how a recipe can be modified to enhance health benefits.</li> </ul>
<p><b>DESIGN TASK</b></p> <p><b>Avocados: Make the switch</b></p>	<p><b>Students:</b></p> <ul style="list-style-type: none"> <li>• Design a recipe that uses avocado as a healthy alternative to another less healthy ingredient (e.g. butter).</li> <li>• Make two versions of the same recipe, one using the avocado substitution and one using the less healthy alternative.</li> <li>• Report on the differences in taste, texture, appearance and nutritional value of the two products.</li> <li>• Promote their recipe and the nutritional benefits of 'making the switch' to using avocados in cooking and baking.</li> </ul>	<p><b>AC9TDE8K05</b></p> <ul style="list-style-type: none"> <li>• Explaining how food preparation techniques impact on the sensory properties, such as flavour, appearance, texture and aroma of food.</li> <li>• Investigating the relationship between food preparation techniques and the impact on nutrient value including how a recipe can be modified to enhance health benefits.</li> </ul>



# Test your knowledge!

## ANSWERS

### LESSON 1

1. c) On a tree
2. a) True
3. d) Testing the oil content
4. b) Queensland
5. d) All of the above
6. b) So they don't get bruised

### LESSON 3

1. d) Central and South America
2. d) All around the world
3. b) False
4. b) Philippines
5. d) Smoothie

### LESSON 2

1. b) Monounsaturated fat
2. d) All of the above
3. a) True
4. a) Diabetic people
5. c) Placing it with an apple or a pear
6. a) Cut down and around the centre of the avocado and twist apart

### LESSON 4

1. c) Sausage
2. a) Bacon and cheese
3. b) Sour cream and provolone
4. a) Cream and butter
5. b) Decrease oven temperature by 25%
6. c) It is a source of biotin which can assist in preventing dry skin and brittle hair

