

INSTRUCTIONS

GRDC Careers



YEAR 7-10

PIEFA Food & Fibre Card Game

This resource has been developed by:

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 how people in design and technologies occupations consider ethical, security and sustainability factors to innovate and improve products, services and environments ([AC9TDE10K01](#))

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

Investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering ([AC9S9H02](#))

Investigate how advances in technologies enable advances in science, and how science has contributed to developments in technologies and engineering ([AC9S10H02](#))

Game Objectives

By participating in an engaging, hands-on card game, students will learn about the Australian grain supply chain and the careers associated with producing important grain products. They will understand how diverse roles, technologies, and innovations support the Australian grains industry.

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

› [GRDC | Growing Australian Grains – Years 7 to 10 | Agriculture Lessons](#)

This resource has been developed by:

Resources and Equipment

PACK CONTENTS

> 58 game cards



Arrow cards

13 x Arrow game cards



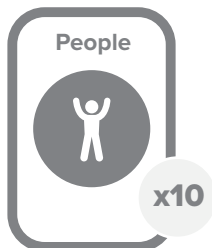
Step cards

14 x Step game cards



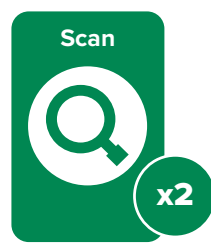
Career cards

14 Career game cards (13 x Career cards and 1 x Career card template)



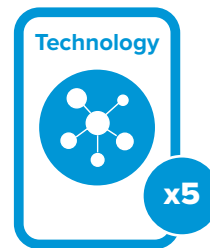
People cards

10 People game cards
(9 x People cards and
1 x People card template)



Scan cards

2 x QR Code game cards



Technology cards

5 x Technology game card
(4 x Technology cards and
1 x Technology card template)

1 x Acknowledgment game card

> ACTIVITY 1 - THE SUPPLY CHAIN FLOWCHART

1. Approximately 3 - 4 players
2. Individual computer/digital device access
3. Stimulus materials:

GRDC Grains Industry Educational Resources
Career Harvest-Careers In Grain







4. GRDC Careers | PIEFA Food & Fibre Card Game
(printed, cut into individual cards and preferably laminated)

This resource has been developed by:

Objective

To create a flowchart of a grain supply chain in the correct order and sequence the various careers it takes to produce important grain products to the corresponding positions on the flowchart.

Game play

1. Players access the stimulus materials as required.
2. Players remove and reserve the *career* (), *people* (), *technology* (), and *QR code* () game cards.
3. Players place all the step and arrow game cards face up and sort them into two piles:
 - 14 *Step* game cards () and
 - 13 *Arrow* game cards ()
4. Players create a flowchart showing the journey of grains such as wheat from paddock (Soil Testing) to plate (Products) using the *step* game cards.
5. Insert the arrows between each step to show the sequence of the product.
6. Players check their answers.
7. Players take the *career* cards from the reserved cards from step 2.
8. Players read the career names and descriptions to the group. Players collaborate to decide which career descriptions are associated with each production stage.
9. Using the completed flowchart, players place the *career* game cards adjacent (next to) the step they are associated with on the completed flowchart.
10. Players check their answers.
11. Players research careers that occur along the supply chain using the links below or an internet search engine.


GRDC Grains Industry Educational Resources

Career Harvest-Careers In Grain

12. Players select a career related to the grain supply chain that is not included in the game cards. Using the supplied *career* cards as a model, players design a *career* card using the template (including a description of the career, a picture, and an explanation of how the career contributes to the Australian grains industry).
13. Players place the newly designed *career* card adjacent to the step associated with the career on the flowchart.

This resource has been developed by:

Extension 1 - People

1. Players take the *people* () cards from the reserved cards in step 2.
2. Using the completed flowchart, players place the *people* cards adjacent to the step in the supply chain they are associated with on the completed flowchart.
3. Players explain their decisions in allocating certain careers and people to stages.

Extension 2 - Technology

1. Players take the *technology* cards () from the reserved cards in step 2.
2. Using the completed flowchart, players place the *technology* cards adjacent the step they are associated with on the completed flowchart.
3. Players research a technology used in any part of the supply chain to improve productivity, speed up a job, produce higher-quality grains, etc. For example, drones, air and soil sensors, etc.
4. Using the supplied *technology* cards as a model, players design a *technology* card using the template (including a description of the technology, a picture, and an explanation of how the technology is advantageous to the Australian grains industry).
5. Using the completed flowchart, players place the newly designed *technology* game card adjacent the step it is associated with on the supply chain.

▶ ACTIVITY 2 - CREATE A QUESTION

1. Approximately 13 players
2. Individual computer/digital device access
3. Stimulus materials:

GRDC Grains Industry Educational Resources
Career Harvest-Careers In Grain

4. GRDC Careers | PIEFA Food & Fibre Card Game
(printed, cut into individual cards and preferably laminated)

This resource has been developed by:

Objective

To learn about the various careers associated with the Australian grains industry. Players use the career cards from Activity 1 and develop a series of questions focused on a particular career.

Game play

1. Players remove the *career* game cards from one pack of GRDC Careers | PIEFA Food & Fibre Card Game.
2. Players select a *career* card so that all 13 *career* cards are allocated to a student.
3. Using the allocated *career* card and worksheet **Grains Careers - Create a Question**, players record **five questions** about this career in the Australian grains industry.

For example, what does an Agronomist do in the grains industry? What qualifications and education are required to become an Agronomist in the grains industry? etc.

4. Players collect and redistribute the *career* cards, making sure they do not receive the *career* card chosen in step 2.
5. Players research their newly allocated careers using the GRDC resources.

GRDC Grains Industry Educational Resources Career Harvest-Careers In Grain

6. Players locate the student who asked the career questions selected in step 2 and collaborate to record answers to the questions.
7. Repeat step 6 until all players have asked and recorded answers to the questions.

Optional

Players can choose other careers of interest and complete Activity 2.

Classes can discuss the varied careers in the Australian grains industry and how they contribute to the production of various grain products.

REFERENCES

Career Harvest. (2022, May 3). *Job Boards for Agriculture | Agriculture Careers*.
www.careerharvest.com.au. <https://www.careerharvest.com.au/jobboards>

GRDC. (2023). *GRDC Grains Industry Educational Resources*.
https://grdc.com.au/__data/assets/pdf_file/0031/227569/grdc-fact-sheet-fa.pdf

PIEFA. *GRDC | Growing Australian Grains – Years 7 to 10 Lessons 1 and 2*.
<https://primezone.edu.au/resource/growing-australian-grains-seven-to-ten/>

This resource has been developed by:

13 x Arrow game cards

Arrow

Food & Fibre CARD GAME

x13

14 x Step game cards

Soil Preparation

CONSIDERATIONS:

- Existing crop residues, debris from the field.
- be used as the initial step
- or discing to break up soil and improve aeration.

Step

x14

14 x Career game cards

Soil Scientist

CONSIDERATIONS:

- Conducts research and experiments to investigate the health of soil and its plant yield.
- critical for growers to the characteristics and on their property so they adjust their inputs ment practices.

Career

x14

10 x People game cards

Brett Tucker: Farm Manager

CONSIDERATIONS:

- A young grower with an agricultural college background managing his farm.
- adopting new , including no-till farming, eties, and precision resulting in increased and improved soil health.

People

x10

2 x QR Code game cards

Instructions for the

GRDC Careers

PIEFA Food & Fibre Card Game

Scan the QR code or visit to access the card e instructions.

primezone.edu.au/grains-education/

Scan

x2

5 x Technology game cards

Autosteer Machinery

CONSIDERATIONS:

- Computer programming combined with GPS technology ensures the tractor autonomously steers itself roped pathway.
- ows precise inter-row ture of a no-till farming echnology enables ion to be safer, more precise.

Technology

x5

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