Unit overview

This unit helps students explore the way different external features of living things have evolved to help them survive and thrive.

All living things have external features that help them survive in their habitats. Students will be familiar with their own external features, such as eyes, ears, nose, mouth, arms, legs and so on, but are unlikely to have considered how these features have evolved to help them survive.

Encouraging students to observe the features and behaviour of other animals can provide a window into the similarities and differences among living things and help students gain a better understanding of how these features support survival. Through the investigations in this unit of work, students explore how animals move, feed and protect themselves.

This unit aims to bring students' prior knowledge to a conscious level, through closely studying the external features of sheep.

By playing a guessing game, students are encouraged to think about the external features that define different animals. Focus questions help identify what features are unique to particular types of animals.

Throughout the unit, students will investigate the various external features that combine to make a sheep unique and adapted to the environment in which it lives. At the completion of the unit, students will have created a model sheep and will assess their sheep in a sheep judging competition.

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.

Real life, hands-on experiences and sharing observations with others are a key part of creating meaningful, shared understandings.

While employing the students' own senses as a tool for scientific observation, this unit could be extended through additional lessons analysing the way animals (including humans) use their senses to help them survive. The lessons and the background information provide useful web links for extension possibilities.

Unit overview

Year 1 science
The external features of living things

Cross-curriculum priority:

Sustainability

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

Links with the Australian Curriculum

This lesson links to all three strands of the Australian Curriculum: Science. The table below outlines the sub-strands covered in this unit of work.

Strand	Sub-strand	Code	Content descriptions
Science understanding	Biological sciences	ACSSU017	Living things have a variety of external features
Science as a human endeavour	Nature and development of science	ACSHE021	Science involves asking questions about, and describing changes in, objects and events
Science inquiry skills	Use and influence of science	ACSHE022	People use science in their daily lives, including when caring for their environment and living things
	Questioning and predicting	ACSIS024	Respond to and pose questions, and make predictions about familiar objects and events
	Planning and conducting	ACSIS025	Participate in different types of guided investigations to explore and answer questions, such as manipulating materials, testing ideas, and accessing information sources
	Processing and analysing data and information	ACSIS027	Use a range of methods to sort information, including drawings and provided tables
	Evaluating	ACSIS213	Compare observations with those of others
	Communicating	ACSIS029	Represent and communicate observations and ideas in a variety of ways such as oral and written language, drawing and role play

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 Year 1, students describe objects and events that they encounter in their everyday lives, and the **effects of interacting with materials and objects.** They **identify a range of habitats.** They describe changes to things in their local environment and suggest how science helps people care for environments.

Students make predictions, and investigate everyday phenomena. They follow instructions to record and sort their observations and share their observations with others.

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

Background information
Year 1 science
The external features of living things

Background information

While sheep have many similar external features to other mammals, such as eyes, ears, a nose and legs, they have some features adapted specifically to allow them to support a herbivorous diet and ruminant digestive system and survive under a range of climatic conditions.

Sheep are well protected from the weather by the wool fleece that covers their body. Wool has a range of unique properties that help sheep maintain their body temperature as the external temperatures fluctuate from hot to cold.

Because they are herbivores, sheep only eat plants. Sheep also are ruminants, with four stomachs and chew cud (regurgitated, partially-digested plant material) as part of the digestive process. Unlike humans, sheep have only back teeth on their upper jaw (no front teeth), with a full set of teeth on their lower jaw. This allows them to grab pasture close to the ground and grind it with their back teeth. The age of sheep can also be identified by the number of teeth.

They mostly graze during the early morning and the evening and can walk many kilometres as they graze. Instead of soft feet with five toes (like humans) sheep are cloven-hooved (a hard hoof split into two toes), which allows them to walk for long distances grazing over rough terrain. Examples of other mammals with this type of hoof are cattle, deer and goats.

More background information on the external features of sheep and how they help sheep survive can be found in the *LEARN ABOUT WOOL* The external features of living things resource package.

Class science journal

During this unit of work you are encouraged to record student observations and the results of investigations in a class science journal.

A class science journal is used for a number of purposes.

- to record student ideas including prior knowledge, observations and statements of learning
- to model scientific text types such as labelled diagrams, lists, drawings, simple tables and graphs, mind maps and other appropriate graphic organisers
- to list activities for group work or free-choice activities
- to record the class' learning journey, including photos and printed worksheets
- to showcase to others the learning that has been undertaken during the unit.

A class science journal can be easily made from large pieces of art or painting paper stapled on one side. Ideally it should be the size of a commercial 'big book' used for shared reading. Alternately, you could create a digital version.

Ensure writing is large and easy to read, so all students can see the words from where they sit.

Students also can have their own journal to record their observations and ideas. A scrapbook makes an ideal student science journal.

Source: Education Services Australia (2013)

Classroom preparation and resources

During the early years at school, children learn best through play-based activities — they learn by exploring and investigating. This unit of work has been developed to be used in conjunction with the freely-available online *LEARN ABOUT WOOL* The external features of living things resource package, which has links to a range of relevant factsheets and engaging short videos.

A hardcopy version of the *LEARN ABOUT WOOL* kit also is freely available and contains hardcopy factsheets, posters and samples of wool from the raw fibre through various stages of processing to yarn and fabric samples.

Leading up to and throughout this unit of work:

- allow students to explore the primary factsheets and *The Workboot Series — Story of Wool* book (if available in your school library)
- provide a range of age-appropriate fiction titles that contain sheep, such as *Pete the sheep* by Jackie French
- introduce students to the range of stories written by children on the Envirostories website — particularly the Our Farmers Our Future sections of the site
- encourage students to use vocabulary associated with wool production found in the resources.

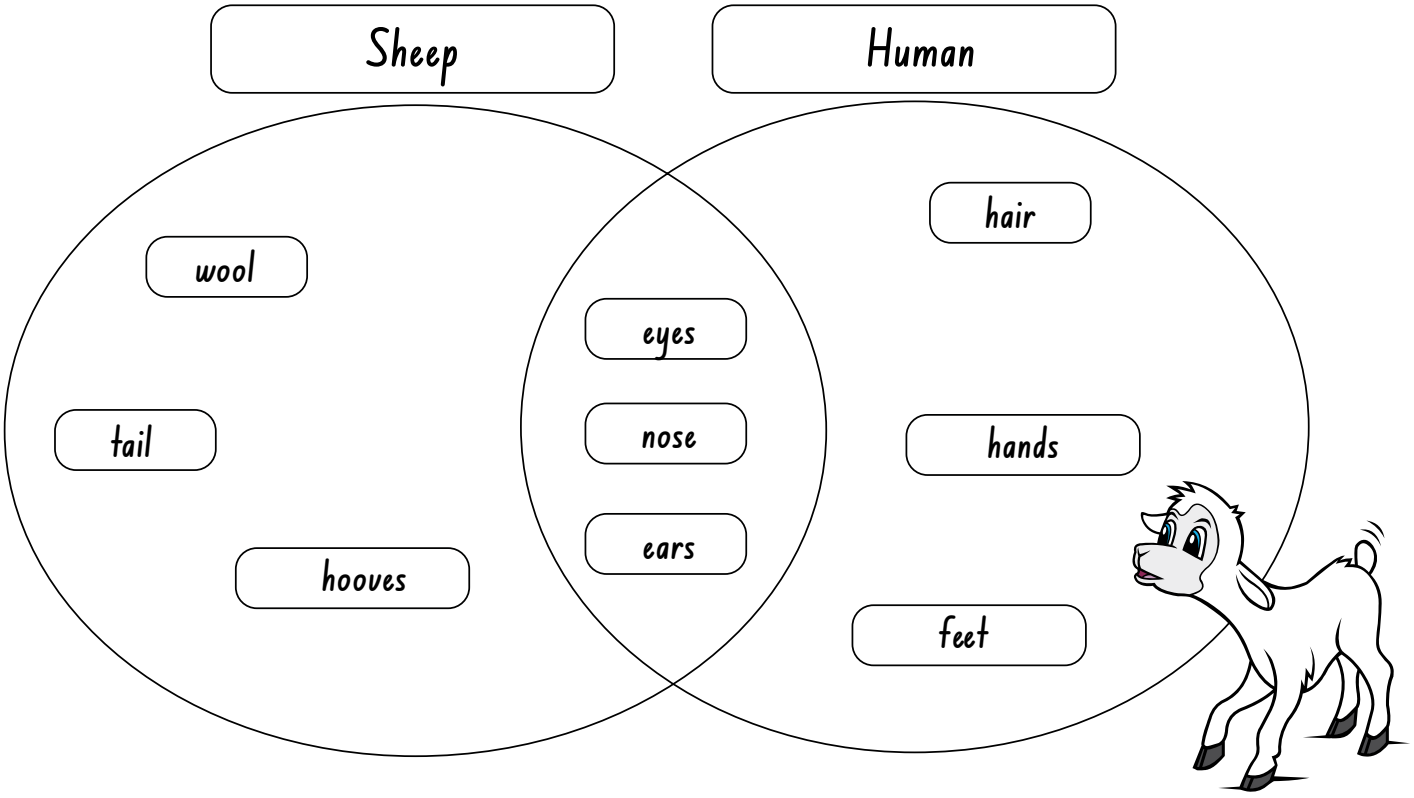
Additional resources

The activities in this unit of work require a range of equipment. Each lesson plan will identify the particular items required to successfully carry out the lesson.

Venn diagram

During this unit of work students will use a Venn diagram to compare the difference and similarities between two animals.

A Venn diagram is a visual representation of information in intersecting circles. Items with properties unique to a set are recorded in separate circles, while items with shared properties are recorded in the space where the circles intersect.



Background information
Year 1 science
The external features of living things

Unit snapshot

Lesson	At a glance
Lesson 1: External features of animals	• To determine what students already know about the common features of animals such as head, legs and wings • To explore different ways of solving science questions through guided discussion • With guidance, to allow students to sort information and classify objects based on easily observable characteristics.
Lesson 2: Differences and similarities	• Describe the use of animal body parts for particular purposes such as moving and feeding • Research ideas collaboratively using web pages and ICT within the classroom
Lesson 3: I've been fleeced	• Describe the use of animal body parts for particular purposes such as moving and feeding • Research ideas collaboratively using big books, web pages and ICT within the classroom
Lesson 4: Different types of teeth	• Describe the use of animal body parts for particular purposes such as moving and feeding • Research ideas collaboratively using web pages and ICT within the classroom • Recognise that descriptions of what we observe are used by people to help identify change. • Jointly construct simple column graphs and picture graphs to represent class investigations.
Lesson 5: Different types of feet	• Describe the use of animal body parts for particular purposes such as moving and feeding. • Research ideas collaboratively using big books, web pages and ICT within the classroom.
Lesson 6: Clever creatures	• Describe the use of animal body parts for particular purposes such as moving and feeding. • Represent what was discovered in an investigation. • Engage in whole class discussion to share observations and ideas

Pre-lesson preparation, materials and equipment

The LEARN ABOUT WOOL factsheets listed below and *The Story of Wool* book (Kondinin Group) will give you ample background information to carry out this lesson and answer a range of questions posed by students.

Useful resources:

For teachers

LEARN ABOUT WOOL kit factsheets:

- *What is wool?*
- *How wool grows*
- *Sheep —the wool producers*

The Story of Wool book (Kondinin Group)

Materials and equipment

- A set of *Who am I?* animal flashcards (teacher to provide)
- Class science journal or graphic organiser
- Student worksheet — *Animal body parts*

Lesson objective

- To capture students' interest and explore what they know about the external features of a range of animals and group them according to their common features.
- Introduce students to the language used to describe common external features of living things.

Students will have the opportunity to:

- demonstrate what they already know about the common features of animals such as head, legs and wings through play
- explore different ways of solving science questions through guided discussion
- sort information and classify objects based on easily observable characteristics.

Setting the context

All living things have external features that help them survive in their habitats. Students will be familiar with their own external features, such as eyes, ears, nose, mouth, arms, legs and so on, but may not have considered how these features help them survive.

In this lesson, students will play 'Who am I?' to practice using science questions to identify links between a range of external features and different types of animals. Students will then consolidate this knowledge to match a range of external features to familiar animals.

Lesson focus

The focus of this lesson is to spark students' interest, stimulate their curiosity, raise questions for inquiry and gain an understanding of their existing beliefs about the external features of a range of familiar animals.

These existing ideas can then be taken account of in future lessons.

Introduction

Explain to students that you are going to play a game of 'Who am I?' and that you will choose students one at a time to pick an animal from the pile of flash cards and the rest of the class will need to guess what sort of animal the chosen student is by asking scientific questions.

Body of lesson

1. Choose a student to start the game and allow them to pick a flash card of an animal. Give them a few moments to think about their animal before the other students start asking questions. You may need to provide some support in answering the questions for the other students.
2. Record information about each animal on the board or in the class science journal under the heading '*Who am I?*' as students ask their questions to support further discussion. You may need to guide the students in their questioning. Encourage questions such as:
   - Where does this animal live?
   - How does this animal move about?
   - What does this animal eat?
   - How does this animal find/catch/eat its food?
3. When the students have guessed the animal, use the graphic organiser to discuss how the answers led them to the conclusion.
4. Repeat the game for each of the flash cards.
5. When the game is finished, have students complete the worksheet *Animal body parts.*
6. Work through the animals on the worksheet with the class, asking questions such as:

- How does the animal move?
- Which parts of the animal help it to move?
- How does the animal see?
- What do you think the animal eats?
- What body parts does the animal use to eat its food?
- What kind of place does the animal live in?
- How does the animal protect itself from the weather?
- Can the animal protect itself from other animals?

Conclusion

Regroup in front of the class science journal and review the graphic organiser and worksheet. Discuss how living things look different and move differently because they are made up of different parts. Explain that we can describe these parts as 'features'. Explain that each animal's features help it survive in different places or habitats.

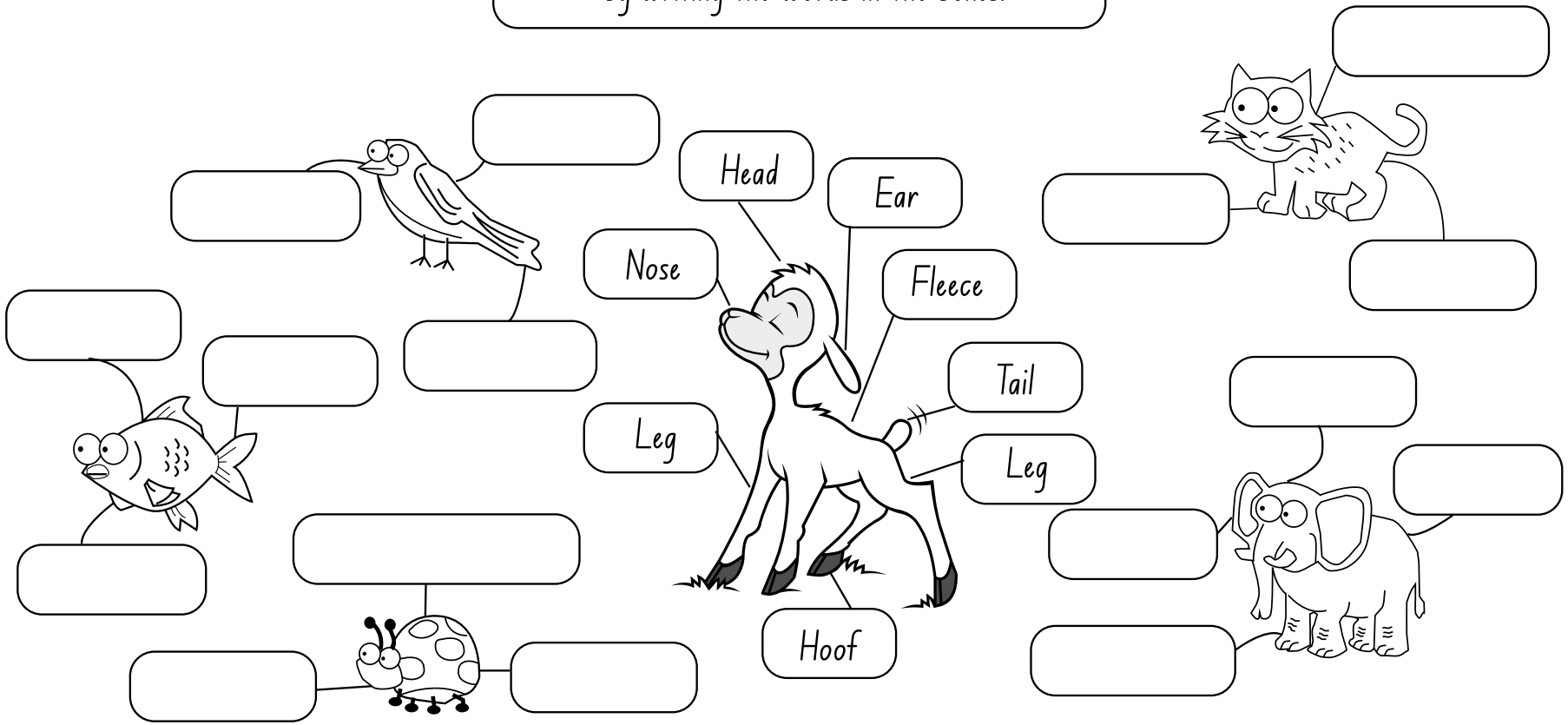
Links to the Australian Curriculum

- Living things have a variety of external features ACSSU017
- Pose and respond to questions, and make predictions about familiar objects and events ACSIS024
- Use a range of methods to sort information, including drawings and provided tables through discussion, compare observations with predictions ACSIS027
- Compare observations with those of others ACSIS213
- Represent and communicate observations and ideas in a variety of ways ACSIS029

ANIMAL BODY PARTS

LEARN ABOUT WOOL

Help Sam the Lamb label the animal body parts by writing the words in the boxes.



Scales Fur Leg Trunk Gill Feather Beak Paw Whisker Wing Ear Antenna Eye Tusk Tail Fin

Name:.....

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Pre-lesson preparation, materials and equipment

The LEARN ABOUT WOOL factsheets listed below and *The Story of Wool* book (Kondinin Group) will give you ample background information to carry out this lesson and answer a range of questions posed by students.

Useful resources:

For teachers

- *LEARN ABOUT WOOL* online resource package:
- ABC Splash website Skin and scales, feathers and fur

Materials and equipment

- Student worksheet — *Skin and scale, feathers and fur*
- Student worksheet — *What do we have in common?*

Lesson 2: Differences and similarities
Year 1 science
The external features of living things

LEARN ABOUT WOOL

Lesson objective

- To encourage students to describe the use of animal body parts for particular purposes such as moving and feeding.
- To allow students to research ideas collaboratively using web pages and ICT within the classroom.
- To introduce students to a Venn diagram to compare animals based on easily observable characteristics with teacher guidance.

Students will have the opportunity to:

- explore and make observations about a range of animals
- discuss the different purposes of a range of external features
- explore the differences and similarities between a range of animals.

Setting the context

Students will understand that different animals look different, move differently and even eat different things, but may not have consciously linked these characteristics to survival of each of these creatures.

In this lesson, students will explore the purpose of a range of external features of different types of animals using the internet. Students will then consolidate this knowledge to compare and contrast two animals using a Venn diagram.

Lesson focus

The focus of this lesson is to spark students' interest, stimulate their curiosity, raise questions for inquiry and gain an understanding about the external features of a range of familiar animals.

These existing ideas can then be taken account of in future lessons.

Introduction

Review with students the class science journal and worksheet from the last lesson. Remind students that animals have many different parts, and we call these parts 'features'. Ask students if they can recall some of the features they discussed in the previous lesson.

Body of lesson

1. Allow students to visit the ABC Splash website Skin and scales, feathers and fur, or visit it as a whole class. Chapters 2 – 10 feature short videos of a range of animals and their unique features. Ask students to select four of the videos to watch.
2. Ask students to complete the worksheet *Skin and scales, feathers and fur*, using the videos they have watched for ideas.
3. Explain to students they are going to compare two of the animals from their *Skin and scales, feathers and fur* worksheet to investigate their similarities and differences. Tell students they will be using a Venn diagram to help them compare these animals. Explain that a Venn diagram is a type of scientific diagram that can be used to explore the differences and similarities between two things.
4. Ask students to select two of the animals from their *Skin and scales, feathers and fur* worksheet and complete the worksheet *What do we have in common?* Ask students to place the features that are similar (e.g. eyes) in the intersecting space and features that are unique to each animal in the corresponding circle (e.g. fins, feathers, fur etc).

Conclusion

Ask students to share their Venn diagrams with the class. Record a collection of unique features under a heading for each animal in the class science journal. Discuss with students how they think each of these unique features helps the animal to survive.

Links to the Australian Curriculum

- Living things have a variety of external features ACSSU017
- Pose and respond to questions, and make predictions about familiar objects and events ACSIS024
- Use a range of methods to sort information, including drawings and provided tables through discussion, compare observations with predictions ACSIS027
- Compare observations with those of others ACSIS213
- Represent and communicate observations and ideas in a variety of ways ACSIS029

SKIN AND SCALES, FEATHERS AND FUR

LEARN ABOUT WOOL

Draw a picture of something that has skin and scales, feathers or fur below.

I have feathers	I have fur
I have a scales	I have fins

Name:.....

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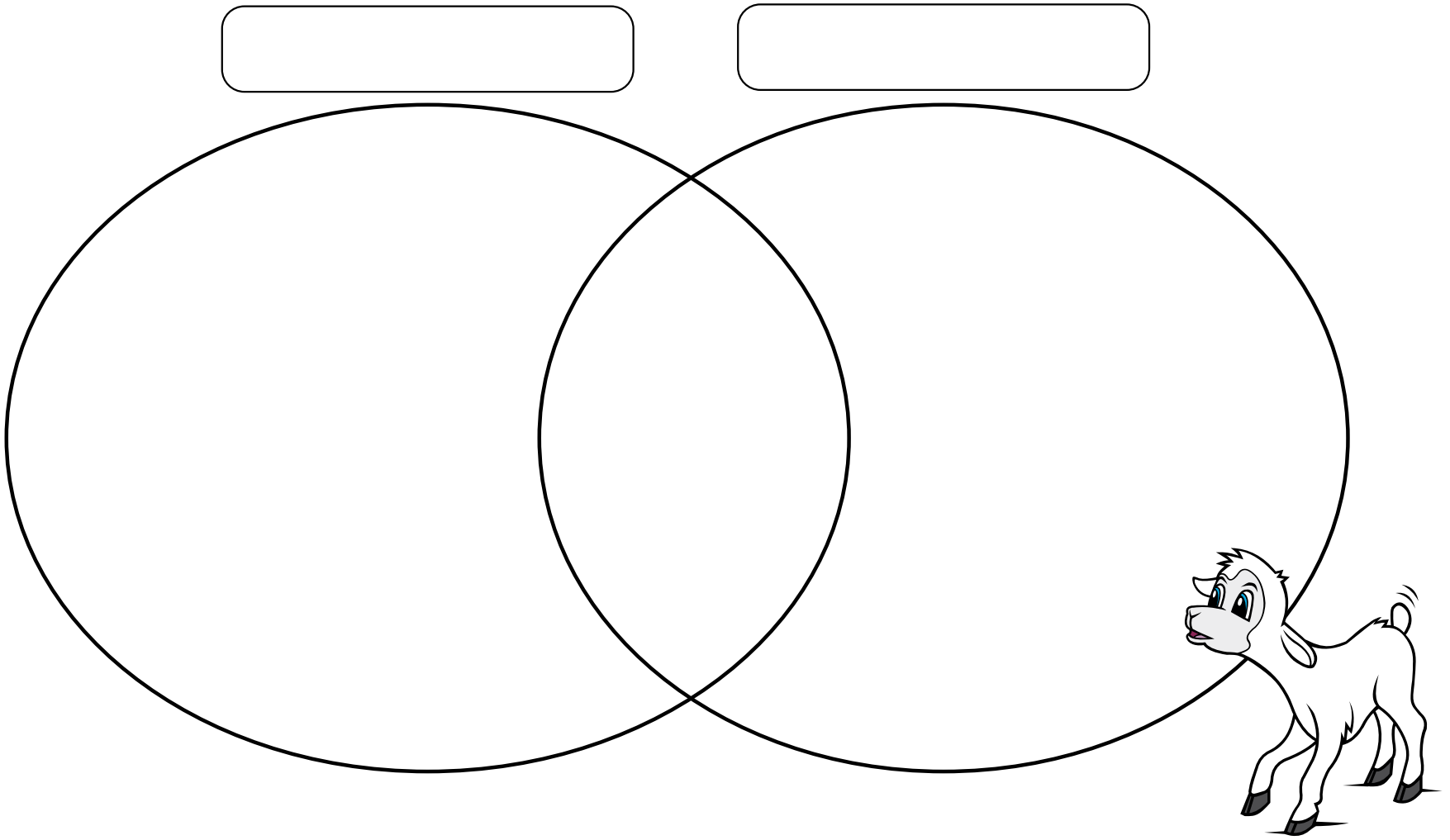
WHAT DO WE HAVE IN COMMON?

LEARN ABOUT WOOL



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Pre-lesson preparation, materials and equipment

The LEARN ABOUT WOOL factsheets listed below and *The Story of Wool* book (Kondinin Group) will give you ample background information to carry out this lesson and answer a range of questions posed by students.

Useful resources:

For teachers

Pete the sheep, by Jackie French

LEARN ABOUT WOOL factsheets:

- *What is wool?*
- *How wool grows*
- *Shearing*
- *Wool — from farm to fashion*

LEARN ABOUT WOOL resource sheet — *Fleecy friends*

LEARN ABOUT WOOL video — *What is wool?*

Video tutorial model sheep construction —

https://prodigalpieces.com/clothespin-sheep-ornament-tutorial/

Materials and equipment

- LEARN ABOUT WOOL fibre samples
- Woollen fleece
- Pencils, cardboard, scissors, wooden pegs, glue, sticky tape, plastic eyes and craft wool

Lesson 3: I've been fleeced
Year 1 science
The external features of living things

Lesson objective

- Describe the use of animal body parts, such as a sheep's fleece, for particular purposes such as warmth and protection.
- Research ideas collaboratively using big books, web pages and ICT within the classroom.

Students will have the opportunity to:

- explore and make observations about wool
- discuss the different purposes of the sheep's fleece
- make the connection between a sheep's fleece and wool used in a range of everyday items such as clothing and furnishings.

Setting the context

Animals have a range of adaptations that protect them against the weather. Sheep are well protected from the weather by the wool fleece that covers their body. Wool has a range of unique properties that help sheep maintain their body temperature as the external temperatures fluctuate from hot to cold. Wool contains a natural grease called lanolin, which gives it water-resistant properties, helping to keep sheep dry and warm in wet weather.

Lesson focus

The focus of this lesson is to spark students' interest, stimulate their curiosity, raise questions for inquiry and gain an understanding about the different adaptations animals have to protect them against the weather or environmental conditions in which they live using sheep as an example.

These existing ideas can then be taken account of in future lessons.

Introduction

Explain to students that they will be investigating sheep, exploring their unique features and discovering how these features help sheep to survive.

Body of lesson

Read to the class *Pete the sheep*, by Jackie French. Using the class science journal to record students' ideas, make a list of what students already know about sheep. You might like to use the the LEARN ABOUT WOOL factsheets to guide the discussion. Ask students questions such as:

- How do sheep move about?
- What do sheep eat?
- Where do sheep live?
- How do sheep stay warm?

2. Show students the LEARN ABOUT WOOL video *What is wool?* and allow students to explore the LEARN ABOUT WOOL factsheets:

- *What is wool?*
- *How wool grows*
- *Shearing*
- *Wool — from farm to fashion*

3. Allow students to explore the fibre and fabric samples from the LEARN ABOUT WOOL resource kit and ask them to describe how the samples feel. Record their responses in the class science journal.
4. Using the LEARN ABOUT WOOL resource sheet *Fleecy friends* as a guide, allow students to make their own pet sheep. Display the sheep in the classroom for judging, if possible.

Conclusion

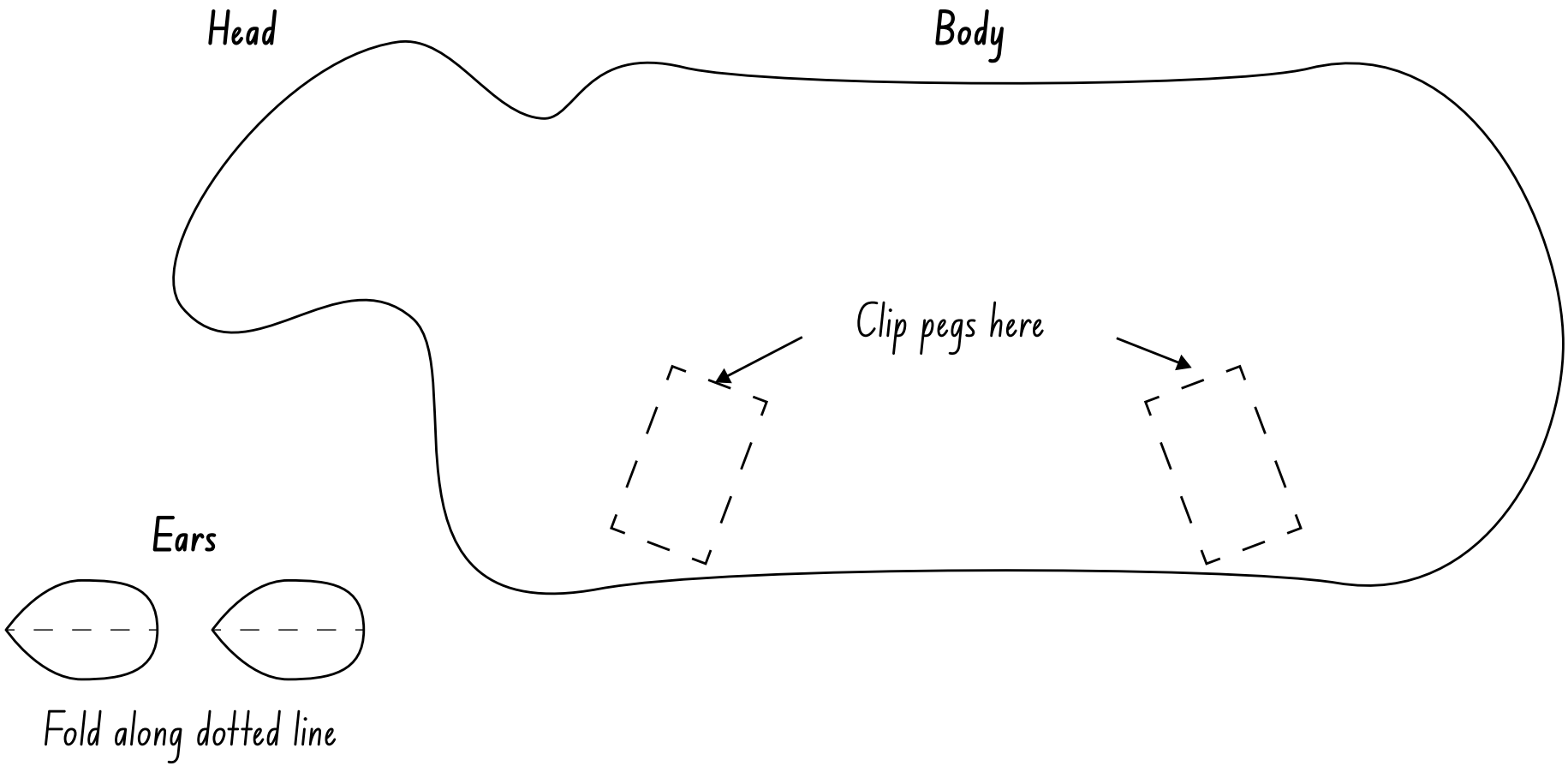
Regroup in front of the class science journal and write the heading *Animals and their coverings*. Ask students to recall the purpose of the sheep's fleece. Encourage students to think about the weather conditions sheep might need to endure and what might happen if the sheep did not have a woolly fleece for protection. Ask students to think of other types of protection animals have that they have explored during the lesson (fur, feathers, scales). Make a list of animals and their protective adaptations.

Links to the Australian Curriculum

- Living things have a variety of external features ACSSU017
- Pose and respond to questions, and make predictions about familiar objects and events ACSIS024
- Use a range of methods to sort information, including drawings and provided tables through discussion, compare observations with predictions ACSIS027
- Compare observations with those of others ACSIS213
- Represent and communicate observations and ideas in a variety of ways ACSIS029

FLEECY FRIENDS TEMPLATE

LEARN ABOUT WOOL



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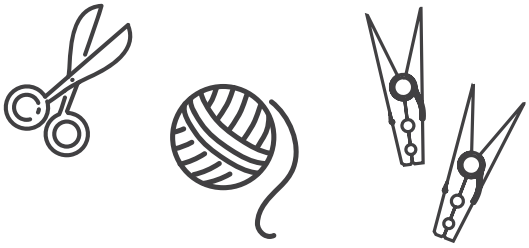
Fleecy friends



You will need:

- Pencils or marker pens
- Stiff cardboard
- White paper
- Scissors
- Craft glue
- Wooden pegs
- Craft wool (from craft supplier, such as Spotlight) or woollen fleece
- Plastic eyes (from craft supplier, such as Spotlight)

Instructions:

1. Provide each student with a copy of the *Fleecy friends* template. Glue the template to the stiff card and cut along the solid lines to produce one body and two ears.
2. Glue a plastic eye to each side of the head.
3. Place two pegs on the cardboard body (as indicated on the template) and attach using a dab of glue.
4. Apply a small amount of glue to the body of the sheep and gently wrap craft wool around the body to form a fleece. Tuck the end of the fleece into the body.
5. Cut out the ears and fold along the dotted lilne before dabbing with glue and inserting into fleece at head end of body.
6. Line up the class fleecy friends and complete judging activity using a 'special guest' judge.

Pre-lesson preparation, materials and equipment

The LEARN ABOUT WOOL factsheets listed below will give you ample background information to carry out this lesson and answer a range of questions posed by students.

Useful resources:

For teachers

LEARN ABOUT WOOL factsheets:

- *Sheep — the wool producers*
- *Types of sheep*

Materials and equipment

- Student worksheet — *How many teeth?*

Lesson 4: Different types of teeth
Year 1 science
The external features of living things

Lesson objective

- To introduce students to the idea that different animals have different diets and different types of teeth.

Students will have the opportunity to:

- explore and make observations about a range of animals
- discuss the different purposes of a range of external features
- explore the differences and similarities between a range of animals
- sort information and classify objects based on easily observable characteristics with teacher guidance.

Setting the context

Unlike humans, sheep have only back teeth on their upper jaw (no front teeth), with a full set of teeth on their lower jaw. This allows them to grab pasture close to the ground and grip it with their back teeth. The age of sheep can also be identified by the number of teeth.

In this lesson students will compare the teeth of different animals and relate their findings to the types of food each animal eats (herbivore, omnivore or carnivore). Students will then consolidate this knowledge to compare and contrast two animals using a simple matching game.

Lesson focus

The focus of this lesson is to introduce the concept of herbivores, carnivores and omnivores by looking at different types of teeth.

These existing ideas can then be taken account of in future lessons.

Introduction

Explain to students animals' teeth are different depending upon what foods they eat — their 'diet'. Meat-eaters (carnivores) have sharp teeth. Plant-eaters (herbivores) have flat teeth. Animals that eat both plants and meat (omnivores), like humans, have sharp teeth in front and flat teeth at the back.

Body of lesson

1. Read the LEARN ABOUT WOOL factsheets *Sheep — the wool producers* and *Types of sheep* with students. Focus students' attention on the diagrams and photograph of the sheep teeth and encourage students to think about the types of food sheep eat.

2. Display the photograph *Showing your age* on a smartboard or large screen if you have one. Organise students into pairs. Ask students to compare the picture of the sheep's teeth with their partner's teeth — what differences can they identify? Ask questions such as:
   - How many front teeth does your partner have?
   - What is the difference between the teeth at the front of your partner's mouth and the teeth at the back of their mouth?
   - Why are our teeth different shapes?
   - What sort of food do humans eat?
   - What do sheep eat?
   - Why don't sheep have any front teeth on the top?

3. Explain to students that many animals (including people and sheep) are born without teeth, develop baby or 'milk' teeth, which slowly fall out and are replaced by adult teeth. Take care to explain that different people lose their teeth at different ages and this is normal. Ask students to raise their hands if they have lost any of their baby teeth. Using the worksheet *How many teeth?* help students to record information about how many teeth their classmates have lost and work with them to develop a simple bar graph of class dental development. Explain that tables and bar graphs are simple scientific tools we can use to present data.

Conclusion

Allow students to play the online game: Teeth and eating: http://www.sciencekids.co.nz/gamesactivities/teetheating.html

NOTE: This requires Adobe flash player. If you do not have access to the internet for each student, the game can be played in small groups, or as a whole class. Using the information in the online game, explain to students that there are three basic types of teeth: incisors, canines and molars. Animals have certain types of teeth depending on what they eat. Each type of tooth has a job, such as biting (incisor), gripping and tearing (canine), crushing and chewing (molar).

Show students the YouTube clip Top ten animals with scary looking teeth. Ask students to guess what these animals might eat by looking at their teeth. Using the class journal, record in a table or as a mind map the types of animals students have explored during the lesson (herbivores, carnivores and omnivores), what each animal eats and the types of teeth each animal has.

Links to the Australian Curriculum

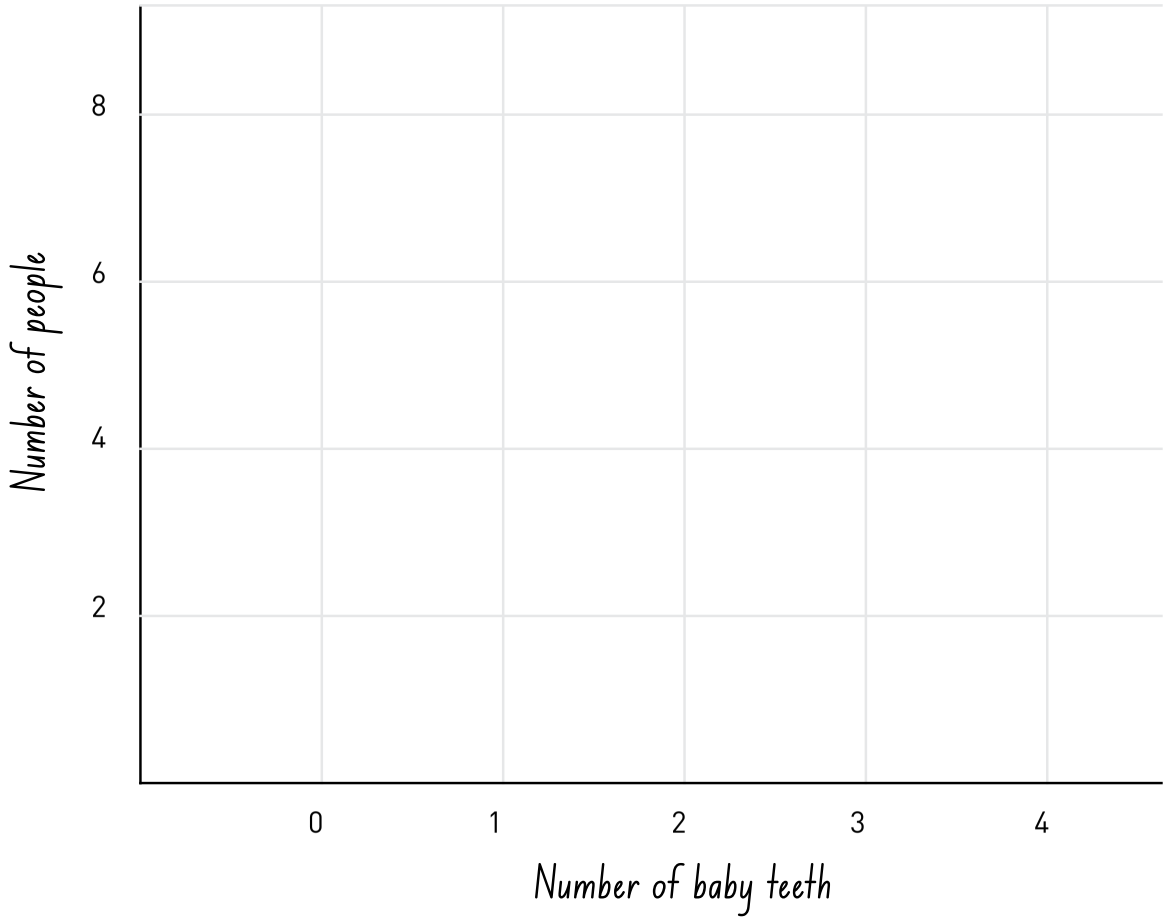
- Living things have a variety of external features ACSSU017
- Pose and respond to questions, and make predictions about familiar objects and events ACSIS024
- Use a range of methods to sort information, including drawings and provided tables through discussion, compare observations with predictions ACSIS027
- Compare observations with those of others ACSIS213
- Represent and communicate observations and ideas in a variety of ways ACSIS029

HOW MANY TEETH?

LEARN ABOUT WOOL

Use a bar graph to show Sam how many baby teeth your class has lost.

Number of baby teeth lost	Number of people
0	
1	
2	
3	
4	
5 or more	



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Pre-lesson preparation, materials and equipment

The 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:

For teachers

- *What If You Had Animal Feet?* by Sandra Markle

Materials and equipment

- Student worksheet — *Whose feet are these?*
- Student worksheet — *If I had sheep feet*
- *What If You Had Animal Feet?* by Sandra Markle

Lesson 5: Different types of feet
Year 1 science
The external features of living things

Lesson objective

- To introduce students to the idea that different animals have different types of feet that have adapted to different environments.

Students will have the opportunity to:

- explore and make observations about a range of animals' feet
- discuss the different purposes of different types of feet
- sort information and classify objects based on easily observable characteristics with teacher guidance.

Setting the context

Sheep mostly graze during the early morning and the evening and can walk many kilometres as they graze. Instead of soft feet with five toes (like humans) sheep are cloven-hooved (a hard hoof split into two toes), which allows them to walk for long distances grazing over rough terrain. Examples of other mammals with this type of hoof are cattle, deer and goats.

In this lesson, students will compare the feet of different animals and relate their findings to the types of environment in which they live.

Lesson focus

The focus of this lesson is to link external features such as feet to the environment in which an animal lives.

Introduction

Read *What if you had animal feet?* by Sandra Markle with students. Discuss why animals have different types of feet.

1. Ask students to complete worksheet *Whose feet are these?* Select a number of students to share their work and explain how each animal they have chosen uses their feet to move through the landscape in which they live.

2. Ask students to imagine they had feet like sheep (hooves). Encourage them to think about all the things they could do if they had hard hooves instead of soft fleshy feet.

3. Ask students to complete the worksheet *If I had sheep feet.*

Conclusion

Review with students why different animals have different types of feet. Ask a few students to share their *If I had sheep feet* worksheets with the class. Using the class journal, develop a list of the different types of feet students have investigated during the lesson.

Links to the Australian Curriculum

- Living things have a variety of external features ACSSU017
- Pose and respond to questions, and make predictions about familiar objects and events ACSIS024
- Use a range of methods to sort information, including drawings and provided tables through discussion, compare observations with predictions ACSIS027
- Compare observations with those of others ACSIS213
- Represent and communicate observations and ideas in a variety of ways ACSIS029

WHOSE FEET ARE THESE?

LEARN ABOUT WOOL

Draw a picture of an animal below showing its feet.

I have hooves	I have claws
I have no feet	I have webbed feet

Name:.....

awi | THE WOOLMARK COMPANY

IF I HAD SHEEP FEET

LEARN ABOUT WOOL

If I was a sheep my footprint would look like this

My hard hooves would help me.....

.....

.....

.....

.....

A picture of me with hooves

Name:.....

awi | THE WOOLMARK COMPANY

Pre-lesson preparation, materials and equipment

This lesson draws together the learnings from previous lessons and is designed to allow students to reflect on resources used and activities carried out throughout the unit of work.

Useful resources:

For teachers

- ABC Splash website *Skin and scales, feathers and fur*

Materials and equipment

- Class journal
- Paper, pencils, scissors, sticky tape, craft glue
- A range of recyclable, everyday materials such as cardboard rolls, paper, fabric and plant material.

Lesson 6: Clever creatures

Year 1 science
The external features of living things

Lesson objective

- To review students' understanding about how the external features of animals help them survive in different environments.

Students will have the opportunity to:

- Describe the use of animal body parts for particular purposes such as moving and feeding
- Represent what was discovered during the unit in an investigation
- Engage in whole class discussion to share observations and ideas.

Setting the context

Animals have a range of external features that help them survive and thrive in a range of habitats. During this unit of work, students have investigated a range of external features and explored the way these features help animals to move, eat and protect themselves against the elements.

In this lesson students will design an animal that can survive and thrive in a given habitat.

Lesson focus

The focus of this lesson is to draw together the learnings from previous lessons and allow students to demonstrate their understanding through problem solving and visual representation.

Introduction

Using the class journal as a discussion point, review what students have learned about animals and their external features.

Body of lesson

1. Explain to students you are going to give them a selection of habitats to choose from and they are going to design a creature that will live in the habitat they have chosen.
2. Provide students with a range of habitats to choose from and encourage them to think about:
   a. What their animal will eat and how they will find and access this food
   b. What is the weather likely to be like? How will their animal stay warm or cool?
   c. How will their animal move about? Will it need to run fast, be able to fly or swim to catch food or can it walk about grazing on plants or shrubs and trees?
3. Students can draw or create their creature from a range of everyday, recyclable materials provided.
4. Encourage students to label key external features they have chosen for their animal.

Conclusion

Ask students to present their creatures to the class, explaining how their features will help them eat, move about and be protected from the conditions in their environment.

Extension activity

Using *Pinterest* for inspiration, encourage students to select their own woollen craft designs to create and share with the class. These can be displayed in the classroom or beyond. Some example search terms include *fuzzy yarn sheep, needle felted design* and *felted wool dryer balls.*

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