# PIEFA Food & Fibre
## CARD GAME

# INSTRUCTIONS

# Australian Apples



**YEAR 7-10**

# PIEFA Food and Fibre Card Game
# Australian Apples Supply Chain

# AUSTRALIAN CURRICULUM CONTENT

Analyse how people in design and technologies occupations consider ethical and sustainability factors to design and produce products, services and environments **(AC9TDE8K01)**

Analyse how food and fibre are produced in managed environments and how these can become sustainable **(AC9TDE8K04)**

Analyse needs or opportunities for designing, and investigate and select materials, components, tools, equipment and processes to create designed solutions **(AC9TDE8P01)**

Generate, test, iterate and communicate design ideas, processes and solutions using technical terms and graphical representation techniques, including using digital tools **(AC9TDE8P02)**

Analyse and make judgements on the ethical, secure and sustainable production and marketing of food and fibre enterprises **(AC9TDE10K04)**

# Game Objectives

By participating in an engaging, hands-on card game, students will learn to sequence the supply chain of Australian apples from farm to consumer. Additionally, they will gain an understanding of technologies and careers involved in the supply chain.

The supply chain game cards can be printed from this document and can also be accessed in the following lesson:

❯ Year 9-10, Lesson 2 - Apples Along the Supply Chain
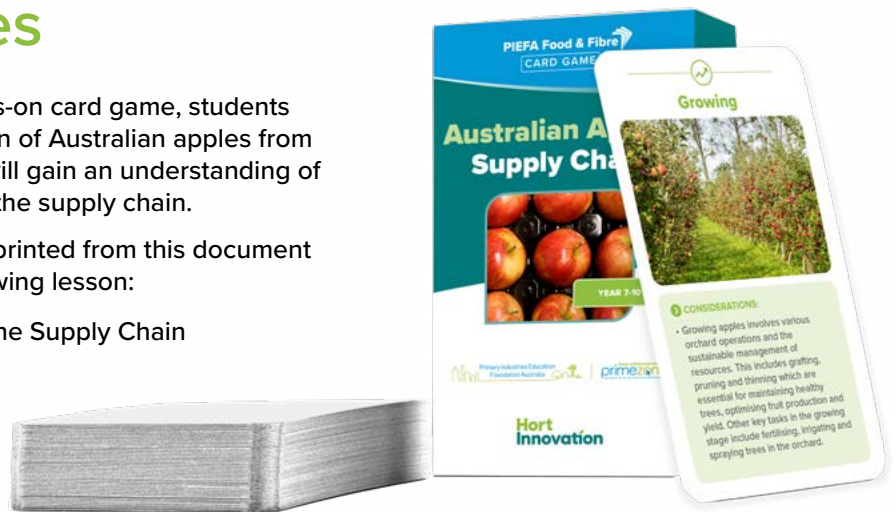
This resource has been developed by:

# Resources and Equipment
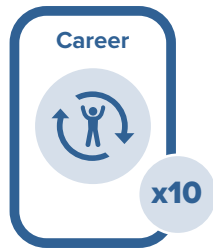
## PACK CONTENTS

> 52 game cards

**Arrow**
x18

**Step**
x18

**Career**
x10

**Scan**
x2

**Technology**
x4

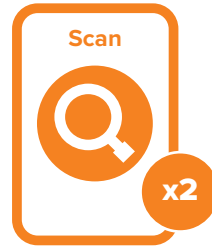**Arrow cards**
18 x Arrow game cards
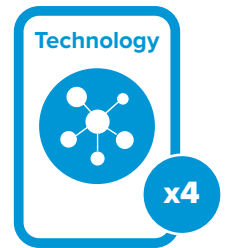
**Step cards**
18 x Step game cards

**Career cards**
10 x Career game cards

**Scan cards**
2 x QR Code game cards

**Technology cards**
4 x Technology game card

1 x Acknowledgment game card

### ➤ GAME 1 - THE SUPPLY CHAIN FLOWCHART

1. Approximately 2 - 4 players
2. Butchers paper and markers
3. PIEFA Food and Fibre Card Game | Australian Apples Supply Chain Game Cards (printed, cut into individual cards and preferably laminated)

NOTE: Lessons and video content are available to support students in completing the PIEFA Food and Fibre Card Game | Australian Apples Supply Chain Game.

Visit **Lesson Two - Apples Along the Supply Chain (Year 9-10)** for activities and content observing the steps throughout the supply chain.

### Objective

To create a flowchart of the supply chain of apples from farm to consumer in the correct order.

### Game play

1.  Players create a flowchart on butchers paper, showing the journey of apples from farm to consumer.

2.  Players include the name of the step or process in the supply chain and use arrows between each step to show the path of apples from farm to consumer.

3.  Players place all the steps and arrow cards face up and sort them into two piles.

    - *Step* game cards ( ) and

    - *Arrow* game cards ( )

    Remove and reserve the *career* ( ) , *technology* ( ), and *QR code* ( ) game cards.

4.  Players collaborate and organise the cards into a supply chain by placing the step cards into their sequential order and arranging the arrow cards between each step to create a supply chain flowchart.

5.  Players check answers with their teacher.

### Extension 1 - Technology

1.  Players take the technology cards ( ) from the reserved cards and place them adjacent (next to) the relevant steps in the supply chain.

2.  Research a technology used in any part of the supply chain to improve productivity, speed up a job, produce a higher quality product, etc.

3.  Design additional technology cards using the templates and cut them out using the supplied card as a model. Include a description of the technology, a picture, and an explanation of how the technology is advantageous on each card template.

4.  Using the completed flowchart, place the newly designed technology game cards adjacent to the relevant step in the supply chain.
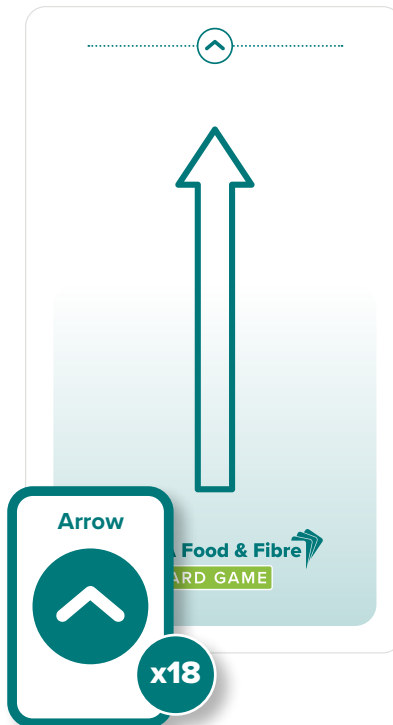
### Extension 2 - Careers

1.  Players take the career cards  ( ) from the reserved cards. Using the completed flowchart, place the career cards adjacent to the relevant step in the supply chain.
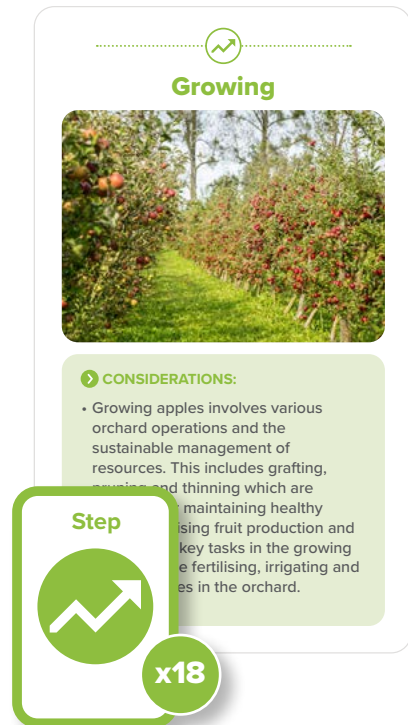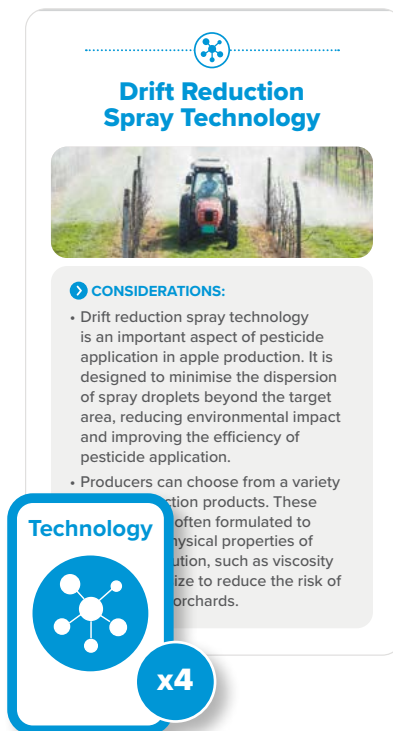
**18 x Arrow game cards**

**18 x Step game cards**

### Australian Apples Supply Chain

Primary Industries Education Foundation Australia | primezone
www.primezone.edu.au

**Hort Innovation**

**Australian Apples Supply Chain**

**PIEFA Food & Fibre**
CARD GAME

**Arrow**

x18

### Growing



**CONSIDERATIONS:**
- Growing apples involves various orchard operations and the sustainable management of resources. This includes grafting, pruning and thinning which are ... maintaining healthy ... ising fruit production and ... key tasks in the growing ... e fertilising, irrigating and ... es in the orchard.

**Step**

x18

**2 x QR Code game cards**

**4 x Technology game cards**

**10 x Career game cards**

**Hort Innovation**



**Apples All Year Round**
Scan the QR code or visit the link ... to learn more about the ... alian apple industry.
www.primezone.edu.au/ .../apples-all-year-round

**Scan**

x2

### Drift Reduction Spray Technology



**CONSIDERATIONS:**
- Drift reduction spray technology is an important aspect of pesticide application in apple production. It is designed to minimise the dispersion of spray droplets beyond the target area, reducing environmental impact and improving the efficiency of pesticide application.
- Producers can choose from a variety ... tion products. These ... often formulated to ... ysical properties of ... ution, such as viscosity ... ize to reduce the risk of ... orchards.

**Technology**

x4

### Quality Control Supervisor



**CONSIDERATIONS:**
- Implement stringent quality assurance protocols, oversee inspection and grading processes, and collaborate with various stakeholders to align ... ntrol measures with ... ndards and consumer ...
- ... l role in maintaining and ... e quality of apples from ... arket.

**Career**

x10

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