Unit overview

This unit helps students explore the properties of Australia’s most iconic natural fibre — wool.

Some students may have experience with wool through clothing or home furnishing, such as blankets. However many Foundation year students may not be aware of the source of wool textiles (sheep), the range of uses and the unique properties of wool, which make it an ideal textile for a wide range of uses.

This unit of work aims to determine students’ prior knowledge of the properties of wool, increase their appreciation for these properties and raise their awareness of how the properties of materials influence their end use.

In this unit of work, students will have the opportunity to develop skills in sorting and grouping materials on the basis of observable properties, such as texture and feel, flammability and water absorption.

Students also will investigate the different forms of clothing used for different activities and explore how the unique properties of wool make it suitable for a wide range of clothing products.

This unit of work also starts the process of students recognising that observation is an important part of exploring and investigating the things, while allowing them to share observations with others and communicating their experiences.

A class science journal is used to record the students’ learning journey and provides for meaningful literacy modelling. It is used to review and organise observations and ideas, and can include images and student contributions.

Hands-on experiences and sharing observations with others are key ways to create meaningful, shared understandings, while individually students draw their observations and identify wants and needs in a role-play game.

Cross-curriculum priority:

Sustainability

Early lessons about the interdependence of animals, plants and people.

Links with the Australian Curriculum

This Properties of wool unit links to all three strands of the Australian Curriculum: Science — Science understanding, Science as a human endeavour and Science inquiry skills.

The table below outlines the sub-strands covered in this unit of work.

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<th>Strand</th>
<th>Sub-strand</th>
<th>Code</th>
<th>Content descriptions</th>
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<tbody>
<tr>
<td>Science understanding</td>
<td>Chemical sciences</td>
<td>ACSSU003</td>
<td>Objects are made of materials that have observable properties</td>
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<tr>
<td></td>
<td>Nature and development of science</td>
<td>ACSHE013</td>
<td>Science involves exploring and observing the world using the senses</td>
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<tr>
<td>Science inquiry skills</td>
<td>Questioning and predicting</td>
<td>ACSIS014</td>
<td>Pose and respond to questions about familiar objects and events</td>
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<tr>
<td></td>
<td>Planning and conducting</td>
<td>ACSIS011</td>
<td>Participate in guided investigations and make observations using the senses</td>
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<td></td>
<td>Processing and analysing data and information</td>
<td>ACSIS233</td>
<td>Engage in discussions about observations and represent ideas</td>
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<tr>
<td></td>
<td>Communicating</td>
<td>ACSIS012</td>
<td>Share observations and ideas</td>
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</tbody>
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Achievement standard

The sequence of the lessons in this unit of work provides opportunities to gather information about students' understanding related to the sections in bold in the achievement statement below:

By the end of the Foundation year, students describe the properties and behaviour of familiar objects. They suggest how the environment affects them and other living things.

Students share and reflect on observations, and ask and respond to questions about familiar objects and events.

Source: Australian Curriculum, Assessment and Reporting Authority (ACARA)