

A Peep at Sheep *on-line*

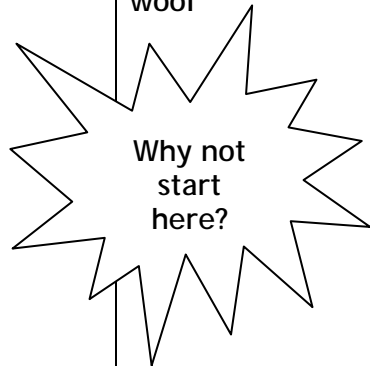
The materials and activities contained in a *Peep at Sheep* best support the implementation of NSW Department of Education & Training's Stage 1, Growing and Changing Connected Outcome Group (COG). *Peep at Sheep* can also be used to support the Products and Services COG. *A Peep at Sheep* aims to give students a broad introduction to sheep and wool. The activities will not fully deliver all the listed outcomes; *Peep at Sheep* should be considered a case study or a series of enrichment activities.

Each outcome has a lead activity followed by extension activities. We suggest starting with activity 1 then sequencing some or all of the remaining activities to suit your students. Final evaluation activities have been included. All of the [supporting resources](#) for the activities are available online.

Curriculum linked activities:

1. [Investigating the properties of unprocessed wool](#)
2. [Comparing lambs and children](#)
3. [Presenting a puppet show about wool](#)
4. [Creating a puppet show about wool](#)
5. [Singing about sheep and wool](#)
6. [Exploring sounds associated with sheep](#)
7. [Sculpting fantasy sheep](#)
8. [Examining Tom Roberts' 'Shearing the rams'](#)
9. [Visiting a working farm](#)
10. [Sharing discoveries about wool](#)
11. [Evaluating 'A Peep at Sheep' online](#)





Activity	Teaching and learning activities	Evidence of achievement
<p>1.To investigate the properties of unprocessed wool</p>	<p>Conduct a simple guided investigation</p> <p>This activity encourages scientific thinking.</p> <p><i>1. stir curiosity</i> Give small groups unprocessed wool and ask them to observe things like feel, smell, look, colour etc. Students then write down / draw as much as they can about wool. Make a 'things we know list' (observations, prior knowledge). Display the list in the classroom and add to it when new facts arise. NB: NSW primary schools can obtain a free wool sample kit by calling 02 4931 6540 and leaving their name, school & postal address.</p> <p><i>2. Explore</i> Give students some tools, e.g. a magnifying glass, microscope, to help them observe unprocessed wool. Ask students to come up with some questions they may have about the wool. Encourage 'can', 'does', 'is', 'will' and 'do' type questions. For example - Can the wrinkles come out? Does it always smell? Does it keep you warm? Can it be coloured? Make a 'things we want to find out list' (questions). Narrow down the questions to those which can be answered via a simple class experiment. Refine questions. For example, Why is wool cream coloured?... is a hard one to investigate. Does wool keep you warm?... could be investigated.</p> <p><i>3. Find out</i> Students choose a question as a class or in groups and then design an experiment to answer their question. Perhaps use these guiding questions: <ol style="list-style-type: none"> 1. <i>What is the question to be answered?</i> 2. <i>What do you think the answer is?</i> 3. <i>What steps could you take to find an answer to this question?</i> </p>	<p>Science and Technology INVS1.7 Conducts guided investigations by observing, questioning, predicting, collecting and recording data, and suggesting possible explanations.</p> <ul style="list-style-type: none"> - <i>explores unprocessed wool using senses and tools</i> - <i>records observations about unprocessed wool</i> - <i>identifies gaps in knowledge and understanding about unprocessed wool</i> - <i>selects a topic for investigation</i> - <i>poses an hypothesis</i> - <i>designs an experiment to test the hypothesis</i> - <i>conducts an experiment to test the hypothesis</i> - <i>collects data</i> - <i>talks about process, data and results</i> - <i>records new observations about</i>

	<p>4. <i>What materials would you need?</i> 5. <i>What data will you record?</i> 6. <i>How will you record the data? (Encourage the use of a table to record data)</i> 7. <i>Do you think you will need to do the experiment more than once? Why?</i> For example: 1. What is the question to be answered? Does wool keep you warm? Or more specifically, will wool warm up my hands? 2. What do you think the answer is? I believe wool will warm my hands. 3. What steps could you take to answer this question? a. Have someone place their hands on a surface at room temperature. b. Record the temperature of each hand. c. Wrap a pile of wool around one hand with a thermometer between the wool and hand. d. Record the temperature after 10min. 4. What materials do you need? A thermometer, pile of wool, hands, a surface at room temperature. 5. What data will you record? Date, time, where I am, temperature, how the person feels. 6. How will you record the data? In a table. 7. Do you think you will need to do the experiment more than once to make sure of the results? Yes.</p> <p>Assist students to refine their process. Test the process and refine if necessary. Why not use parent helpers?</p> <p><u>4. Explain</u> Perhaps use these guiding questions: <i>What happened?</i> <i>What data did you record?</i> <i>What did the data tell you?</i> <i>Did you make any changes along the way?</i> <i>What is the answer?</i> <i>Where you able to predict the answer?</i></p>	<p><i>unprocessed wool</i></p>
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For example:
 What happened? My hands got warmer when wrapped in wool.
 What data did you record?

Data	Test	Person 1	Person 2
Date	8/7/07	8/7/07	8/7/07
Season	winter	winter	winter
Time	2.15pm	2.30pm	3.00pm
Where	outside, on marble table	inside on table	inside on table
Temperature - before wool	Air - 15 °C On top of hand - 20°C	Air - 16°C Under hand - 30°	Air - 17°C On top of hand - 27°
Temperature - after 10 minutes in wool	27°C	32°C	30°C
How do you feel?	I can feel the hand wrapped in wool warming up. My other hand is freezing.	My woolly hand is hot	One warm hand one cool hand
Notes	- make sure thermometer sits close to the hand - person must stay still - wrap the hand tightly in wool so there are no gaps	Under the hand is hot so the temperature didn't change much	

What did the data tell you? Wool will warm up hands.
 Did you make any changes along the way? Yes, I changed where I placed the thermometer.
 What is the answer? Wool warms hands.
 Where you able to predict the answer? Yes

5. Present

The groups describe their investigation and present data and information to the class,

another class or parents and discuss the results.

Check out these website for more science process ideas.

<http://www.curriculumsupport.education.nsw.gov.au/primary/scitech/index.htm>

<http://www.science.org.au/primaryconnections/index.htm>

<http://www.justsciencenow.com/phases>

Extension activities:

Complete a compare and contrast chart

Examine some unprocessed and processed wool. Compare the two samples. Students could try to explain what happens to wool to change it from unprocessed to processed wool.

Record the findings.

[Download and read the poster, 'Making clothing from wool'](#)

Possible discussion questions:

Where does wool come from?

How does wool grow?

How is wool removed from sheep?

What happens to wool after shearing?

What is a fibre? (Give definition and example.)

Show the students a wool fibre. Talk about how fine and long it is.

What sort of clothing is made from short wool fibres?

(A short wool fibre is less than 4cm)

What sort of clothing is made from long wool fibres?

(A long wool fibre is greater than 4cm)

Why do long bits make smooth fabric? (they can be stretched and spun into smooth yarn, then tightly woven)

Create a display of wool products

Ask students to bring in wool products for display. Together sort the products into short fibre or long fibre products. Discuss why wool has been chosen to make each item.

Invite a guest speaker

Invite a local spinners group to come and give a demonstration.

	<p>Conduct a clothing label audit Where was the garment made? What is it made from? What are the properties of the fabric?</p> <p>Learn to knit Download instructions on-line at http://www.patons.biz/knitting_info/How_to_Knit.htm Students could knit a scarf (perhaps in school colours) or organise a Red Cross Trauma Teddy knitting drive (http://www.redcross.org.au/nsw/supportus_reg_vol_opps.htm)</p> <p>Weave Make a simple wool weaving card.</p> <p>Learn to crochet Download instructions on-line at http://www.patons.biz/knitting_info/How_to_crochet.htm</p>	
<p>2. To identify some similarities between lambs and children</p>	<p><u>Download and read the big book</u> The story of <i>Timothy and Wobbly the woolly sheep</i> compares little boys and little lambs' early development. Use the questions in the story as discussion starters. Further discussion questions: <i>What will Wobbly look like when he is fully grown?</i> <i>What will you look like when you are fully grown?</i> <i>How are children different to sheep?</i></p> <p>Draw a timeline on the board to show Wobbly from birth to maturity (sheep live from 6-11 years). Label with as many descriptive words as possible such as lamb, weaner, ram. Do the same for a person. Include things needed for healthy growth and development.</p> <p>Extension activities:</p> <p>Shear sheep Students glue fluffy cotton balls to the sheep template let it dry and then use scissors to shear it without cutting the paper (skin) of the sheep. Students could weigh their fleece,</p>	<p>Science and Technology LTS1.3 Identifies and describes ways in which living things grow and change.</p> <ul style="list-style-type: none"> - <i>recounts personal physical changes</i> - <i>describes Wobbly's changes</i> - <i>identifies lamb, ram, ewe</i> - <i>uses terms such as baby, child, teenager, women, man, grandparent etc</i> - <i>lists needs for healthy growth and development</i> <p>PDHPE</p>

	<p>tabulate the clip and calculate the total class clip weight. If buyers payed \$1 per gram, how much is the class clip worth? The possibilities are endless!</p> <p>Note: A Merino fleece weighs between 4-5 kilos and fetches around \$8-10 a kilo.</p> <table border="1" data-bbox="712 292 1442 507"> <thead> <tr> <th>name</th> <th>fleece weight</th> <th>price</th> </tr> </thead> <tbody> <tr> <td>e.g. Bella</td> <td>10g</td> <td>\$10</td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>class total</td> <td></td> <td></td> </tr> <tr> <td>class average</td> <td></td> <td></td> </tr> </tbody> </table>	name	fleece weight	price	e.g. Bella	10g	\$10							class total			class average			<p>GDS1.9 Describes the characteristics that makes them both similar to others and unique.</p> <ul style="list-style-type: none"> - <i>compares and contrasts the development of sheep and children</i>
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<p>3. To present a pre-recorded puppet show about wool</p>	<p>Download a copy of the pre-recorded play (print and sound file available)</p> <p>Join Sam the shearer, inspector Merino, Sally the ewe, Wobbly the ram and Lester the lamb as they work out who stole the missing fleece.</p> <p>Set the scene Suggested discussion points: <i>'Inspector Merino and the Case of the Missing Wool Fleece'</i> What do you think the play is about? <i>Introduce the characters, give a brief description and or read some of the play.</i> <i>What do Sam, Sally, Wobbly and Inspector Merino look like? Sound like? Act like?</i> <i>Do you think this is a happy puppet show, sad puppet show, funny puppet show etc</i> <i>Introduce the puppets/characters.</i> <i>Listen to part of the play.</i> <i>Who was talking?</i> <i>What is the music for?</i> <i>What does 'enter....' 'exit....' mean?</i> <i>What background noises can you here? Where does the play take place? How do we know this?</i></p> <p>Put on a puppet show Make some puppets for the characters Sam, Sally, Wobbly, Inspector Merino and Lester. Sheets attached to a door frame will make a good puppet theatre if you don't have one. Ask two students to use the puppets to act out the pre recorded script. Students can take</p>	<p>Creative Arts DRAS1.1 Takes on roles in drama to explore familiar and imagined situations.</p> <ul style="list-style-type: none"> - <i>Identifies and describes characters</i> - <i>follows stage direction</i> - <i>uses the puppets, theatre and CD to present a puppet show</i> - <i>recounts story</i> <p>Creative Arts DRAS1.3 Interacts collaboratively to communicate the action of the drama with others.</p> <ul style="list-style-type: none"> - <i>uses the puppets, theatre and pre recorded play to present a puppet show</i> <p>Creative Arts DRAS1.4 Appreciates dramatic</p>																		

	<p>turns to present all or part of the play. The play introduces the dual warming and cooling properties of wool.</p> <p>Examine the performance Discussion prompts: <i>What happens in the beginning of the puppet show?</i> <i>What happens at the end of the puppet show?</i> <i>What is the puppet show about?</i> <i>Who is your favourite character? Why?</i> <i>Why was the puppet show written?</i> <i>What does a shearer do?</i> <i>What does a wool classer do?</i> <i>Did the play tell us anything new about wool?</i> <i>What did we do well?</i> <i>What could we do better next time?</i></p> <p>Extension activities: Rewrite some of the play in order to change the ending.</p> <p>Construct sheep masks and act out the pre recorded show. Students could do this without the theatre, they could be the puppets.</p> <p>Create an advertisement for the puppet show.</p> <p>Advertise and present a lunchtime performance of the puppet show.</p>	<p>work during the making of their drama and the drama of others.</p> <ul style="list-style-type: none"> - <i>recounts story</i> - <i>Identifies and describes characters</i> - <i>describes the setting</i> - <i>identifies aspects of the show that worked well</i> - <i>identifies aspects of the show which need improvement</i> - <i>gives reasons for the shows creation</i>
<p>4. To create and present a puppet show about wool</p>	<p>Make up a play about wool Students script a new play about wool in groups and present it to the class. This could be written, through drawings or done verbally.</p>	<p>Creative Arts DRAS1.2 Conveys story; depicts events and expresses feelings by using the elements of drama and the expressive skills of movement and voice.</p> <ul style="list-style-type: none"> - <i>presents an original puppet show</i>

		<p>Creative Arts DRAS1.3 Interacts collaboratively to communicate the action of the drama with others.</p> <ul style="list-style-type: none"> - <i>scripts and presents an original show with others</i>
<p>5. To sing about sheep or wool</p>	<p>Brainstorm 'Songs I know about sheep or wool'. For example, 'Click go the shears' or 'baa baa black sheep' or 'Mary had a little lamb' or 'Little Bo Peep' or 'Once a jolly swagman'. Make a list on the board.</p> <p>Learn a new song Choose a song from the list or another song. Read the lyrics to the class. Discussion / activity prompts: <i>What is the song about?</i> <i>Who are the characters?</i> Listen to the song. <i>How does the song make you feel?</i> Clap the chorus. <i>Can you name any instruments?</i> Sing the song. <i>If you had to sing the song with your body instead of your mouth, how would you move?</i> <i>Mime actions to the song as it plays.</i> <i>Sing the chorus in rap or opera or rock etc.</i> <i>Draw a picture to go with the song.</i></p>	<p>Creative Arts MUS1.1 Sings, plays and moves to a range of music, demonstrating an awareness of musical concepts.</p> <ul style="list-style-type: none"> - <i>sings a well known song about sheep or wool</i> - <i>mimes or moves in response to a song</i> - <i>recreates part of a song in a new style</i>
<p>6. To explore sounds associated with 'sheep' the word and animal</p>	<p><u>Make a sound chart</u> Download, print and enlarge the sheep template and make an 'eep' word list. Make an 'ee' or 'sh' sound chart or 'eep/eap' rhyming chart</p>	<p>Creative Arts MUS1.2 Explores, creates, selects and organises sound in simple structures.</p> <ul style="list-style-type: none"> - <i>writes a list of 'ee'</i>

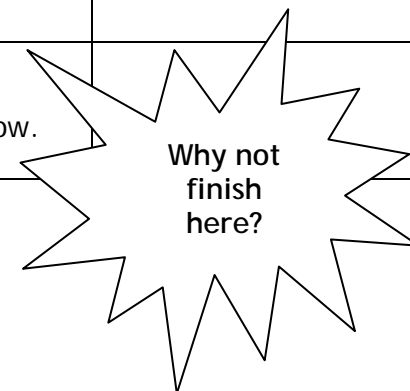
	<p>Make sheep sounds</p> <p>Download and listen to the sheep noises. Students could attempt their best 'baa'. Students then use 'baas' to express various emotions - happy 'baa', sad 'baa', lonely 'baa'. The class could 'baa' their way through Mary Had a Little Lamb.</p> <p>Extension activities: Create and / or say a tongue twister Try creating and saying tongue twisters like:</p> <ol style="list-style-type: none"> 1. She shore sheep by the sheep shed 2. Shearers shear sheep in shearing sheds 3. Weavers weave woolly Wobbly's warm wool 	<p><i>words</i></p> <ul style="list-style-type: none"> - <i>writes a list of 'sh' words</i> - <i>writes a list of 'eep' and 'eap' rhyming words</i> - <i>sings a song using 'baa' sounds</i>
<p>7. To sculpt a fantasy sheep</p>	<p>Make a fantasy sheep sculpture from junk, paper and paint. Discussion / thought prompts: <i>What is a sculpture?</i> <i>What is fantasy?</i> <i>Can you name a fantasy creature? Do these creatures have any special powers?</i> Introduce the art activity. Make a fantasy sheep sculpture from junk, paper and paint. <i>How could we change a sheep into a fantasy sheep?</i> <i>What if sheep were mean?</i> <i>What if they could fly? What would they look like?</i> <i>What if they were coloured? What would they look like?</i> <i>What if they lived in water? What would they look like?</i> <i>What would a fairy sheep look like?</i> <i>What would a rainbow sheep look like?</i> <i>What would a monster sheep look like?</i></p> <p>Ask the librarian to put together a selection of books about sheep wool and animals in general. Students could use the books to do initial sketches of animal features and then use their sketches to work out what their sculpture might look like.</p> <p>If available from the library, read 'Pete the Sheep' by Jackie French to the class.</p>	<p>Creative Arts Creative Arts VAS1.1 Makes artworks in a particular way about experiences of real and imaginary things.</p> <ul style="list-style-type: none"> - <i>uses junk and papier mache to sculpt a fantasy sheep</i> - <i>identifies real and fantasy features.</i> <p>Creative Arts VAS1.2 Uses the forms to make artworks according to varying requirements.</p> <ul style="list-style-type: none"> - <i>uses junk and papier Mache to sculpt a fantasy sheep</i>

	<p>Use empty pet bottles and junk to create a basic sheep, body shape then cover with papier mache and paint & decorate.</p> <p>Students write or verbalise a statement about the real and fantasy features of their sheep.</p> <p>Students interview their sheep and write a profile. For example: Name: Favourite food: Lives: Hobby: Special powers:</p> <p>Display finished pieces and profiles.</p> <p>Extension activities: Make puppets Make puppets by cutting out the sheep template, adding distinguishing features and sticking it on paddle pop sticks.</p> <p>Design and draw Design and draw a wool shearing machine that does not rely on people or a new product made from wool.</p>	
<p>8. To examine Tom Roberts' 'Shearing the rams'</p>	<p>Find out and talk about Tom Roberts', 'Shearing the rams 1888 - 90.' Find a reproduction of the painting and use it to prompt discussion. Suggested discussion questions: <i>What kind of artwork is it?</i> <i>What do we call a person who creates paintings?</i> <i>Can you name an artist?</i> <i>What is the name of the artist who made this artwork?</i> <i>What might the artist have looked like?</i> <i>How big is the original?</i> <i>When was it made?</i> <i>Where was it made?</i> <i>Where does the original hang?</i></p>	<p>Creative Arts VAS1.3 Realises what artists do, who they are and what they make.</p> <ul style="list-style-type: none"> - <i>contributes to the discussion</i> - <i>uses words like painting, artist, gallery etc</i> - <i>writes a report about 'Shearing the rams'</i> <p>Creative Arts VAS1.4 Begins to interpret the</p>

	<p><u>Process</u> <i>What is it made from?</i> <i>How was the picture made? What process or steps might the artist have taken to do the artwork?</i> <i>How did the artist apply the paint?</i></p> <p><u>Subject</u> <i>Play I spy...how many living things can you see? etc</i> <i>What is the painting about?</i> <i>Students could identify the type of sheep being shorn; discuss the tools used and compare this to today; talk about the clothing worn and how the men would be feeling; talk about the role of women; materials used to build the shed. How would it smell?</i> <i>What happens next?</i> Give the students a little information about the artwork.</p> <p><u>Colour</u> <i>What colours have been used?</i> <i>Are the colours realistic? (Like real life?)</i></p> <p><u>Shape</u> <i>If we turned all the objects into shapes e.g. oblongs for people, what are the main types of shapes used?</i></p> <p><u>Line</u> <i>Describe the lines in the painting.</i></p> <p><u>Direction</u> <i>Turn all the objects into horizontal, vertical or diagonal lines. What direction are most of the lines? Do these lines suggest movement?</i></p> <p><u>Light</u> <i>Point to the darkest area.</i> <i>Point to the lightest area.</i> <i>Where is the light coming from?</i></p> <p><u>Texture</u> <i>Describe the main textures in the painting.</i></p> <p><u>Artist intention</u> <i>Is this a fantasy picture or showing real life?</i> <i>Why was it made?</i></p> <p><u>Personal reaction</u> <i>How do you feel when you look at the artwork?</i></p>	<p>meaning of artworks, acknowledging the roles of artist and audience.</p> <ul style="list-style-type: none"> - <i>describes what an artist does</i> - <i>gives reasons for the creation of artworks</i> - <i>writes a report about 'Shearing the rams'</i>
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	<p><i>What do other people think of the work?</i></p> <p>Students write a brief report about the painting.</p> <p>Extension activity: Ask students to redraw and paint 'Shearing the rams'. Oil pastels work well.</p>	
<p>9. To visit a working farm</p>	<p>Visit a farm Organise an excursion to a working farm.</p> <p>Before you go, locate the farm and your school on a map. Look at a brochure or web page about the farm. Use geographical terms to describe the farms location and features eg. north, west, city, country.</p> <p>At the farm sketch, write and take digital photos or video to document your visit. Record information about natural and built features, history and people.</p> <p>Back at school present a slide show, or display drawings and recap what you discovered on the day.</p> <p>Create a farm timeline in the same format as the sheep timeline.</p> <p>Download, print and study the history of wool growing sheep in Australia poster and try to see where the farms history overlaps.</p> <p>Create a personal or family timeline for each student.</p> <p>Extension activity: Have a go at 'The maths of shearing sheep' Download the blackline master activity sheet.</p>	<p>HSIE ENS1.5 Compares and contrasts natural and built features in their local area and the ways in which people interact with these features.</p> <ul style="list-style-type: none"> - <i>names and describes natural and built features on the property</i> - <i>uses geographical terms</i> - <i>describes what the farm may have looked like before European settlement</i> - <i>identifies how people have changed the environment</i> - <i>gives reasons for change</i> - <i>names positive and negative changes</i> - <i>identifies environmental care projects on the property</i> - <i>recognises human interaction with the farm has changed with time</i>

		<ul style="list-style-type: none"> - <i>describes what the farm was used for in the pasts and today</i> <p>HSIE CCS1.2 Identifies changes and continuities in their own life and in the local community.</p> <ul style="list-style-type: none"> - <i>compares and contrasts life in the past with life in the area today</i> - <i>describes the significance of the farm to local people</i> - <i>sequences stages and events in the history of the farm</i> - <i>sequences stages and events in their own life</i>
<p>10. To share discoveries about wool</p>	<p>Email or write a letter Write a letter or email a country school about your <i>Peep at Sheep</i> experience outlining discoveries and asking the country students to respond with stories about sheep, wool or sheep farming in their area.</p> <p>Extension activities: Mount a display about sheep and wool for the school Put on a lunchtime talk Create a webpage to add to your schools website</p>	<p>PDHPE COS1.1 Communicates appropriately in a variety of ways.</p> <ul style="list-style-type: none"> - Drafts, edits and sends a letter - scripts and sends an email
<p>11. To review the learning activities and conclude A</p>	<p>Revisit the 'things we know list' from activity 1. Add to the list. Revisit the 'things we want to find out list' from activity 1. Tick off the things now know.</p>	



<p><i>Peep at Sheep</i></p>	<p>Discuss the activities you did and reflect on discoveries.</p> <p>Students complete an evaluation. Suggested prompts: <i>What I wanted to know:</i> <i>What I learnt:</i> <i>The most interesting activity was.....because....</i> <i>I would like to know more about</i></p> <p>Send a comment, drawing or photo to the LandLearn NSW website at: landlearn.enquiries@dpi.nsw.gov.au. We'll upload the photos and drawings to our Flickr gallery for everyone to see.</p>	
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Got any better ideas? We would like to keep improving A Peep at Sheep so please let us know what you think about the activities. Feel free to add your own ideas for other schools. We will happily include your ideas and credit your contribution. Send ideas to landlearn.enquiries@dpi.nsw.gov.au

Additional

Posters

Did you know? Amazing facts about wool
Wool-growing sheep in Australia (wool sheep breeds)
The history of wool-growing sheep in Australia
Making clothing from wool

Slideshow

A picture slideshow via SlideShare.