

Pre-lesson preparation, materials and equipment

The LEARN ABOUT WOOL online resource library, combined with the suggested resources listed below will give you ample background information to carry out this lesson and answer a range of questions posed by students.

Useful resources:

LEARN ABOUT WOOL primary factsheets

- [From farm to fashion](#)
- [Shearing](#)
- [Different breeds of sheep](#)

LEARN ABOUT WOOL kit posters

- [Wool processing](#)
- [From farm to fashion](#)

Videos

- [Lost and found: The journey from farm to fashion](#)
- [Shearing](#)

Useful books

- *Click go the shears*, illustrated by Charlotte Lance
- *Weaving the rainbow*, written by George Lyon, illustrated by Stephanie Anderson

Useful link

- [Enviro-stories Our farmers, our future library – Fluffy's getting shorn](#)

Materials and equipment

- LEARN ABOUT WOOL kit fibre, yarn and fabric samples
- Class science journal
- LEARN ABOUT WOOL factsheets
 - [From farm to fashion](#)
 - [Shearing](#)
 - [Different breeds of sheep](#)
- LEARN ABOUT WOOL kit posters
 - [Wool processing](#)
 - [From farm to fashion](#)
- Student worksheet *From farm to fashion*
- Videos
 - [Lost and found: The journey from farm to fashion](#)
 - [Shearing](#)
- Book
 - *Click go the shears*, illustrated by Charlotte Lance

Lesson objective

To allow students to discover how wool is processed from the raw fibre to everyday woollen items.

Students will have the opportunity to:

- investigate the ways wool is processed
- use a range of methods to sort information.

Lesson focus

The focus of this lesson is to take students on the journey from farm to fashion by detailing each stage of the journey wool takes from the sheep to the manufactured garment or wool product.

Setting the context

Depending on the length and fibre diameter (fineness) of a wool fleece, it can be processed into yarn through either the woollen or worsted processing system. These woollen and worsted yarns can be knitted or woven to produce a range of fabrics with varying characteristics and end uses.

Woollen processing produces bulky yarns, which can be woven to produce heavy-weight fabrics or knitted to produce cosy jumpers, socks and beanies.

Woollen-spun woven fabrics are generally thick and heavy. They are ideal for warm winter jackets and coats. These fabrics are generally wind-proof and can repel light rain, so are good to wear when playing outside during winter.

Woollen-spun knitted fabrics are generally heavier and bulkier than worsted-spun knitted fabrics. They make great soft, warm jumpers, scarves, beanies, socks and cardigans.

Worsted processing produces fine yarns, which can be woven to produce smooth, light-weight fabrics. These fabrics are used for clothes such as business suits, trousers and skirts. Fine worsted-spun yarns produce super-soft knitted fabrics that feel great next to your skin. These fabrics are incredibly versatile — they are used for baby clothes, underwear, t-shirts and sportswear, leggings, dresses and other lightweight knitwear.

Worsted-spun woven fabrics are ideal to wear in warm weather or inside, where they keep you cool and comfortable.

Worsted-spun knitted fabrics are ideal for wearing everyday — they are soft and comfortable and great for travelling as they are soft, cool, comfortable, lightweight and don't need ironing.

In addition to these processing routes, wool can be 'felted' — a technique used for many years and by many early cultures.

Felted fabrics are formed directly from loose wool fibre without the intermediate stages of yarn formation, knitting or weaving. Felting methods are also used to make low-value wool products, such as insulation tiles and filling for cold weather clothing and bedding, such as quilts.

More background information on wool and wool processing can be found in the LEARN ABOUT WOOL online resource library or the [Woolmark Learning Centre Wool Appreciation Course](#).

Introduction

Explain to students that during this lesson they will be following the journey of wool from farm to fashion. To introduce this journey, show students the short video [Lost and found: The journey from farm to fashion](#). Discuss with students the processes covered, identifying the common stages as depicted in the poster [Wool processing](#). Show the video again, asking students to try and link what they are seeing in the video with the names of the processes identified on the poster. Were there any differences? Discuss.

Body of lesson

1. Review the class science journal and discuss the observations students have made so far about wool garments and where wool comes from.
2. Reflecting on the videos, reinforce that wool goes through a number of physical changes from the raw fleece to the end product including shearing, processing, fabric production, garment design and manufacture.
3. Read with students the LEARN ABOUT WOOL factsheet [Shearing](#) and discuss the activities carried out in the shearing shed. Watch the LEARN ABOUT WOOL [shearing](#) video as a support to the factsheet. Read [Click Go the Shears](#), illustrated by Charlotte Lance with students and write down some of the words and phrases in the class science journal they may be unfamiliar with, such as: *ringer*, *bare-bellied Joe*, *wide is his blow*. Explain that shearing technology (and language) has changed since the poem was written. Students also might like to visit the Enviro-Stories website and read [Fluffy's Getting Shorn](#).
4. Allow students to explore the fibre, yarn and fabric samples in the hard copy LEARN ABOUT WOOL kit. Focusing on the raw fibre — ask students to describe the differences between each sample. Encourage students to think about the way the greasy (raw) wool feels and smells, compared with the wool top. Allow students to try and stretch

the greasy wool fibres to feel how strong they are and encourage them to feel the wavy crimp. Focusing on the woollen and worsted yarn samples, encourage students to describe the differences between the two yarns, in particular the thickness of each sample. Focusing on the two fabric samples — worsted-spun fine-knit rib and woollen-spun plain-knit ask students which yarn they think was used to produce which fabric. Using the LEARN ABOUT WOOL factsheet [Different breeds of sheep](#) explain to students that different types of sheep produce different types of wool. Explain that the different types of wool are used in different types of yarn and different types of fabrics. Reflect on the differences between the worsted and woollen yarns and fabrics they have just explored. Explain that the different types of wool are processed in slightly different ways called 'woollen' and 'worsted' processed. Explain that the broader (thicker) wool usually goes through the 'woollen' process and is used in thicker, heavier textiles and finer (thinner) wool is used in the 'worsted' processing system and is used to produce lighter, finer fabrics. Refer back to the LEARN ABOUT WOOL factsheet *Different breeds of sheep* and point to the Merino sheep on the front of the factsheet as you explain that Merino sheep produce the finest wool in the world and Australia produces the most Merino wool in the world.

5. Explore the range of wool processing posters supplied in the LEARN ABOUT WOOL kit and work with students to match the fibre, yarn and fabrics samples with the stages covered in the posters. Refer students to the LEARN ABOUT WOOL [Wool – from farm to fashion](#) factsheet for more information on the different wool processing routes.
6. Ask students to complete the worksheet *From farm to fashion* using the poster [Wool processing](#) to assist them with identification of each stage. Students will need to cut out the cartoons of each stage and glue them in the correct order on another piece of paper. The correct order is:

- 1) Growing
- 2) Shearing
- 3) Baling and transport
- 4) Washing
- 5) Carding

- 6) Combing
- 7) Dyeing
- 8) Spinning
- 9) Weaving or knitting
- 10) Final garment

Conclusion

Re-group with the students and discuss the worksheet with them. Explain that during the next few lessons students will be further investigating the way raw wool is processed to impart desirable properties to woollen products. These properties influence the way we use wool by changing its shape and form when undergoing a variety of processes such as spinning, felting, knitting and weaving.

Extension activity

If you are in a rural area, investigate whether you can take your class to visit a farm during shearing to allow students experience this stage firsthand, or ask a wool producer to visit the classroom and describe the processes of wool growing and shearing.

Students might also like to make their own picture book showing the journey from farm to fashion, using their completed worksheet to help them.

Links to the Australian Curriculum:

- Everyday materials can be physically changed in a variety of ways ([ACSSU018](#))
- Pose and respond to questions, and make predictions about familiar objects and events ([ACSI024](#))
- Participate in guided investigations to explore and answer questions ([ACSI025](#))
- Use a range of methods to sort information, including drawings and provided tables through discussion, compare observations with predictions ([ACSI027](#))
- Compare observations with those of others ([ACSI213](#))
- Represent and communicate observations and ideas in a variety of ways ([ACSI029](#))