Primary Industries Education
Foundation Australia

primezone.edu.au



Australian Alpaca



**AgriFutures**®





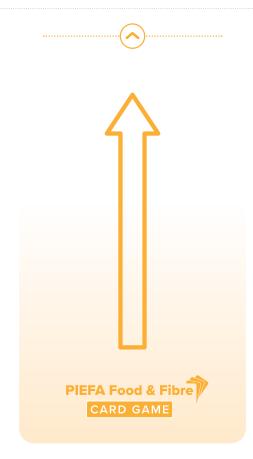


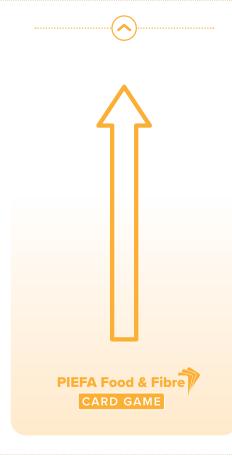


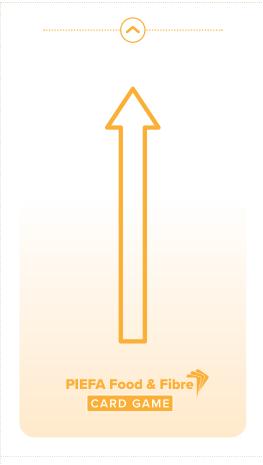


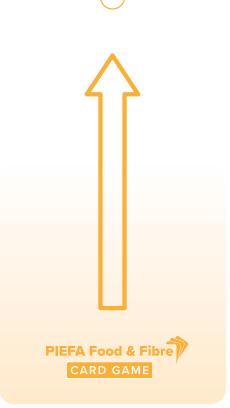


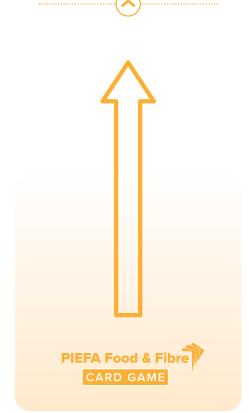


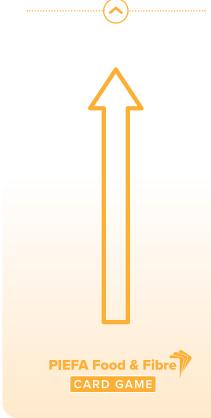
















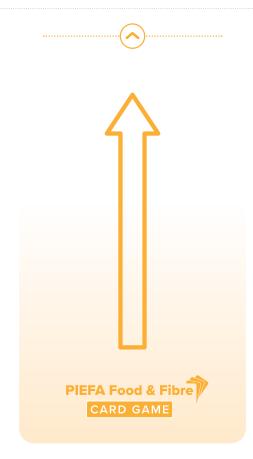


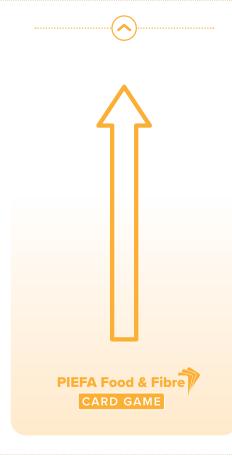


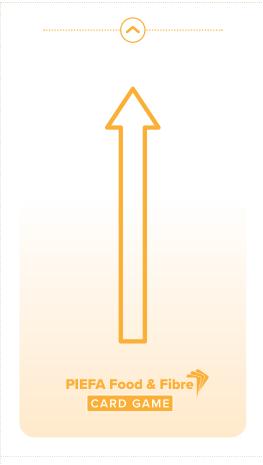


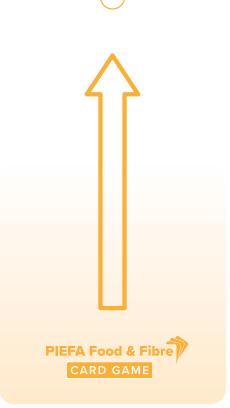


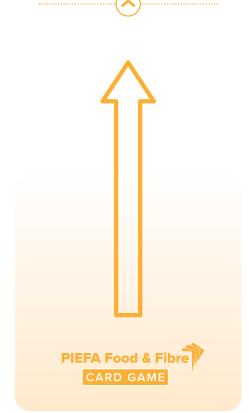


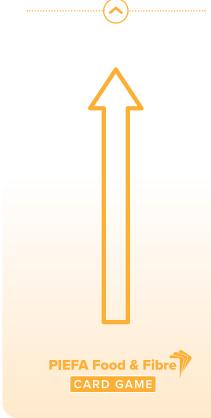
















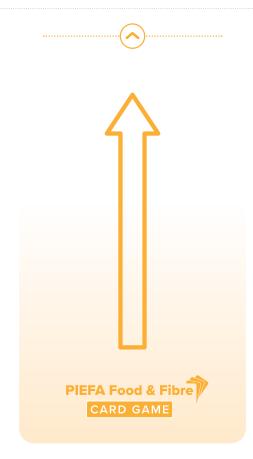


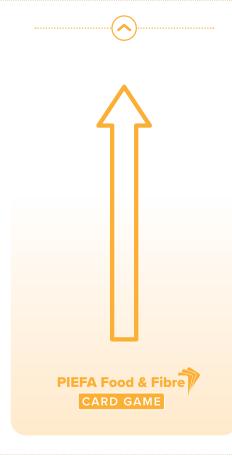


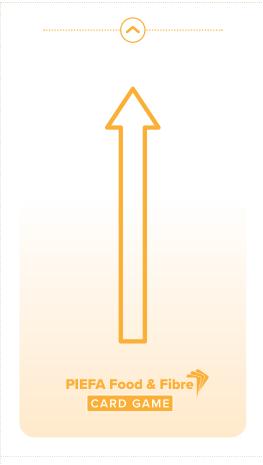


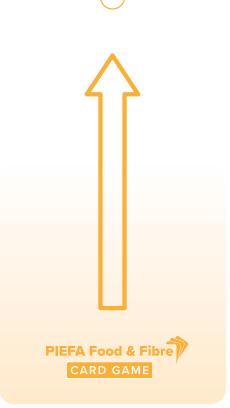


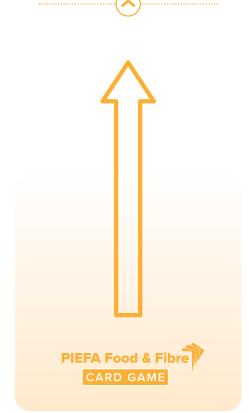


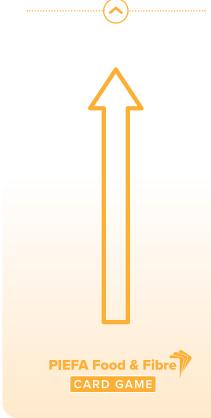
























2 x QR Code







# Awesome Alpacas



PIEFA Food & Fibre



Instructions for the

# Awesome Alpacas

PIEFA Food & Fibre Card Game Australian Alpaca Association Supply Chain



Scan the QR code to learn how to use these cards to sequence the process of converting fibre from alpacas on a farm into an end product suitable for sale.







Scan the QR code to discover how the Australian Alpaca Association is helping to build a successful and sustainable alpaca industry in Australia.



CARD GAME













15 x Step game cards





#### Farm



## OCONSIDERATIONS:

Farms are areas of land used to raise plants and animals for food and fibre. Animals, such as alpacas, are cared for on a farm. They are managed so that they are stress-free, protected from

disease, and have all of their

needs met.



## Shearing



#### OCONSIDERATIONS:

Alpacas are shorn once a year, in spring. Shearing usually takes around five to ten minutes per alpaca, and 2.5-5.0 kg of fleece is collected from each animal.

Each animal is laid on their side, either on a shearing table or the ground and restrained whilst electric sheep-shearing equipment is used by the shearer.



## **Pre-classing & Skirting**



## ONSIDERATIONS:

Alpaca fleece is skirted to remove vegetable matter or unusable fibre. This operation saves time in the next step (classing) and will increase the financial return to the producer.



## Classing



#### CONSIDERATIONS:

Alpaca fleece is sorted and grouped to meet the needs of processors and consumers. The fibre's most important features for classing are: diameter (micron), length and colour.



# **Scouring & Washing**



#### ONSIDERATIONS:

The fibres must be scoured or washed to remove dirt and grease from the fleece. Alpacas have a low grease content and yield around 90% of the initial fleece weight after scouring.



# **Carding**



## OCONSIDERATIONS:

Carding aligns the individual fibres while removing some unwanted vegetable matter. Rollers with 'teeth' tease the fibres, open them up, and produce an even strand for the next step.













I5 x Step game cards





# **Top Making**



#### OCONSIDERATIONS:

The fibres go through a finishing alignment called 'gilling' before being combed into a product known as a 'top'. This top has the appearance of a loose rope.



## **Spinning**



## OCONSIDERATIONS:

Tops are fed into spinning machines to make yarn for either knitting or weaving. This is the last step in the process before the fabric is manufactured.



# **Dyeing**



#### OCONSIDERATIONS:

Light-coloured fleece may be dyed in various colours to suit contemporary fashion. Dyeing can occur at various stages along the supply chain. However, the beautiful natural colours of alpacas are also manufactured into high quality products without dyes.



## **Fabric Formation**



#### CONSIDERATIONS:

Yarn may be woven into luxury fabrics which can then be made into high end products.



# Alpaca Co-op Commercial Fleece Buyer Craft Hobbyist



#### OCONSIDERATIONS:

Alpaca co-operatives (co-op), craft hobbyists and commercial fleece buyers purchase fleece from producers, usually after it has been classed. Co-ops are owned and controlled by members so that smaller producers benefit from increased bargaining power and buyers can purchase greater amounts of similar quality fleece.



# Manufacturing into End Products



## OCONSIDERATIONS:

Yarn may be knitted into garments, such as jumpers and scarves, or woven fabric may be made into garments like jackets, sportswear, accessories and designer wear.













15 x Step game cards





## Consumer



## OCONSIDERATIONS:

Consumers are the people who purchase luxury alpaca end products. They are the last step in the supply chain.



## **Wholesaler**



### OCONSIDERATIONS:

A wholesaler buys and stores alpaca yarn or fabric in large quantities and then sells smaller quantities to retailers.



## Retailer



#### **ONSIDERATIONS:**

A retailer is a person or a business that sells alpaca end products to consumers. Sales may occur from a physical shop, online shop, market stall, etc.













8 x Career





## **Producer**



#### OCONSIDERATIONS:

- A producer is a farmer who manages, coordinates and performs farming operations related to raising alpacas.
- Producers care for the health and welfare of their animals, minimising stress to produce healthy and productive products.



### **Shearer**



#### OCONSIDERATIONS:

- Alpacas are shorn once a year, usually in spring or early summer.
- Shearers have experience and skills in the techniques of shearing and handling alpacas, which are different from those for sheep.
- It is common practice that alpacas are restrained for shearing.



# **Agricultural Journalist**



## ONSIDERATIONS:

- Journalists research and compile news stories, write and edit news reports, commentaries and feature stories for presentation in print and electronic media.
- Sometimes journalists compose written material to advertise goods and services.



#### Classer



#### OCONSIDERATIONS:

Registered classers have successfully completed a training course in alpaca wool classing/ preparation. They assess and group similar alpaca fleece into bales. Classers examine the fibre colour, type, fineness & handle, length, brightness, crimp, guard hair content, tensile strength, and skirtings/oddments and apply a registered classerID (stencil) to the bales.



## **Camelid Veterinarian**



#### **ONSIDERATIONS:**

 Camelid veterinarians have training and experience in the medical care and treatment of alpacas. They work closely with producers to improve and maintain the health, welfare and productivity of alpacas.



# **Scientist**



## ONSIDERATIONS:

Scientists research, gather and use evidence to make and test hypotheses to gain and share understanding and knowledge. An understanding of the science of fleece production can be applied to selective breeding programs, selecting stock that produces offspring with higher quality, and more desirable fleece.

















# **Crafter/ Hobbyist**



#### OCCUPATIONS:

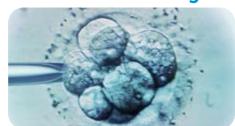
· Crafters or hobbyists participate in making handicrafts using alpaca wool, yarn or fabric. They may make products to sell or for personal use.



## ONSIDERATIONS:



# **Artificial Breeding**



## ONSIDERATIONS:

Embryo transfer involves transferring a fertilised egg (ova) from a high quality female donor alpaca to a recipient female, who then gives birth and rears the cria.

This means that more offspring can be produced from the genetically superior mother.

## ONSIDERATIONS:

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