



# All About Alpacas

## TEACHER GUIDE

LESSON 1

FOUNDATION  
– YEAR 2

This resource has been developed by:



# LESSON 1

## All About Alpacas

### ➤ LEARNING AREAS / YEAR LEVEL

Design and Technologies (Foundation – Year 2)  
Science (Foundation – Year 2)

### ➤ AUSTRALIAN CURRICULUM CONTENT

Explore how plants and animals are grown for food, clothing and shelter  
(**AC9TDE2K03**)


Observe external features of plants and animals and describe ways they can be grouped based on these features (**AC9SFU01**)

Represent observations in provided templates and identify patterns with guidance (**AC9SFI03**)

Identify the basic needs of plants and animals, including air, water, food or shelter, and describe how the places they live meet those needs (**AC9S1U01**)

Describe daily and seasonal changes in the environment and explore how these changes affect everyday life (**AC9S1U02**)

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> **LESSON OBJECTIVE**

Students will learn about the grouping and classification of alpacas and their relationship to other animals. They will understand the similarities and differences between the different types of alpacas and learn about the needs of the animals and the seasonality of jobs on an alpaca farm. Students will engage in hands-on, collaborative activities that encourage discussion, problem-solving and organisation of information.

> **LESSON OVERVIEW**

**Activity 1.1 – Grouping and Classification** (60-80 mins)

**Activity 1.2 – Features of Alpacas** (60 mins)

**Activity 1.3 – The Needs and Seasons** (70 mins)

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# Resources and Equipment

## ➤ ACTIVITY 1.1 – Grouping and Classification

1. [Worksheet 1.1a – How am I Grouped?](#) (Literacy activity)
2. [Worksheet 1.1b – How am I Grouped?](#) (Cloze passage activity)
3. [Worksheet 1.1c – Camels, Llamas and Alpacas](#) (Tracing activity) or
4. [Worksheet 1.1d – Camels, Llamas and Alpacas](#) (Literacy and data sheet activity)
5. [Worksheet 1.1e – Counting on Me](#) (Measurement activity)
6. Roll of toilet paper (or string)
7. A metre ruler (per group)
8. Paper cups (multiples per group)

## ➤ ACTIVITY 1.2 – Features of an Alpaca

1. [Worksheet 1.2a – Alpacas](#) (Table labelling activity) or
2. [Worksheet 1.2b – Alpacas](#) (Labelling activity)
3. [Worksheet 1.2c – Odd One Out?](#) (Problem-solving activity)
4. [Worksheet 1.2d – Huacaya and Suri](#) (Observation activity)
5. [Worksheet 1.2e – Huacaya and Suri](#) (Literacy activity)
6. [Worksheet 1.2f – Huacaya and Suri](#) (Cut and paste activity)
7. Scissors and glue (per individual)
8. [Worksheet 1.2g – Huacaya and Suri – Similar and Different](#) (Venn diagram activity)

## ➤ ACTIVITY 1.3 – The Needs and Seasons

1. [How to Draw a Cute Alpaca](#) (4:04)
2. [A Year on Our Farm](#) (5:22)
3. [Worksheet 1.3a – What do Alpacas Need?](#) (Drawing activity)
4. Coloured pencils/textas
5. [Worksheet 1.3b – Making a Paper Plate Calendar](#) (Seasonal activity)
6. One large paper plate, scissors, one metal fastener, glue, marker, and ruler (per student)

# Lesson Guide

## > ACTIVITY 1.1 – Grouping and Classification

Students will learn about the main features of alpacas and how they differ from animals in the same family. They will understand the way that alpacas are grouped based on their features.

1. Explain to students that placing both living and non-living things into categories makes communication with other people easier. Ask students to imagine they are in a supermarket in the aisle that sells milk. Question them about what else is normally in this area and why. (*other dairy products.*) Repeat this by asking students if they have ever been to a toy store. If they were standing in the lego area, what other products would be close by? (*other lego sets but not soft toys or collecting cards.*) This process of sorting makes life easier and saves time. Sorting is also called classification (things that are alike or have similar features are grouped together).
2. Discuss other areas around the school where people have organised or classified living and non-living things (*library books, classes, year groups, sporting teams, science equipment, etc.*) and record ideas in a central area.
3. Recall the seven features that determine if an organism is a **living** thing (movement, respiration, sensitivity, growth, reproduction, excretion and nutrition). Using these features, we can determine if something is a living or non-living thing. This is an example of how things can be grouped; living or non-living. Another way that living things can be grouped or organised is by using the **classification** system of living things.
4. Provide students with **Worksheet 1.1a – How am I Grouped?** (Literacy activity) and as a class, read the information about how alpacas are grouped based on their features. Provide students with **Worksheet 1.1b – How am I Grouped?** (Cloze passage activity) and ask them to fill in the missing words from the word bank.

### **Answers**

5. Provide students with **Worksheet 1.1c – Camels, Llamas and Alpacas** (Tracing activity) or **Worksheet 1.1d – Camels, Llamas and Alpacas** (Literacy and data sheet activity) depending on the students' year level and literacy ability. Either trace the terms or read the information distinguishing each species of animals.
6. Divide students into groups of three and use a toilet paper roll (or string) and a metre ruler to roll the paper out to the height of the three animals. Students tear off the roll at the correct formal measurement. Groups then order the toilet paper/string from the shortest to the tallest animal.
7. As an extension task, distribute **Worksheet 1.1e – Counting on Me** (Measurement activity). Students use informal measurements to compare the heights of the same three animals. Assist students in using their handspans, paper cups and another 'free choice' item from within the classroom to measure the height of the animals and record the numerical values on their worksheets.

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## ➤ ACTIVITY 1.2 – Features of Alpacas

Students will learn about the features of alpacas and how huacaya and suri breeds are similar and different to each other.

1. Alpacas have characteristics and features which make them distinguishable from other animals. Provide students with either **Worksheet 1.2a – Alpacas** (Table Labelling activity) or **Worksheet 1.2b – Alpacas** (Labelling activity) to practise recognising and recording features of an alpaca.

### Answers

2. Distribute **Worksheet 1.2c – Odd One Out?** (Problem solving activity) to groups of three to four students. Ask students to view the three animals on the worksheet and observe the features of each one. Students individually decide which animal is the odd one out in the series and justify their choice to the other members of their group. (Note: there is no right or wrong answer to this task.)
3. After students have had a period of time to discuss their ideas, ask them to raise their hand for animal one, two or three to vote for which animal they determined the most different in the series.
4. Explain to students that there are two different breeds of alpacas: huacaya and suri. These breeds of alpacas have different observable features. Either project on-screen or handout **Worksheet 1.2d – Huacaya and Suri** (Observation activity) for students to observe and ask them to contribute their ideas about how the animals are similar and different from each other. Record ideas in a central area.
5. Distribute **Worksheet 1.2e – Huacaya and Suri** (Literacy activity) to individual students, and as a class, read the information about the different types of alpacas and their characteristics and features.
6. After reading the literacy material, provide individuals with **Worksheet 1.2f – Huacaya and Suri** (Cut and paste activity), scissors and glue. Ask students to cut around the features and images on their worksheets and paste the suri information neatly in the right side column and the huacaya information on the left side of the column to create a table of features of the different breeds.

### Answers

7. As an extension task, distribute the Venn diagram on **Worksheet 1.2g – Huacaya and Suri – Similar and Different** (Venn diagram activity). Using the range of materials they have read and viewed, ask students to record features that are unique to huacaya's (on the left-hand side) and suri's (on the right-hand side of the diagram) of the Venn diagram. Record shared similarities in the overlapping area of the diagram.

### Answers

## > ACTIVITY 1.3 – The Needs and Seasons

Students will learn about the needs of living things and how farmers provide these essential things to alpacas on a farm. They will understand jobs (operations) that are performed throughout the year and how these jobs are related to the cycling of the seasons.

### Background Information

Revise the concept that living organisms need specific things from the environment to be successful in their growth, development and reproduction. Remind students that animals need water, food, air and shelter/warmth to survive. Link these needs to the cycles and seasons in nature and their impact on living things. Farmers need to ensure that their plants and animals are looked after in all seasons and will perform jobs (operations) at different times of the year to care for their animals and plants.

1. Record the names of the four seasons in a central area and ask students:
  - What are the features of the weather in each season?
  - What clothes are commonly worn in each of the different seasons?
  - What things might a farmer do in each season to look after their animals and plants?
2. After students have had the opportunity to contribute their ideas, as a class, watch the video clip reading of [A Year on Our Farm](#) (5:22).
3. Students listen for any jobs that the people in the story perform during the different seasons and at the end of the story, recall the information they have heard.
4. Facilitate a discussion about why the seasons occur. Explain to students that the 'seasons are the natural cycles that occur every year as the earth rotates around the sun on a tilted axis'.
5. View the video [How to Draw a Cute Alpaca](#) (4:04) and ask students to complete their drawing on **Worksheet 1.3a – What do Alpacas Need?** (Drawing activity). Students need to leave space around their alpaca to draw and label its needs.

6. Read students the following information focused on seasonal jobs on an alpaca farm. Ask them to listen carefully for the answers to the following questions.
  - What jobs are performed in the different seasons?
  - Why are these jobs performed at different times of the year?

### **Seasonal Jobs on the Alpaca Farm**

Farmers in Australia take very good care of their alpacas. During the different seasons, farmers have to perform jobs that keep their herds safe and healthy. Jobs on farms are called operations.

#### **Summer – Birthing**

In Australia, cria can be born at different times of the year. One of these times is during summer. When cria are being born, farmers check the mothers and offspring to make sure they are safe and healthy.

#### **Autumn – Drenching**

Alpacas are given medicine that they need to swallow so that they don't get sick from internal parasites like worms.

#### **Winter – Vitamin ADE Vaccination**

If alpacas do not get enough Vitamin D from the sun, their bones become weak and they can get a bone condition called rickets. Farmers need to give their animals Vitamin D injections during the winter so that their bones stay strong.

#### **Spring – Shearing and Classing**

Alpacas grow fleece to protect themselves from the weather. Farmers cut (shear) the fibre that alpacas grow and it is used to make things such as clothes and carpets. Shearing can be performed at different times of the year but is often done during spring.

7. Display **Worksheet 1.3b – Making a Paper Plate Calendar** (Seasonal activity) and ask students to collect the required materials displayed on page 1.
8. Distribute or project page 2, and explain that students will create a calendar of operations (or jobs) on an alpaca farm during different seasons. Assist students in following the flowchart methodology using the templates provided on page 2-6.

### **Answers**



# Student Resources

## ➤ ACTIVITY 1.1 – Grouping and Classification

Worksheet 1.1a – How am I Grouped? (Literacy activity)

Worksheet 1.1b – How am I Grouped? (Cloze passage activity)

Worksheet 1.1c – Camels, Llamas and Alpacas (Tracing activity) or

Worksheet 1.1d – Camels, Llamas and Alpacas (Literacy and data sheet activity)

Worksheet 1.1e – Counting on Me (Measurement activity)

## ➤ ACTIVITY 1.2 – Features of an Alpaca

Worksheet 1.2a – Alpacas (Table labelling activity) or

Worksheet 1.2b – Alpacas (Labelling activity)

Worksheet 1.2c – Odd One Out? (Problem-solving activity)

Worksheet 1.2d – Huacaya and Suri (Observation activity)

Worksheet 1.2e – Huacaya and Suri (Literacy activity)

Worksheet 1.2f – Huacaya and Suri (Cut and paste activity)

Worksheet 1.2g – Huacaya and Suri – Similar and Different (Venn diagram activity)

## ➤ ACTIVITY 1.3 – The Needs and Seasons

Worksheet 1.3a – What do Alpacas Need? (Drawing activity)

Worksheet 1.3b – Making a Paper Plate Calendar (Seasonal activity)

## Acknowledgments

- Gayle Herring, Fibre Naturally Alpaca Woollen Mill
- Waratah Alpaca Fibre
- Mulberry Park Alpaca Stud
- Coolawarra Storybook Alpaca Stud
- Ambersun Alpaca Stud
- EP Cambridge Alpaca Stud
- Mllduck Alpaca Stud
- Dairy Road Alpaca Stud
- Wedgetail Rise Alpaca Stud
- Barrooka Alpaca Stud
- Precision Alpaca Stud
- Australian Alpaca Association
- Tirrikee Alpaca Stud
- Fleurieu Prime Alpaca
- Malakai Alpaca Stud
- Yaringa Alpaca stud

This resource has been developed by:

# Answers

## ➤ ACTIVITY 1.1 – Grouping and Classification

**Worksheet 1.1a – How am I Grouped?** (Cloze passage activity)

- Living, animal, mammal, camelid, huacaya, suri

**Worksheet 1.1e – Counting on Me** (Measurement activity)

- Answers will vary depending on individual student responses.

## ➤ ACTIVITY 1.2 – Features of an Alpaca

**Worksheet 1.2a – Alpacas** (Table labelling activity)

- 15, 2, 11, 6, 4

**Worksheet 1.2b – Alpacas** (Labelling activity)

- |               |            |             |                     |
|---------------|------------|-------------|---------------------|
| 1. Mouth      | 7. Withers | 13. Hock    | 19. Pastern         |
| 2. Muzzle     | 8. Back    | 14. Pad     | 20. Knee            |
| 3. Bonnet/bob | 9. Croup   | 15. Toenail | 21. Apron/bib/chest |
| 4. Ears       | 10. Rump   | 16. Flank   | 22. Shoulder        |
| 5. Eyes       | 11. Tail   | 17. Ribs    |                     |
| 6. Neck       | 12. Thigh  | 18. Elbow   |                     |

*(Answers continued on following page...)*

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**Worksheet 1.2f – Huacaya and Suri** (cut and paste activity)

(a)



Huacaya

Soft feeling  
fibre

Outwards  
growing fibre



(b)



Suri

Silky feeling  
fibre

Hanging  
fibre



**Worksheet 1.2g – Huacaya and Suri – Similar and Different** (Venn diagram activity)

- **Suri:** less commonly farmed; shiny fleece; silky locking fibre; hanging fleece; fleece feels more slippery and silky than a huacaya.
- **Huacaya:** most common breed in South America and Australia; soft bonnet of fibre on forehead; mutton chops on cheeks; body fibre grows outwards.
- **Similar:** body size; body shape; valuable fleece; breed comes in a range of colours.

(Answers continued on following page...)

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## ACTIVITY 1.3 – The Needs and Seasons

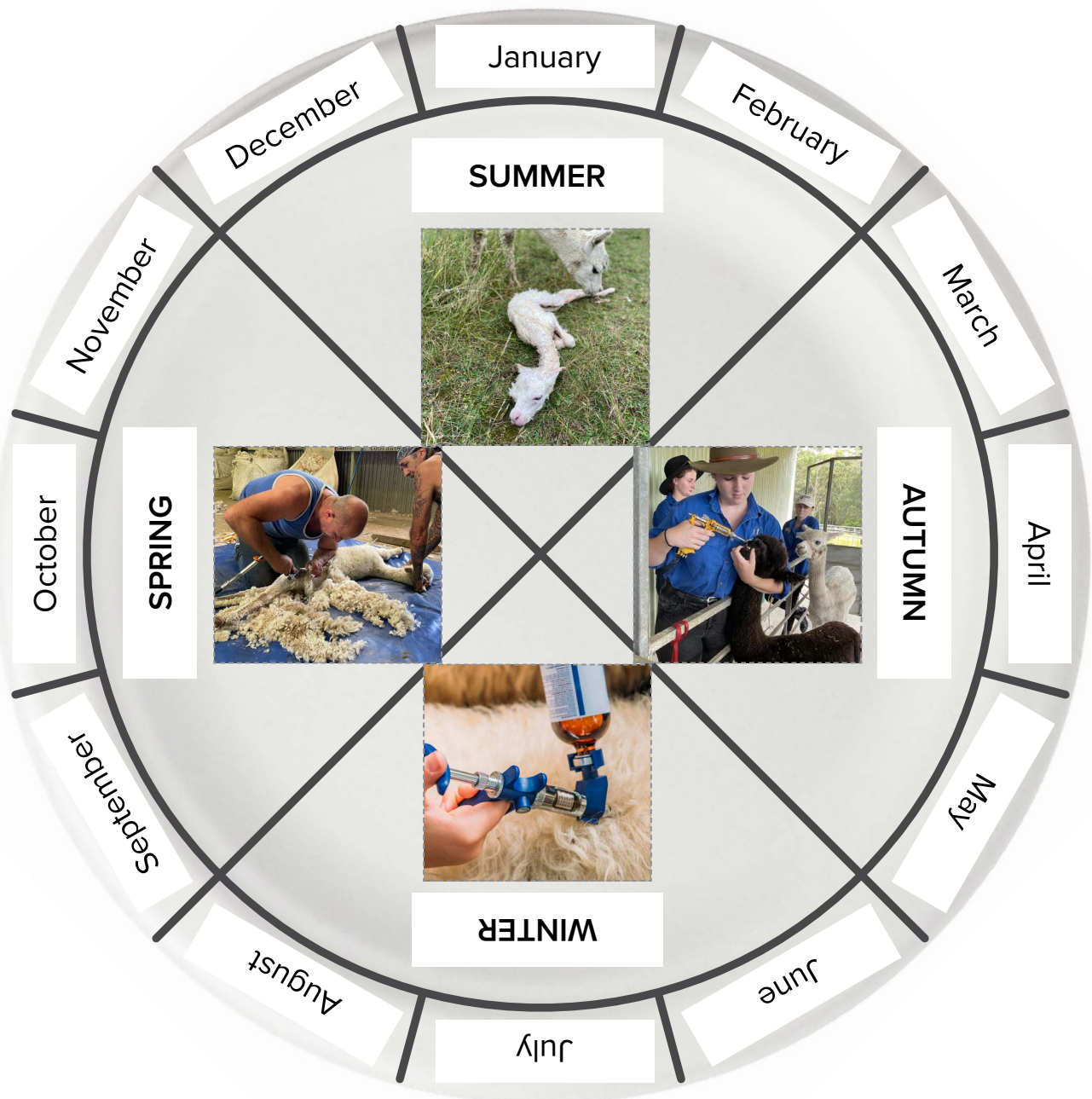
### Worksheet 1.3b – Making a Paper Plate Calendar (Seasonal activity)

Summer – Birthing

Autumn – Drenching

Winter – Vaccination

Spring – Shearing/Classing



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# References

- Alpaca | mammal. (2019). In *Encyclopædia Britannica*.  
<https://www.britannica.com/animal/alpaca>
- Armstrong, D. M., & Wilson, D. E. (2019). mammal | Definition, Characteristics, Classification, & Facts. In *Encyclopædia Britannica*.  
<https://www.britannica.com/animal/mammal>
- ArtHH. (2018, June 8). *How to Draw a Cute Alpaca*.  
[www.youtube.com](http://www.youtube.com), <https://www.youtube.com/watch?v=LPXx6PbwDhY>
- *Basics of alpaca keeping*. (n.d.).  
[www.agric.wa.gov.au](http://www.agric.wa.gov.au), <https://www.agric.wa.gov.au/small-landholders-western-australia/basics-alpaca-keeping?page=0%2C1>
- camel | Bactrian, Dromedary, & Facts | Britannica. (2019). In *Encyclopædia Britannica*.  
<https://www.britannica.com/animal/camel>
- *Camel Fact Sheet*. (2017). Redsuncamels.  
<https://www.redsuncamels.com.au/camel-facts>
- Hunter, M. (2016, October 23). *A Year on our Farm*.  
[www.youtube.com](http://www.youtube.com), <https://www.youtube.com/watch?v=co9MyotFn4c>
- The Editors of Encyclopedia Britannica. (2018). Llama | mammal. In *Encyclopædia Britannica*.  
<https://www.britannica.com/animal/llama>

## LITERACY ACTIVITY

# How Am I Grouped?

**Alpacas are grouped in different ways to help us understand more about their features.**

I am a **living** thing because I move, respire, am sensitive to the environment, grow, reproduce, excrete and need nutrition.

I am part of the **animal** kingdom.

I am a **mammal** because I am nourished with milk when I am young, I have hair/fur and other special features inside my body that other animals don't have.

I am in the **camelid** family because I am large with a slender neck and long legs. I have unique two-toed feet with soft pads and a stomach that has three chambers. Camels and llamas are part of this family too.

There are two **breeds** of alpacas. They are called:

- huacaya
- suri



*Huacaya*



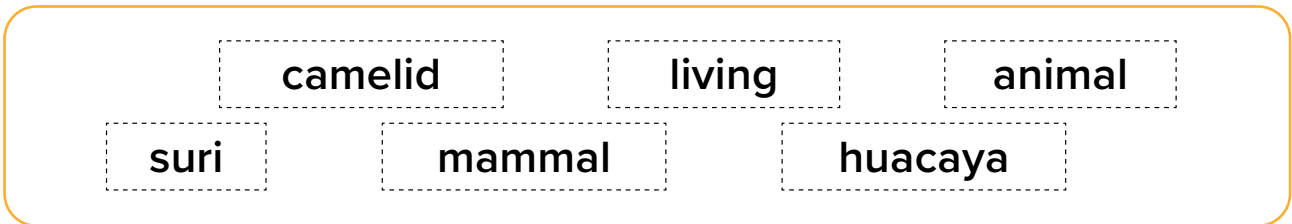
*Suri*

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## CLOZE PASSAGE ACTIVITY

# How Am I Grouped?

Use the words below to fill in the missing spaces.



Alpacas are grouped in different ways to help us understand more about their features.

I am a \_\_\_\_\_ thing because I move, respire, am sensitive to the environment, grow, reproduce, excrete and need nutrition.

I am part of the \_\_\_\_\_ kingdom.

I am a \_\_\_\_\_ because I am nourished with milk when I am young. I have hair/fur and other special features inside my body that other animals don't have.

I am in the \_\_\_\_\_ family because I am large with a slender neck and long legs. I have unique two-toed feet with soft pads and a stomach that has three chambers. Camels and llamas are part of this family too.

There are two breeds of alpacas. They are called:

- \_\_\_\_\_
- \_\_\_\_\_

TRACING ACTIVITY

# Camels, Llamas and Alpacas



Camel

Average height to shoulder: 180cm



Llama

Average height to shoulder: 120cm



Alpaca

Average height to shoulder: 90cm

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## LITERACY AND DATA SHEET ACTIVITY

# Camels, Llamas and Alpacas



A camel has a humped back, a short tail, long slim legs, and a long neck. It has two large toes that spread apart to keep the animal from sinking into the sand.

**Average height to shoulder: 180cm**



A llama is a bigger size than an alpaca with banana-shaped ears. They do not have humps. They have long legs and necks, short tails, small elongated heads, and large pointed ears. Their fleece is more coarse than an alpaca.

**Average height to shoulder: 120cm**



An alpaca is a slender-bodied animal with a long neck and long legs, a short tail, a small blunt shaped head, and large pointed ears. Alpacas are used for their fleece, as pets and herd protectors against foxes.

**Average height to shoulder: 90-95cm**

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## MEASUREMENT ACTIVITY

# Counting on Me



## A camel is:

- a) \_\_\_\_\_ hands in height
- b) \_\_\_\_\_ paper cups in height
- c) \_\_\_\_\_ in height



## A llama is:

- e) \_\_\_\_\_ hands in height
- f) \_\_\_\_\_ paper cups in height
- g) \_\_\_\_\_ in height



## An alpaca is:

- h) \_\_\_\_\_ hands in height
- i) \_\_\_\_\_ paper cups in height
- j) \_\_\_\_\_ in height

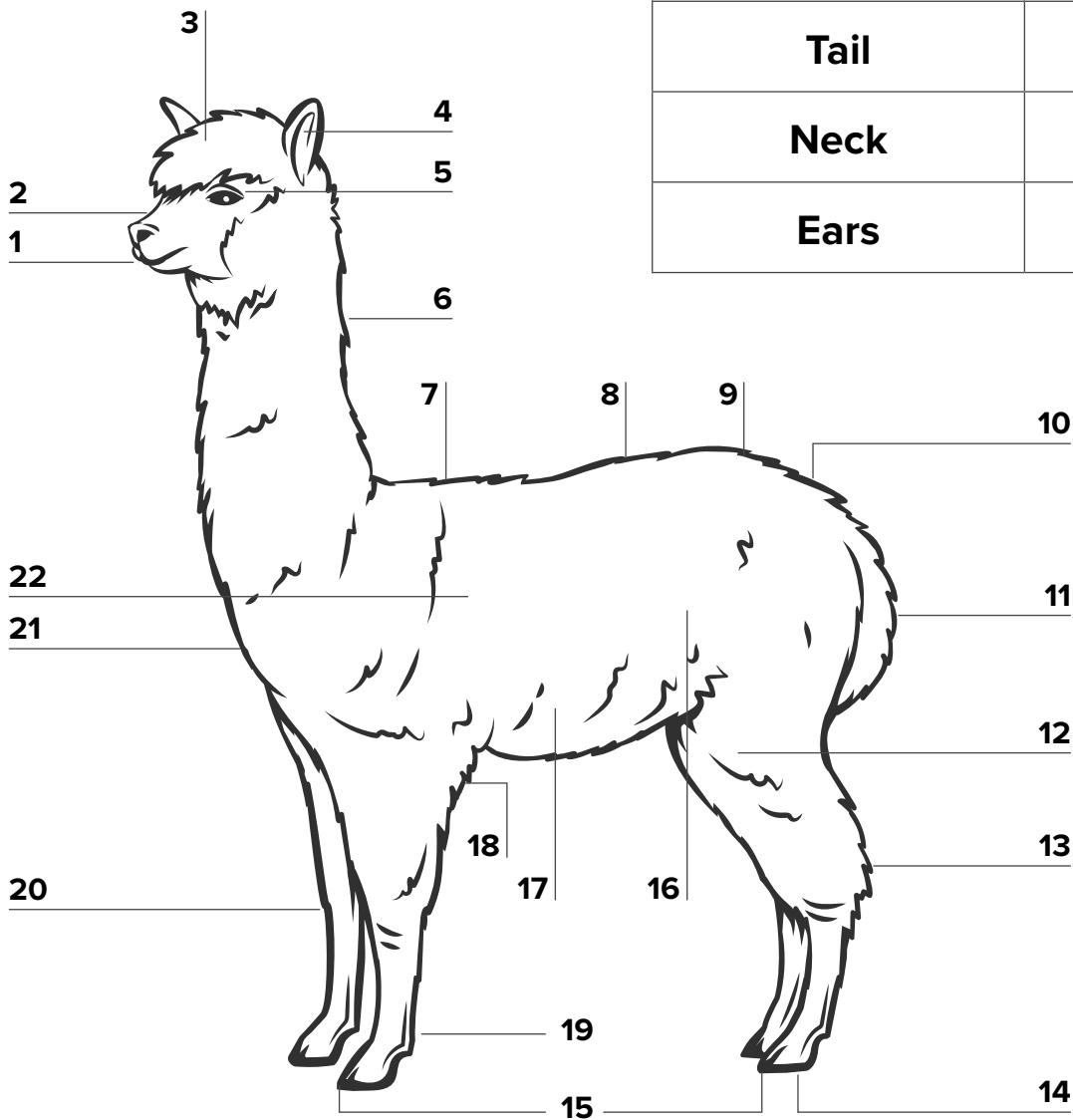
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TABLE LABELLING ACTIVITY

# Alpacas

Find the feature and record the correct number in the table.

FEATURE	NUMBER
Toenail	
Muzzle	
Tail	
Neck	
Ears	

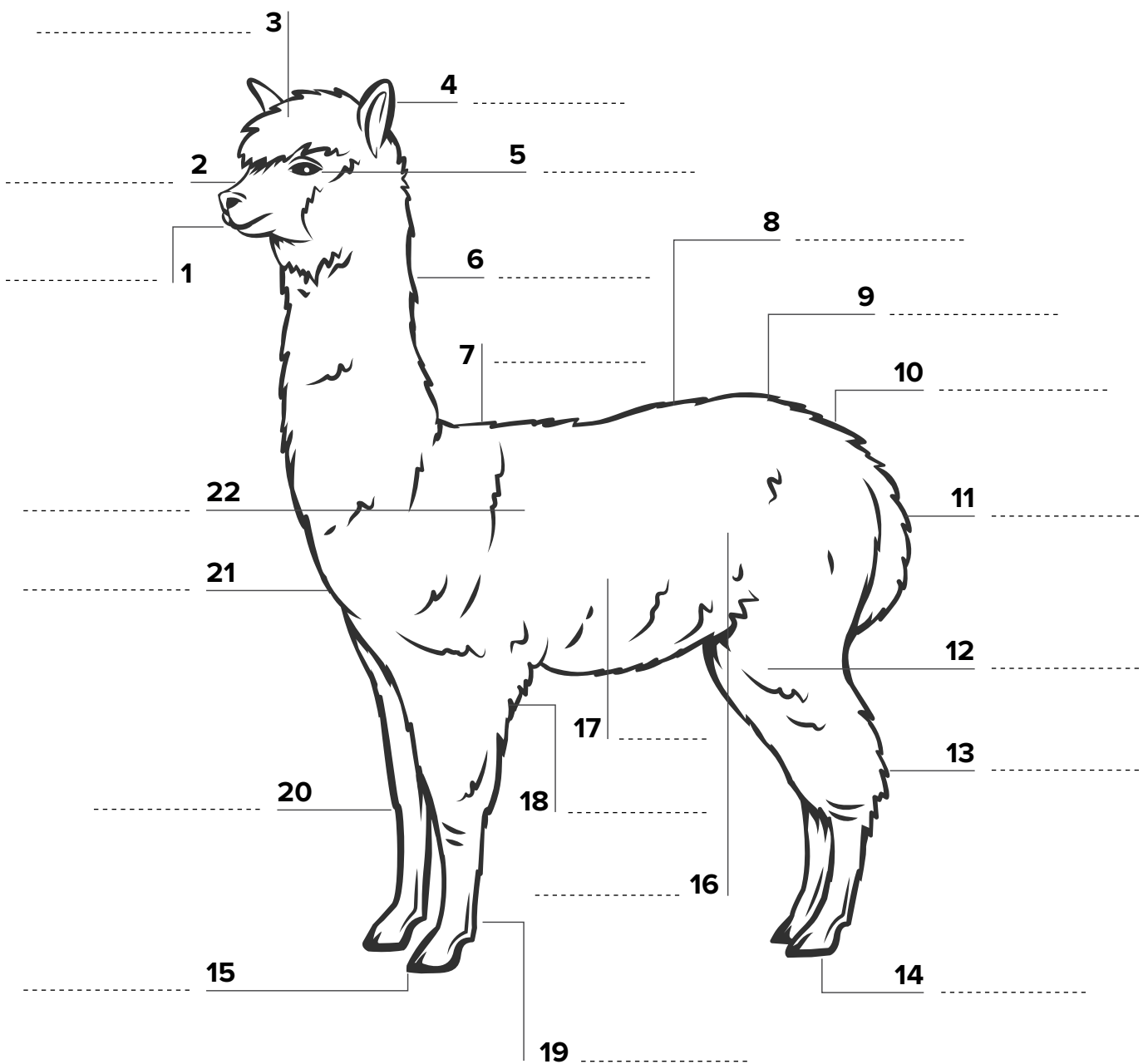


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LABELLING ACTIVITY

# Alpacas

Label the features of the alpaca below by placing the name beside the correct number.



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## PROBLEM-SOLVING ACTIVITY

# Odd One Out

Which animal is the odd one out and does not belong in the series?



**Alpaca 1**



**Alpaca 2**



**Alpaca 3**

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OBSERVATION ACTIVITY

# Huacaya and Suri



*Huacaya*



*Suri*

This resource has been developed by:

OBSERVATION ACTIVITY

# Huacaya and Suri



*Huacaya*



*Suri*

This resource has been developed by:

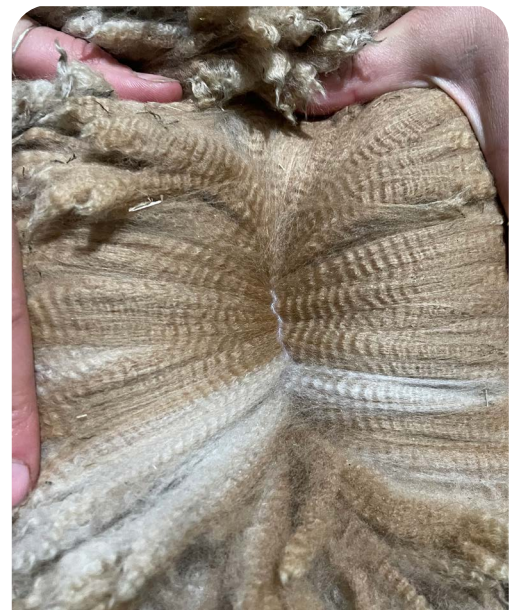
## LITERACY ACTIVITY

# Huacaya and Suri

**There are two distinct types of alpaca: huacaya and suri. The key difference between them is observed in their fleece characteristics.**

**Huacaya**, pronounced wua'ki'ya, is the most common alpaca type in both South America and Australia. The huacaya has a soft bonnet of fibre on its forehead and boasts 'mutton chops' on its cheeks, while its dense body fibre grows directly outwards, not unlike merino fleece. Ideally, fleece coverage is even and extends down the legs. Coverage should extend down the legs and up the neck to a full bonnet on the head with a clean muzzle and ears.

The less common type is the **suri**, pronounced soo'ree, and in Australia, only a small percentage of alpacas are suris. The animal is covered with lustrous, silky, locking fibre, prized both in the show ring and by processors. The fleece hangs from a centre part – neck through to tail – with the locks lying close to the skin in a draped, free-swinging curtain. The fleece has lustre, and its feel is more slippery and silky than that of the huacaya. The predominant suri colours are white or light fawn.



*Huacaya*



*Suri*

This resource has been developed by:



CUT AND PASTE ACTIVITY

# Huacaya and Suri

A.

B.

This resource has been developed by:



Soft feeling  
fibre



Hanging  
fibre



Suri



Outwards  
growing fibre



Silky feeling  
fibre

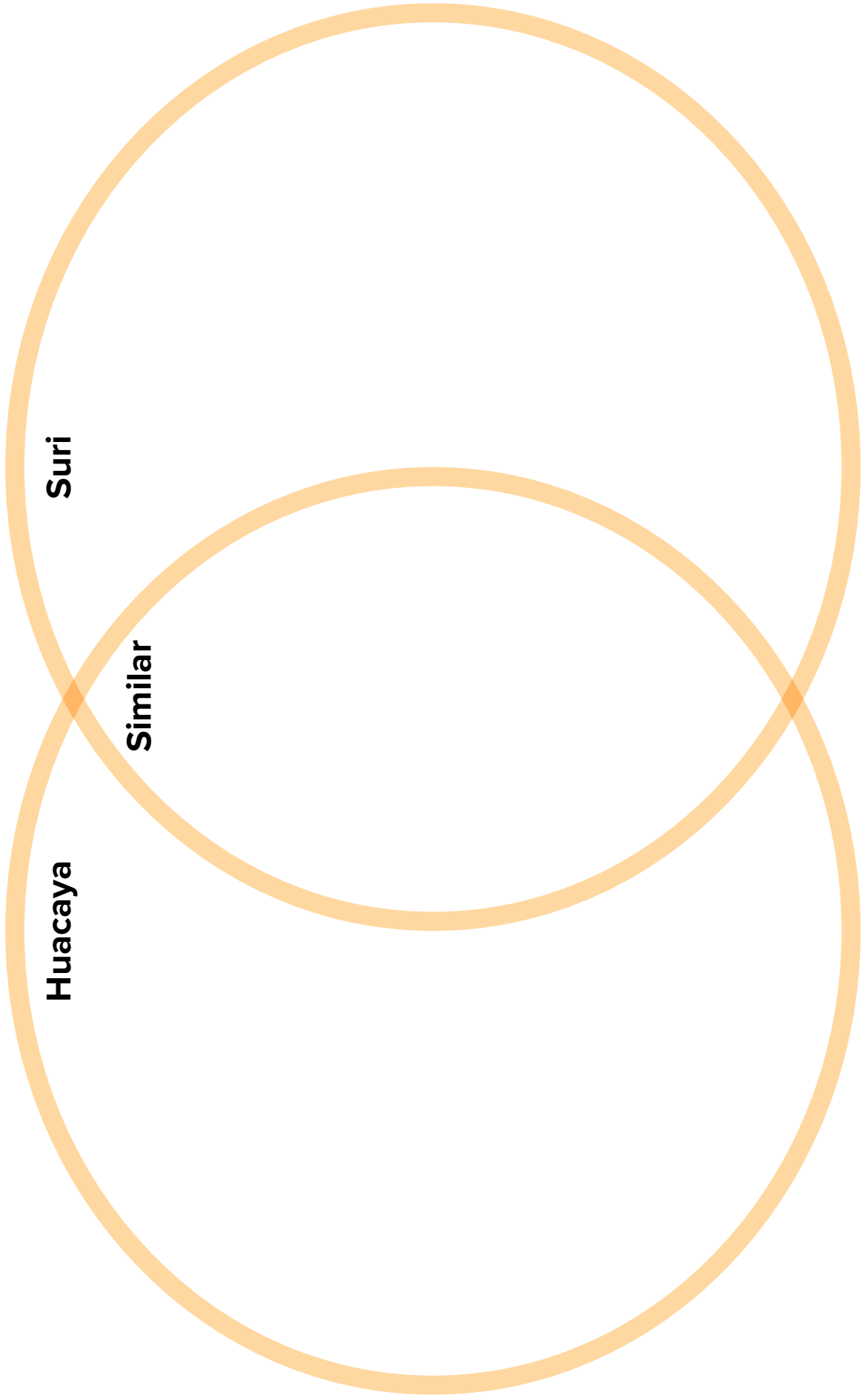


Huacaya



VENN DIAGRAM ACTIVITY

# Huacaya and Suri – Similar and Different



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## DRAWING ACTIVITY

# What do Alpacas Need?

**Living things need: food, water, shelter and air to survive.**

Draw an alpaca on a farm and provide it with:

- grass for **food**
- **water** to drink
- trees for **shelter** from the hot sun, and
- plenty of fresh **air** to breath/respire

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SEASONAL ACTIVITY

# Making a Paper Plate Calendar – Materials

Collect the following materials:



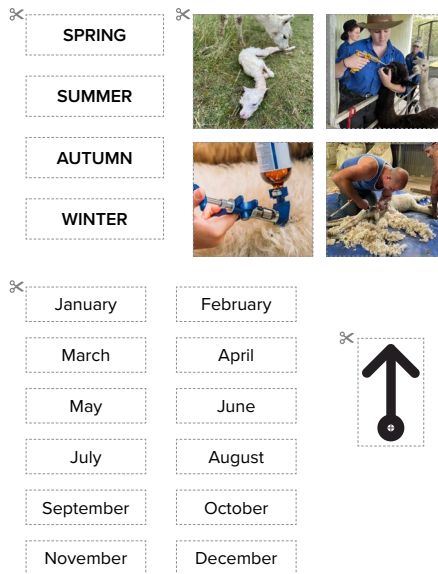
1 x large paper plate



1 x metal pin/fastener



1 x scissors



1 x template  
(see following page)



1 x glue stick



1 x marker pen



1 x ruler

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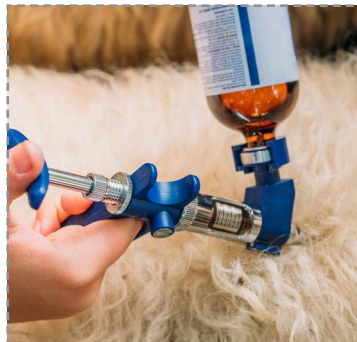


SPRING

SUMMER

AUTUMN

WINTER



January

February

March

April

May

June

July

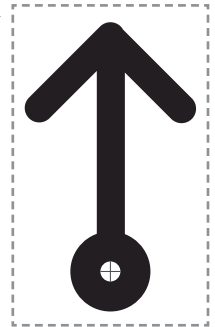
August

September

October

November

December



SEASONAL ACTIVITY

# Making a Paper Plate Calendar – Instructions

**Step 1** – Use a ruler and a marker to divide the plate.  
Draw two lines that cross and a circle inside the outer edge.



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SEASONAL ACTIVITY

# Making a Paper Plate Calendar – Instructions (cont.)

**Step 2** – Use scissors to neatly cut the words from the supplied label template.

✂

SPRING

SUMMER

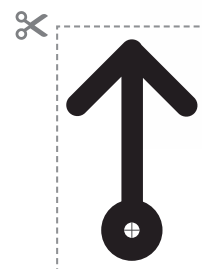
AUTUMN

WINTER



✂

January	February
March	April
May	June
July	August
September	October
November	December



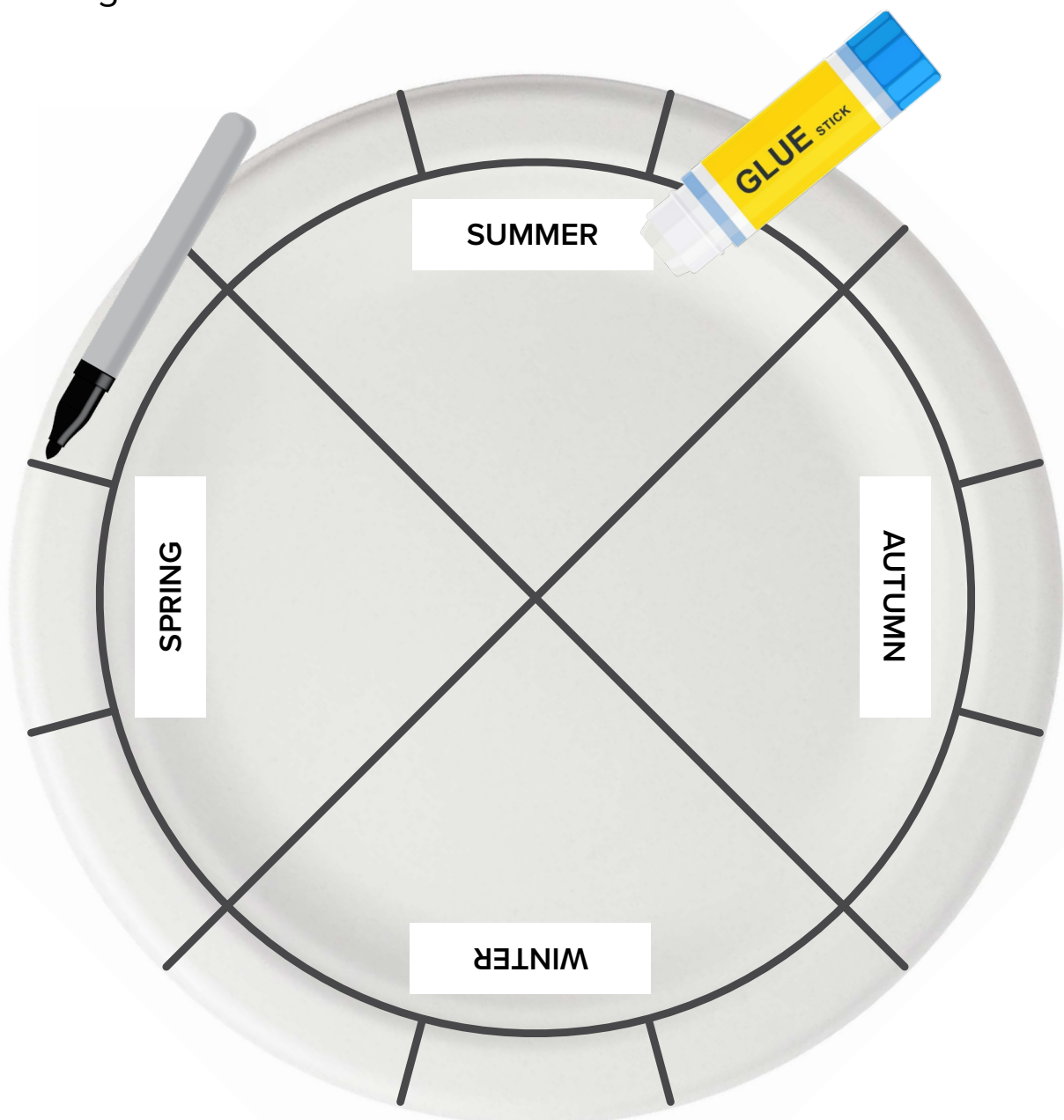
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SEASONAL ACTIVITY

# Making a Paper Plate Calendar – Instructions (cont.)

**Step 3** – On the paper plate, use the marker to divide the outer circle into 12 even segments (four x segments of three) and then paste the names of the seasons in the correct order, starting with summer.



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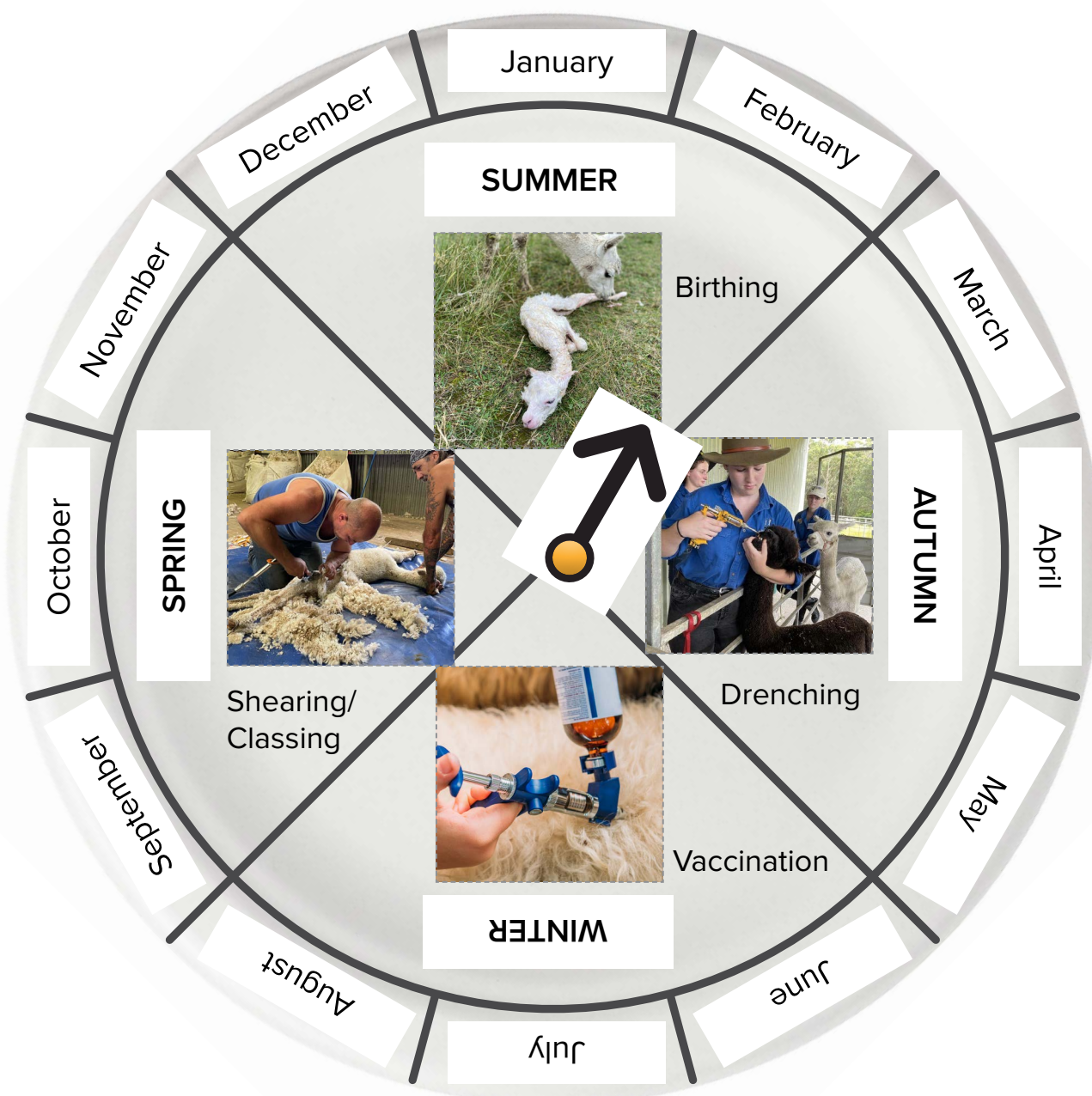
SEASONAL ACTIVITY

# Making a Paper Plate Calendar – Instructions (cont.)

**Step 4** – Paste the months of the year into the correct segments.

**Step 5** – Match and paste the jobs into the correct season.

Finally, secure the arrow with a paper fastener so that it can turn.



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