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3–4 | LESSON PLAN

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Lesson 5

Modelling changes on the farm



AUSTRALIAN CURRICULUM CONTENT

Compare characteristics of living and non-living things and examine the differences between the life cycles of plants and animals. (ACSSU044, ACSSU072, AC9S3U01)

Construct and use representations, including tables, simple column graphs and visual or physical models, to organise data and information, show simple relationships and identify patterns (ACSIS057, ACSIS068, AC9S3I04, AC9S4I04)

LESSON OBJECTIVE

Students will learn about animal life cycles. They will also build models to represent changes over time and show relationships and patterns between the life phases of cattle, sheep and goats.

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Lesson 5

LESSON OVERVIEW

Activity 5.1	Keywords	10–20 mins
Activity 5.2	Life cycle of a sheep	20–30 mins
Activity 5.3	Modelling the life cycles of livestock	20 mins
Activity 5.4	Just for fun	10 mins

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Resources and equipment

ACTIVITY 5.1 – Keywords

1. Worksheet 5.1a – *Keywords and definitions.*
2. Worksheet 5.1b – *Keywords scramble.*
3. Worksheet 5.1c – *Keywords spelling list.*
4. Timer.

ACTIVITY 5.2 – Life cycle of a sheep

1. Worksheet 5.2a – *Sheep: growing and changing*.
2. Scissors, glue, metal fastener pins.
3. Three different coloured pencils (green, red, blue).

ACTIVITY 5.3 – Modelling the life cycles of livestock

1. Stimulus 5.3a – *How does my name change as I grow?*
2. Playdough, plasticine or other craft materials.
3. Worksheet 5.3a – *Modelling the life cycles of livestock*.
4. Scissors, sticky tape, toothpicks.
5. Digital device (optional).

ACTIVITY 5.4 – Just for fun

1. Worksheet 5.4 – *What's my name?*

ADDITIONAL READING/RESOURCES

- Growing and Changing.

Lesson guide

ACTIVITY 5.1 – Keywords

1. Distribute Worksheet 5.1a – *Keywords and definitions* and read through the text with students. Allow time for students to individually re-read the words and then allocate students into pairs. Set a five-minute timer and ask pairs to practise recalling the meaning of the keywords with each other. After five minutes, provide pairs with Worksheet 5.1b – *Keywords scramble*. Students work together to unscramble the keywords. (Answers page 18–19)

   Optional: Provide students with Worksheet 5.1c – *Keywords spelling list.*

ACTIVITY 5.2 – Life cycle of a sheep

1. As a class, brainstorm the following questions and record ideas in a central area:
   - How do you look different from when you were a baby?
   - What are the stages in a human's life cycle?
   - How will you look different as you grow and become an adolescent/ teenager and then an adult?
   - How do animals and plants look different as they get older?
   - What is a life cycle?

   (Answers page 20)

   Explain to students that when animals (including humans) grow older, the most apparent change is their size (height, weight and width). They also change in other ways, such as the different sexes developing characteristics so that they can reproduce. Although the life cycles are described in stages, animals gradually change from day to day throughout all of these stages.

   Note – Both male and female cattle, sheep and goats can have horns. A common misconception is that only males have them.

2. Students use Worksheet 5.2a – *Sheep: growing and changing* to create a sheep's life cycle. Students follow the instructions to cut out the images and wheels, sticking the pictures in the correct locations to show the growth of a sheep over time, and create a life cycle wheel for this animal. Encourage students to describe how sheep change from one life cycle stage to the next. (Answers page 21)

***Lesson guide** continued next page*

Lesson guide *continued*

ACTIVITY 5.3 – Modelling the life cycles of livestock

1. Distribute or display the three images of Stimulus 5.3a – *How does my name change as I grow?* Discuss what changes can be observed as cattle, sheep, and goats grow and change from birth into an adult. Discuss how the names we use for them at different life stages also change. Whether an animal is a male or a female also influences the terms used to describe them.
2. Allocate students to groups of four and distribute Worksheet 5.3a – *Modelling the life cycles of livestock* to each group. Provide access to playdough, plasticine or other craft materials. Students build four different models of their chosen livestock at each life stage, including an adult male and female (paying close attention to differences and similarities at each stage).
3. When models are complete, students should cut out the corresponding picture and its term and use sticky tape and toothpicks to create a label that they can attach to each model.
4. Allow time for students to observe each other's models and discuss the similarities and differences at each life stage and the similarities and differences between each type of animal (sheep, cattle and goats).
5. Students may use digital devices to create a display or display their completed models in the classroom.

ACTIVITY 5.4 – Just for fun

1. To conclude the lesson, students use Worksheet 5.4a – *What's my name?* to match the name of the farm animals with their correct definitions. Students use one coloured pencil (e.g. green) to match all sheep definitions, then select a different colour to match the goat terms and another colour for the cattle descriptions. (Answers page 22).

Student resources

ACTIVITY 5.1 – Keywords

Worksheet 5.1a	Keywords and definitions
Worksheet 5.1b	Keywords scramble
Worksheet 5.1c	Keywords spelling list

ACTIVITY 5.2 – Life cycle of a sheep

Worksheet 5.2a	Sheep: growing and changing

ACTIVITY 5.3 – Modelling the life cycles of livestock

Stimulus 5.3a	How does my name change as I grow?
Worksheet 5.3a	Modelling the life cycles of livestock

ACTIVITY 5.4 – Just for fun

Worksheet 5.4	What's my name?

Worksheet 5.1a

Keywords and definitions

Read the keywords and definitions below. Practise saying them once to yourself and then with a partner. Test each other on the meaning of the words.

yearling	A young cow between one and two years old.
hogget	A young sheep.
doeling	A young female goat.
buckling	A young male goat.
ewe	An adult female sheep.
vealer	A young calf less than a year old.
calf	A very young, or baby cow.






Worksheet 5.1b

Keywords scramble

Unscramble the keywords below and recall their meanings.

e t o g h g

e e w

e a i n g y l r

e a l v r e






***Worksheet 5.1b** continued next page*

Worksheet 5.1b continued

Worksheet 5.1b

Unscramble the keywords below and recall their meanings.

e o i n g l d

c f l a

u l b i n g c k






Worksheet 5.1c

Keywords spelling list

Spell the keywords below.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

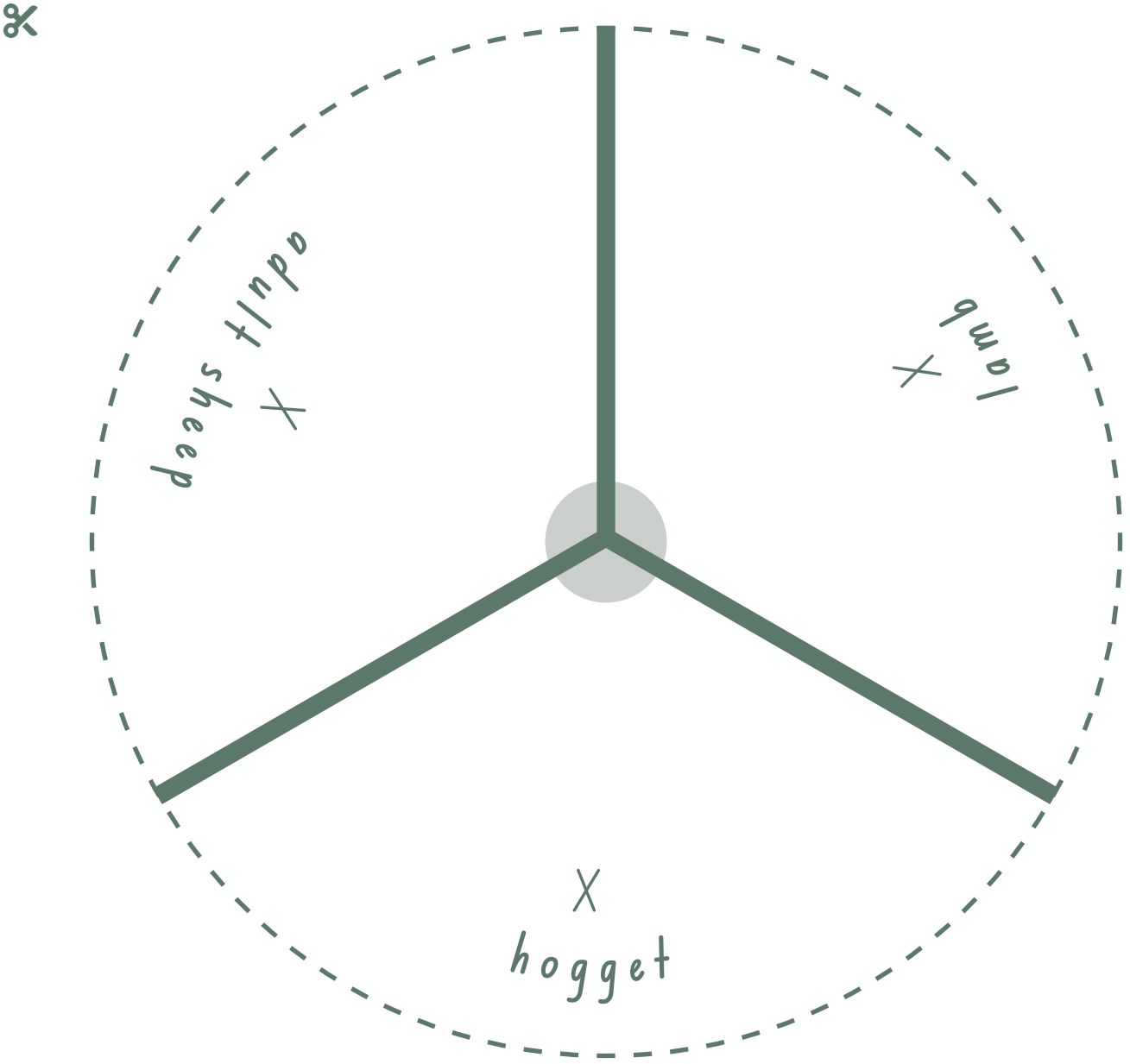
7. _____

PLEASE NOTE: This activity requires single-sided printing

Worksheet 5.2a

Sheep: growing and changing

Cut out both circles and the three sheep images. Paste the pictures in the correct positions (over the X and facing outwards, but not covering the name of the animal) and attach the growing and changing circle on top of this circle, using a metal fastener so it can spin.



***Worksheet 5.2a** continued next page*

Worksheet 5.2a continued

Worksheet 5.2a







growing and changing

SHEEP

Stimulus 5.3a

How does my name change as I grow?



A baby cow is a calf.



A young cow is a yearling or a vealer.



An adult female is a cow.



An adult male is a bull.

Stimulus 3.2a continued next page

Stimulus 5.3a continued

Stimulus 5.3a



A baby sheep is a lamb.



A young sheep is a hogget.



An adult female is a ewe.



An adult male is a ram.

***Stimulus 5.3a** continued next page*

Stimulus 5.3a continued

Stimulus 5.3a



A baby goat is a kid.



A young female goat is a doeling and a young male goat is a buckling.



An adult female is a doe.



An adult male is a buck.

***Stimulus 5.2a** continued next page*

Worksheet 5.3a

Modelling the life cycles of livestock

In pairs, use playdough, plasticine or other craft materials to build four different models of cattle, sheep or goat at each life stage, including an adult male and female (paying close attention to differences and similarities at each stage). Label, then paste or upload a picture of your model in the below area.

calf	lamb	kid
yearling or vealer	hogget	doeling or buckling
cow	ewe	doe
bull	ram	buck

Worksheet 5.4a

What's my name?

Draw a line between the names and correct definitions.

Use a green pencil to connect all of the sheep definitions, swap colours for the goat definitions and use a third colour for the cattle names. The first name has been done for you as an example.

young sheep = hogget

adult female cow	bull
young male goat	yearling/vealer
adult male goat	ram
young sheep	cow
young cow	lamb
baby cow	doeling
young female goat	ewe
adult male sheep	kid
baby sheep	hogget
baby goat	buckling
adult female sheep	doe
adult male bull	buck
adult female goat	calf

Keywords

Worksheet 5.1b – Keywords scramble.

Unscramble the keywords below and recall their meanings.

etoghg — hogget

A young sheep.

eew — ewe

An adult female sheep.

eaingylr — yearling

A young cow between one and two years old.

ealure — vealer

A young calf less than a year old.

5.1b Answers *continued next page*

5.1b ***Answers*** *continued*

Activity 5.1

eoingld — doeling

A young female goat.

cfla — calf

A very young, or baby cow.

ulbingck — buckling

A young male goat.

Life cycle of a sheep

1.

How do you look different from when you were a baby?
Size has increased (larger overall, taller, heavier); hair has grown and possibly changed in colour; increased size of head and brain; organs have increased in size and weight etc.

What are the stages in a human's life cycle?
Foetus, baby, child, adolescent/teenager, adult and elderly. Although we describe the human life cycle in stages, people gradually change from day to day throughout all of these stages.

How will you look different as you grow and become an adolescent/teenager and then an adult?

As above. Also, sexual maturity will occur, and females will develop breasts, males a more prominent Adam's apple and facial hair, both sexes may develop acne, etc.

How do animals and plants look different as they get older?
Various responses. They become taller/longer, heavier, have thicker trunks, a greater number and increased size of leaves; animals might continue to grow larger horns, fleece/hair/coat thickens etc, plants develop flowers, fruit and seeds, runners etc

What is a life cycle?
The series of changes that animals and plants undergo as they grow and become older.

***5.2a Answers** continued next page*

*5.2 **Answers** continued*

Activity 5.2

Worksheet 5.2a – Sheep: growing and changing



Activity 5.3

Modelling the life cycles of livestock

Check to ensure students have labelled each model with the correct picture and label. Each model should differ in size (height, width, weight).

Activity 5.4

Just for fun

