



Year 1 Science lessons pack

What kind of superhero do I want to be?



Year 1

Science lessons pack

ENQUIRY QUESTION

What kind of superhero do I want to be?

LINKED HARMONY PRINCIPLE

The principle of Diversity

The six lesson plans in this pack can be used to deliver the science content for the Year 1 enquiry of learning *What kind of superhero do I want to be?*, which is linked to the principle of Diversity.

This science learning builds on children's understanding of the human body and the foundations of science learning that will have been explored through the area of Understanding the World in the EYFS.

‘Take time to explore the natural world through your senses.’

Each lesson plan includes opportunities to refer to the children's prior learning, as well as questions to use to reflect on current learning and to assess the children's developing knowledge and understanding. Wherever possible, lessons feature key elements that are distinctive to the Harmony approach to teaching and learning, for example: opportunities to **learn about Nature**, to **learn in Nature** and to **learn from Nature**.

A summary of each of these elements in relation to the six lesson plans in this pack is set out on the next pages.

01 - Learning about Nature

The statutory requirements of the National Curriculum set out what children need to learn about Nature – although, of course, their wider learning about Nature will extend beyond this.

As children progress through their primary education, we can map the journey that their science learning about animals, including humans, takes. By understanding their prior learning about animals, including humans, in the EYFS, and by looking ahead to the path their learning about animals, including humans, will take in Years 2 to 6, we are better able to plan for progression.

The table below shows where the science learning about animals, including humans covered in the lesson plans in this pack sits within this journey.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
ENQUIRY	Understanding the world Physical development	What kind of superhero do I want to be?	What do I need to be healthy?	What is the story of our food?	How did the Anglo-Saxons farm and how was it different from today?	What can we learn about how the Ancient Greeks lived?	How can we learn to live in peace?
SUMMARY OF LEARNING	Children will be guided to increase their knowledge and sense of the ecologically diverse world around them. Using their bodies and their senses they will explore the natural world. They will develop their understanding of how their body works and how to look after themselves as they grow	Children will identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. Within the context of their local environment, and through their senses, they will also explore the changes that occur across the four seasons	Children will learn about and identify the basic needs of animals, including humans, for survival (water, food and air). They will describe the importance for humans of exercise, hygiene and eating the right amounts of different types of food	Children will identify that animals, including humans, need the right types and amount of nutrition. They will recognise that they cannot make their own food but get nutrition from what they eat Alongside this, children will also consolidate their knowledge of the requirements of plants for life and growth	Children will be able to describe the simple functions of the basic parts of the digestive system in humans and identify the different types of teeth in humans and their simple functions	Children will explore the changes that occur as humans grow and develop from childhood to old age	Children will identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. They will recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function and describe the ways in which nutrients and water are transported around the body
KEY VOCABULARY	Main parts of the body eg. head, neck, shoulders, arms, elbows, hands, fingers, legs, knees, toes, face, ears, eyes, hair, mouth, teeth, skeleton, backbone, (un)healthy	senses, touch, feel, see, sight, smell, taste, hear, sound, skin, tongue, nerve, brain, texture	survive, alive, thrive, exercise, heartbeat, breathing, hygiene, diet, nutrients, vitamins, wellness, balance	dissect, components, nutrition, function, source, producer, consumer, grain, polytunnel, hen, rooster, heifer, bullock, crop	digestion, saliva, oesophagus, stomach, intestine, incisor, canine, molar, herbivore, carnivore, omnivore	human, child, develop, puberty, adolescent, adult, elder, elderly, deteriorate	circulatory system, drugs, lifestyle, oxygen, carbon dioxide, pulse, rate, pumps, blood, blood vessels, transported, lungs

The table below sets out what the children’s learning about animals, including humans, looks like over the course of the six lessons.

Week 1	Week 2	Week 3
How do my hands help me to identify something through touch alone?	What will I see in Nature today?	What different sounds can I hear around our school?
Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense
Week 4	Week 5	Week 6
How do the different parts of my mouth help me to eat and taste?	How good am I at identifying different smells?	What are the different parts of my body called?
Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense



02 - Learning in Nature

In addition to learning about Nature, a Harmony approach also provides suggestions for rich opportunities to learn in or alongside Nature, as the six science lessons in this pack demonstrate.

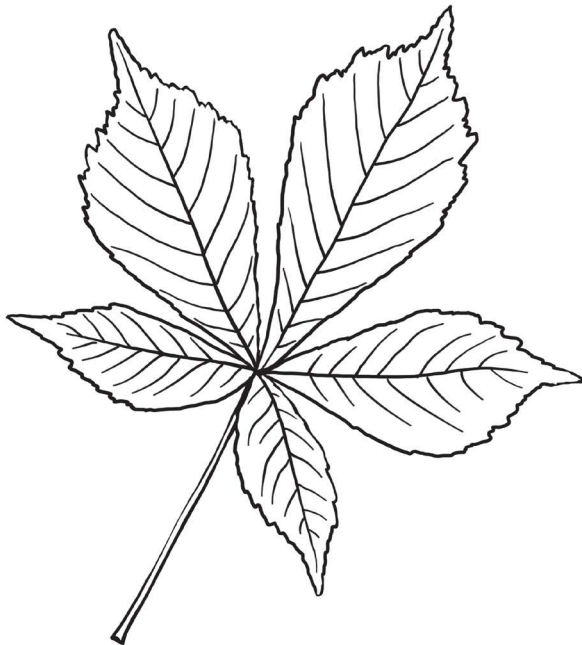
For example, the children will explore the links between parts of the human body and the senses, the sights, smells, feel, sounds and tastes of autumn and how Nature teaches us that diversity brings strength.

As they learn in Nature, the children will also experience opportunities to develop their skills in working scientifically. Although these skills will be developed incrementally over time (as shown in Appendix A), the coverage of these skills within the sequence of these six lessons is set out below.

Week 1	Week 2	Week 3
How do my hands help me to identify something through touch alone?	What will I see in Nature today?	What different sounds can I hear around our school?
Performing simple tests. Identifying and classifying.	Observing closely using simple equipment.	Observing closely using simple equipment. Identifying and classifying. Using their observations and ideas to suggest answers to questions.
Scientific enquiry type: Identifying, classifying & grouping	Scientific enquiry type: Observing over time	Scientific enquiry type: Identifying, classifying & grouping
Week 4	Week 5	Week 6
How do the different parts of my mouth help me to eat and taste?	How good am I at identifying different smells?	What are the different parts of my body called?
Performing simple tests. Identifying and classifying. Gathering and recording data to help in answering questions.	Performing simple tests. Identifying and classifying. Gathering and recording data to help in answering questions.	Identifying and classifying.
Scientific enquiry type: Comparative testing	Scientific enquiry type: Identifying, classifying & grouping	Scientific enquiry type: Identifying, classifying & grouping

Working scientifically vocabulary

- identify
- observe
- group
- test



03 - Learning from Nature

The third key element of a Harmony approach is learning from Nature, which is linked to progression in understanding of Harmony principles. This aspect of learning supports the development of children’s understanding of what it means to live sustainably.

The six lessons in this pack and the wider enquiry they are part of are underpinned by the principle of Diversity; they build on children’s prior learning in the EYFS and prepare them for further learning in Years 2 to 6.

The children’s progression in their understanding of the principle of Diversity, through enquiries of learning that help us to think and live more sustainably, is shown below.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
ENQUIRY	Children are introduced to opportunities to explore and develop their initial knowledge and understanding about diversity (exploring different species of flowers, trees, birds, fish, animals or dinosaurs, our strengths, different languages spoken)	What kind of superhero do I want to be?	What can we learn about the plants that grow in the UK?	What’s the story of our planet and how can we care for it?	Why should we protect the biodiversity of the rainforest?	How can I be a sustainability champion?	How would I like to make history?
PROGRESSION: CONCEPT OF DIVERSITY		How are we the same and different?	How do different plants grow and what do they need?	How is our climate changing and why is this a problem?	What makes the rainforest amazing?	What were the pros and cons of the Industrial Revolution?	How have the actions of individuals changed the world?
THINKING SUSTAINABLY		Which fruits and vegetables can we taste in autumn?	Why is it important to have a diversity of plants?	What is Earth Hour and how shall we celebrate it?	How can we help protect the rainforest?	What will happen if we keep consuming more than the planet can provide?	How would I like to make history?
THINKING SUSTAINABLY VOCABULARY		same different natural made by people outside inside	unique strength resilience senses value differences	diversity biodiversity variety species teamwork	richness enrich preserve conserve abundance	heritage traditions culture wisdom indigenous	myriad simplicity changemaker agency fossil fuels climate change

Animals including humans
Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

Seasonal changes
Observe changes across the four seasons; observe and describe weather associated with the seasons and how day length varies.

Working scientifically:
Performing simple tests.
Identifying and classifying

Science enquiry type:
Identifying, classifying and grouping

Vocabulary relating to animals, including humans, working scientifically and thinking sustainably is highlighted within the unit introduction.

Thermometer

Natural seasonal objects such as fallen leaves, conkers, acorns, sycamore seeds and seed heads

Opaque bag

A large sheet of paper and a pen

Copies of Resource 1A (one per child)

Clipboards

A selection of fiction and non-fiction books about the five senses such as *Look Inside Your Body* by Louis Stowell

Optional: Look What I Found In The Woods by Moira Butterfield and Jesus Verona

Children requiring additional support could be introduced to the seasonal objects prior to the lesson so they are familiar with what they are and have had the opportunity to explore them through play. Supporting adults should scaffold the acquisition of new vocabulary, as needed.

Challenge children to explore: *Is it just our hands that help us to feel/touch?* Explain that it is our skin that helps us to feel and that it is the body's largest organ.

CLIMATE ACTION PLAN:
Biodiversity and Nature

How do my hands help me identify things by touching them?

What do we already know?

Take the children outside to **learn in Nature**.

Begin the lesson by recapping their prior **learning about Nature** (from EYFS) by asking them: *What you can see? What can you hear? What can you smell? What can you feel or touch?*

There may be an opportunity to begin to explore the children's understanding of the **principle of Diversity** as they respond. For example, if a child says they can see a leaf,

you might ask: *Do all leaves look the same?* If a child says they can hear a bird, you might ask: *Does all birdsong sound the same?*

Remind the children that we have five senses and that our brains use information from our senses to understand the world around us. Ask them: *Which of our senses haven't we talked about yet? When do we use our sense of taste?*

What are we learning today?

Move the children's **learning about Nature** on by explaining that this lesson will focus on the sense of touch and that they will be trying to identify natural 'treasures' using their sense of touch alone. Ask the children: *Which parts of our bodies do we touch and feel with? How do we know what something is by touching, not looking?*

Explain that there are nerve endings in our skin that send messages through the nerves to the brain.

TEACHER TIP:

This unit of science learning focuses on the human body and human senses. However, it is important throughout these six lessons to remind the children that we are part of Nature and to make links or establish differences between our senses and the senses of other animals.

Either in this lesson, or at another point in the school day, you could share with the children the book *Look What I Found In The Woods* by Moira Butterfield and Jesus Verona, which works well to support this learning.

How are we learning today?

Take the children outside to **learn in Nature**. Ask them: *How does it feel to be outside today?* Encourage the children to link their responses to their observations about the weather (e.g. it feels warm outside today because the sun is shining; it feels windy outside today and I can see the trees blowing). As a class, use a thermometer to measure the temperature outdoors.

TEACHER TIP:

If possible, create a simple class weather station outside that includes a thermometer, a DIY [rain gauge](#) made from a plastic drinks bottle and a weatherproof streamer or flag – or even a DIY [wind vane](#). Once this is set up, you can visit it as part of your regular outside learning practice so children can build up measurements and observations about the weather through the seasons. This data can be referred to in future learning in geography and in science.

Depending on the number of supporting adults, arrange the children in adult-led groups so that new vocabulary can be introduced and modelled. Before passing around a 'feely' bag containing natural seasonal objects (see 'You will need', left), remind the children not to put any of the objects in their mouths. Encourage them to explore the objects through touch (no peeking!) and describe them. They might

focus on how the object felt, its size and texture. Record the adjectives they use in a class list.

Ask the children to try to identify each of the objects, based on the words that they have collectively used to describe them.

TIME TO EXPLAIN:

Using the class list of adjectives, the stem sentence and the photographs of the items on Resource 1A, support the children in describing the objects.

STEM SENTENCE:

I touched the _____ with my hands. It felt _____ and _____ .

Once all the natural, seasonal objects have been revealed, allow the children time to set up a Nature table with them. They can add further items over the next few weeks.

TEACHER TIP:

To extend the children's **learning about Nature**, draw out the value of a diversity of leaves, tree nuts and seeds to a diversity of wildlife. For example, acorns from oak trees provide food for birds such as woodpeckers and nuthatches, as well as mammals such as badgers and wild boar; conkers are eaten by deer and squirrels; sycamore seeds are eaten by greenfinches and goldfinches.

What have we learned today?

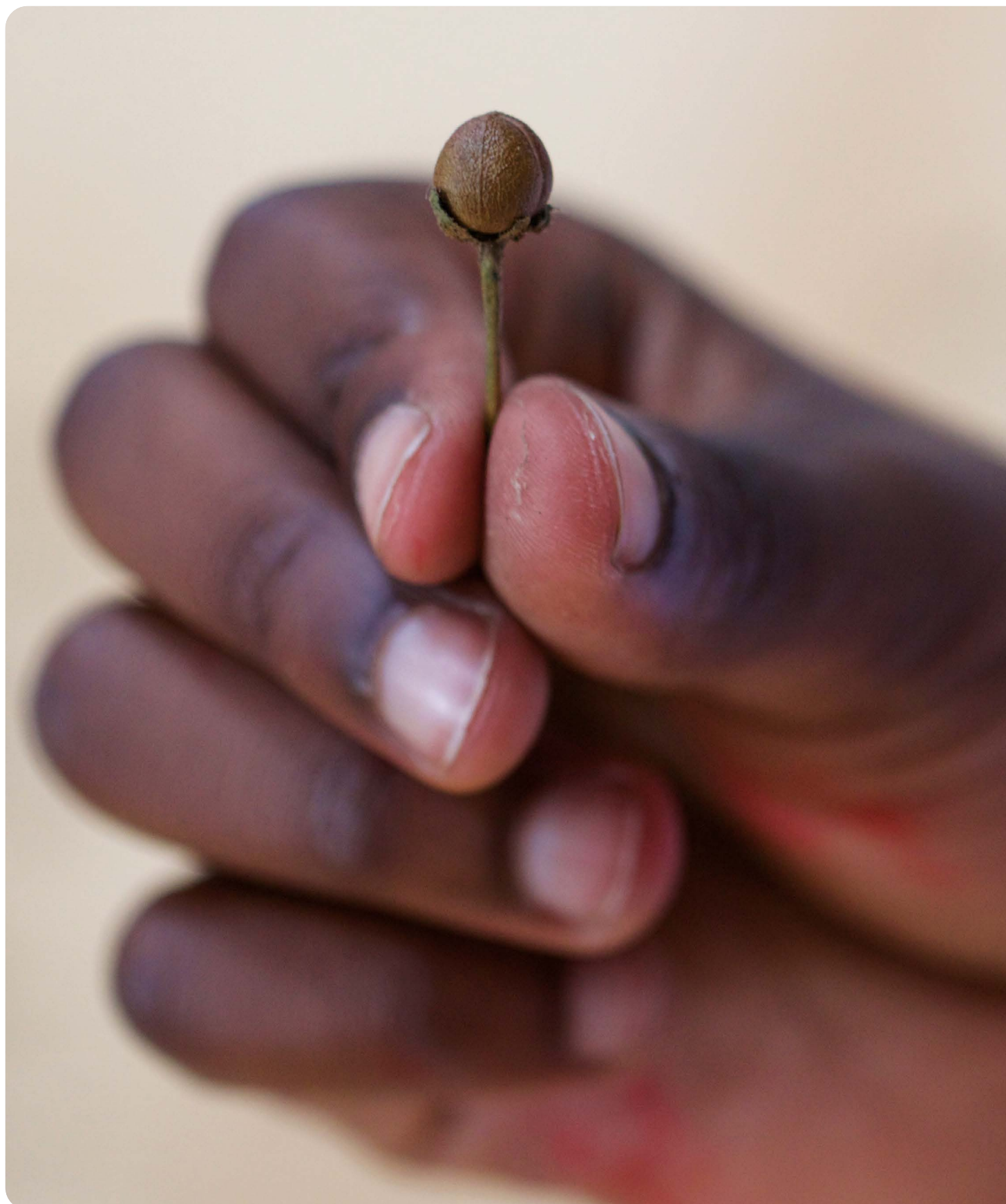
Encourage the children to reflect on their **learning about Nature** with reference to human senses and assess their understanding, by asking: *Which part(s) of our body help us to feel things by touching them?*

Draw out in discussion the wonder of touch. Our skin and our brains work together to tell us what we are feeling – it's like a superpower. At this point in the lesson, you might also want to explore with the children how animals use different parts of their bodies to feel or touch things around them. (e.g. a cat uses its whiskers, a pig uses its snout, an octopus uses the suckers on its tentacles).

At the end of the lesson, allow the children to select a natural object from the Nature table or go outside and invite them to select their own. Ask them to close their eyes and sit quietly, taking time to focus on how the object they have chosen feels in their hands.

TEACHER TIP:

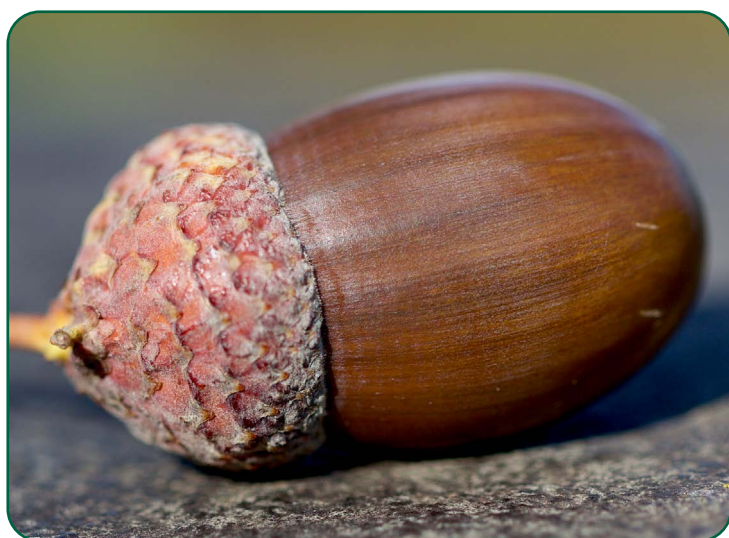
Encourage the children to continue to look for diversity in Nature by suggesting that they explore treasures during walks outside school. Provide copies of the [Woodland Trust's Nature Detectives Autumn Scavenger Hunt](#) resource and encourage them to bring in autumn 'treasures' they have found with their families. Share these, reinforcing and extending the vocabulary developed within this lesson, and add them to the Nature table.



Resource 1A



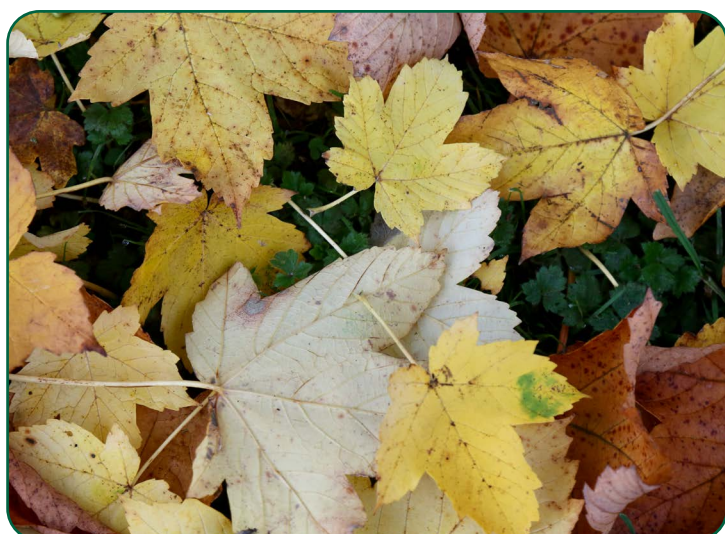
The conkers felt _____
and _____.



The acorns felt _____
and _____.



The sycamore seeds felt
_____ and
_____.



The leaves felt _____
and _____.

Animals including humans
Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

Working scientifically:
Observing closely, using simple equipment

Scientific enquiry type:
Observing over time

Vocabulary relating to animals, including humans, working scientifically and thinking sustainably is highlighted within the unit introduction.

- Copies of Resource 2A (one per child)
- Copies of [The Woodland Trust's Minibeast Hunt resource](#) (enough for one between two)
- Bug viewers or magnifiers
- Binoculars (if you have them)
- Cones
- Whiteboards and pens
- Optional:* Colour swatches
- Optional:* *Brown Bear, Brown Bear, What Do You See?* by Bill Martin Jr and Eric Carle

Children requiring additional support could play colour-matching games to consolidate their knowledge of colours prior to the lesson.

Provide the children with colour swatches from a local DIY store (or print one from the internet) and challenge them to go on a colour hunt to find things in Nature that most closely match these colours.

CLIMATE ACTION PLAN:
Biodiversity and Nature

What will I see in Nature today?

What do we already know?

Begin the lesson by recapping what the children have already **learned about Nature** by asking them: *What are our senses? Which sense did we explore in the last lesson? Which parts of our body help us to touch and feel?*

Recap how they explored the **principle of Diversity** in their prior learning by asking them: *Were the objects that we explored through touch all the same? What made the nuts/seeds/leaves different?*

What are we learning today?

Move the children's **learning about Nature** on by asking them: *Which sense helps us to see each other? Which part of our body do we use to see?*

Remind the children of the importance of taking time to stop and look closely at Nature when we can, as they did in the previous lesson. Encourage them to take a moment to look at the eyes of the person next to them. Ask: *What colour are your partner's eyes?* Explain that the coloured part of the eye is called the iris and that the black circle in the middle of the iris is called the pupil.

Draw their attention to the diversity of colours in every child's iris and to the fact that, as with fingerprints, everyone's iris is completely unique.

Explain that the pupil allows light into the eye, and messages about shapes and colours are sent to the brain along a nerve at the back of the eye (optic nerve). The brain sorts out all the messages and this is how we see.

TEACHER TIP:
This may be a good time to explore the fact that though most of us have the same body parts, in the same places, doing the same jobs, none of us are exactly the same. For example, different people's eyes see the world differently. Some of us see colours differently and some of us need to wear glasses to help us to see clearly. Some people can't see and use their other senses to help them navigate the world. This discussion will need to be tailored to individual needs and class groups, as appropriate.

How are we learning today?

Take the children outdoors to **learn in Nature**. Call out a colour and challenge them to work in pairs to find a natural object that is the same colour. Repeat with other colours. Alternatively, challenge them to find natural objects that are the same colours as the colours on their swatch.

Use cones to mark out an area that is approximately 10m x 10m or simply agree with the children an area for them to learn in. Invite them to explore this area with their partner and to discuss all the things they can see. You might want to model how to lift and replace rocks or fallen branches carefully to look for minibeasts as part of the children's exploration.

Challenge the children to use a magnifier to find five things with their partner that they have never noticed before or to find five different-shaped leaves.

Ask: *How many different minibeasts can you spot? Are they easy to see? Are there any fallen leaves or seeds? Are they all the same? How are they different?*

Take feedback from the children about the things they saw. Next, challenge them only to look up off the ground and to work with their partner to discuss all the things they can see. They may need to venture out of the area marked with cones to look at trees, for example, in more detail.

Discuss with the children what they saw and ask them: *How many different leaf shapes can you see? Can you see any interesting shapes in the clouds?*

To facilitate the last part of the lesson, collect some natural materials to add to the Nature table while the class is outdoors.

TEACHER TIP:
Either in this lesson, or at another point in the school day, you could share with the children the book *Brown Bear, Brown Bear, What Do You See?* by Bill Martin Jr and Eric Carle, which works well to support this learning.

TIME TO EXPLAIN:

Encourage the children to reflect on their **learning about Nature** by asking them: *Did you see anything you haven't noticed before?* Ask the children to record five things they have seen outside today on Resource 2A, modelling this for them first.

STEM SENTENCE:

Outside, I used my eyes and I saw ____ .

What have we learned today?

Encourage the children to reflect on their **learning about Nature** with reference to human senses and assess their understanding, by asking: *What part of our bodies did we use to 'look' and 'see'?* Remind them that our senses are amazing, like superpowers.

To draw out the learning about the **principle of Diversity**, ask the children: *Do all animals see the same way we see?* Discuss the fact that animals that come out at night (nocturnal) or at dawn/dusk (crepuscular) are able to see better than we can in the dark or in low light. Discuss the diversity of things the children saw and add any collected natural objects to the Nature table.

At the end of the lesson, invite the children to play a version of 'I spy' with a partner, using three words to describe what a natural object looks like and seeing if their partner can guess the object. You may want to model this for the children first by playing the first round as a class. This game could be played outside.



Resource 2A

Think about all the things
you saw outside today. Draw
a picture of five things and
write a sentence for each.

I saw _____
_____.

I saw _____
_____.

I saw _____
_____.

I saw _____
_____.

I saw _____
_____.

Animals including humans
Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

Working scientifically:
Observing closely, using simple equipment. Identifying and classifying. Using their observations and ideas to suggest answers to questions

Science enquiry type:
Identifying, classifying and grouping

Vocabulary relating to animals, including humans, working scientifically and thinking sustainably is highlighted within the unit introduction.

- Large ground sheet or tarpaulin
- Tablet with Merlin app downloaded
- Copies of Resource 3A (one per child)

Children requiring additional support could use a tablet to record sounds that can be listened to again in the classroom. Adults can support the reading of bird names on the Merlin app in small groups.

Challenge children to play a game with a partner to guess the birdsong.

CLIMATE ACTION PLAN:
Biodiversity and Nature

What different sounds can I hear around our school?

What do we already know?

Begin the lesson by recapping what the children have already **learned about Nature** by asking: *Which of the senses have we explored so far? Which parts of our body help us to see and touch?*

Recap how they explored the **principle of Diversity** in their prior learning by asking them: *Are everyone’s eyes the same? What makes them different? Do all animals see in the same way?*

What are we learning today?

Move the children’s **learning about Nature** on by asking them: *How do we hear things? Which part of our body do we use to hear?*

This discussion will need to be tailored to individual needs and class groups, as appropriate.

Ask the children to close their eyes for one minute and count how many sounds they can hear. After one minute, invite the children to share the sounds they heard.

TEACHER TIP:
This may also be a good time to recap that although most of us have the same body parts, in the same places, doing the same jobs, none of us are exactly the same. Due to the diversity that exists within our own bodies, some of us may need a little extra help to make our bodies work even better, such as wearing hearing aids.

How are we learning today?

Share the poem *The Sound Collector* by [Roger McGough](#). Ask the children: *Which part of the poem was your favourite? Why?* Explain that the children are going to be outdoor sound collectors. Ask them: *What sounds do you think the Sound Collector would hear if they went outside today?*

TIME TO EXPLAIN:
The children draw their own ‘sound sack’ on Resource 3A and record the sounds they heard by writing or drawing them in the sack.

STEM SENTENCE:
Outside, I used my _____ to hear _____ .

Reflect on the children’s **learning in Nature** by asking: *What would it be like if the sound collector took away all the sounds that we hear outside?*

Take the children outdoors to **learn in Nature**. Begin by inviting them to close their eyes and listen carefully to the sounds they can hear. Ask them: *What did you hear? What made this sound?* Challenge them to close their eyes again and this time identify two sounds made by Nature and two sounds made by people.

You could ask the children to listen with their eyes open and then closed to see if they are better able to focus on what they can hear with their eyes shut. Explain that when we take the time to be still and quiet, and to really concentrate, we hear more things than we might imagine.

Move to different locations outdoors and repeat the activity.

TEACHER TIP:
If you are able to hear birdsong during the lesson, or at another time in the school day, an app such as [Merlin](#) can be used to identify birds by their song.

What have we learned today?

Encourage the children to reflect on their **learning about Nature** with reference to human senses and assess their understanding, by asking: *What part of our bodies did we use to listen and hear?* You might want to draw the children's attention to the fact that the word 'hear' has the word 'ear' in it to remind them that these two things are linked.

To draw out the learning about the **principle of Diversity**, ask the children: *Do all animals hear the same way we hear?* Discuss how many animals can hear things we can't (for example, dogs can hear much higher sounds than we can); how animals such as bats and dolphins use sounds to help them navigate in the dark or in the water (echolocation); and how some insects hear through their antennae or by using hairs on their bodies. Their hearing, like ours, is like a superpower.

At the end of the lesson, invite the children to play a game where a guesser tries to name the member of the class who has used their voice to mimic a sound heard in Nature. You could model this first for the children by turning your back to the class and asking another adult or a child to choose someone to make the sound.



Resource 3A

My sound sack

Draw your own sound sack in the space below.
Write or draw in it all the things you heard outside.

Outside, I used my _____ to hear _____
_____.

Animals including humans
Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

Working scientifically:
Performing simple tests.
Identifying and classifying.
Gathering and recording data to help in answering questions

Scientific enquiry type:
Comparative and fair testing

Vocabulary relating to animals, including humans, working scientifically and thinking sustainably is highlighted within the unit introduction.

Copies of Resource 4A (one per child)

A selection of autumn fruits (e.g. apples, pears, blackberries and raspberries) and vegetables (e.g. carrots, celery, kale and sweetcorn)

Optional: Which Food Will You Choose? by Claire Potter and Ailie Busby

Children requiring additional support could be arranged in mixed-ability groupings. Assign roles to each member of the group so that all children can describe tastes and express their opinions.

Challenge children to explore: *Is it just the tongue that helps us taste?* Explain that we can only taste five things using our tongues (sweet, sour, salty, bitter and savoury) and that most of what we ‘taste’ comes from our sense of smell. You can prove this to the children by asking them to close their eyes and hold their nose, then put a small piece of fruit in their mouths to see what they can actually taste using their tongue alone.

CLIMATE ACTION PLAN:
Biodiversity and Nature

Which part of my body helps me to taste?

What do we already know?

Begin the lesson by recapping the children’s prior **learning about Nature** by asking them: *Can you name the senses we have explored so far? Which parts of the body help us to touch, see and hear?*

Recap how they explored the **principle of Diversity** in their prior learning by asking them: *Where have we found diversity when we have used our senses?*

What are we learning today?

Explain to the children that in this lesson they will learn about the sense of taste by exploring different fruits and vegetables. Challenge them to work in pairs to name three different fruits and vegetables that are red. Move on to other colours (e.g. pink, orange, yellow or green). Record these in a class list.

Ask the children to choose two of their favourite fruits or vegetables from the list and to imagine that they are introducing this food to their friend for the first time. Explain that in order to encourage their friend to eat it, they will need to describe how to eat it and how it will taste.

STEM SENTENCES:
This is a _____. It tastes _____.

You use your _____ to _____ the _____.

TEACHER TIP:
Either in this lesson, or at another point in the school day, you could share with the children the book *Which Food Will You Choose?* by Claire Potter and Ailie Busby, which works well to support this learning.

How are we learning today?

Move the children’s **learning about Nature** on by looking at the list of foods they have created and asking: *Do these fruits and vegetables grow all year round? Do they grow near where we live or far away?*

Discuss with the children what we mean by the term ‘seasonal’ (fruits and vegetables that grow outdoors at a certain time of year and are ready to eat at a certain time of year). You might find the [Guide to seasonal food webpage](#) on the National Trust website helpful for this discussion.

Ask them: *Which fruits and vegetables are ready to eat in the autumn where we live?* Draw out the fact that fruits such as apples, pears, blackberries and raspberries are seasonal autumn fruits in the UK and that vegetables such as carrots, celery, kale and sweetcorn are seasonal autumn vegetables in the UK.

TEACHER TIP:
There may be opportunities for children to **learn in Nature** in this lesson if you have fruit trees or bushes growing on your school site that can be picked, or a vegetable patch that’s ready to harvest. If not, shop-bought autumn fruits and vegetables can be used, but be sure to draw the children’s attention to the part of the plant they are eating and how the fruit or vegetable grows (e.g. on a tree or bush in the case of apples and blackberries).

Either by drawing on their past experiences of eating these fruits and vegetables, or by making predictions based on how they look if they haven’t tried them before, ask the children how they think each fruit or vegetable will taste and feel when eaten. Ask them: *Which parts of our mouth help us to eat our food? Which help us to taste it? Which help us to feel the texture of our food?*

Allow the children time to try each fruit one at a time, closing their eyes and taking time to focus on its taste and texture. Invite them to reflect on their predictions. Ask: *Did any of the tastes and textures surprise you? Which fruit is your most and least favourite and why?*

Create a class word bank of vocabulary the children can use in discussion to describe the taste of the fruits they tried.

What have we learned today?

Encourage the children to reflect on their **learning about Nature** with reference to human senses and assess their understanding, by asking: *Which parts of our bodies do we use to taste? Do different parts of our bodies play different roles in helping us to taste?*

To draw out the learning about the **principle of Diversity**, explore the idea that Nature creates a diversity of fruit and vegetables and they have the vitamins and minerals that we, and other animals, need to stay healthy.

At the end of the lesson, invite the children to play 'What am I?' either as a class or in pairs, using adjectives to describe what one of the fruits they tried tastes like and seeing if someone else can guess what it is from their description.

TEACHER TIP:

Where there is space to grow food in school grounds, there is the opportunity for students to learn that there are different varieties of the same fruit or vegetable, be it an apple, a pear, a carrot or a potato. They can **learn from Nature**, exploring how these different varieties grow and become experts in this expression of diversity.



Fruit and vegetable tasting

Draw the fruits and vegetables you tried and write a sentence about how they tasted.

The _____ tasted _____.

The _____ tasted _____.

The _____ tasted _____.

The _____ tasted _____.

Animals including humans
Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

Working scientifically:
Performing simple tests.
Identifying and classifying.
Gathering and recording data to help in answering questions

Scientific enquiry type:
Identifying, classifying and grouping

Vocabulary relating to animals, including humans, working scientifically and thinking sustainably is highlighted within the unit introduction.

At least six reusable plastic jars with lids, each labelled A, B, C, D...

At least six strongly scented natural items such as onion, lavender, orange, garlic, mint, basil, pine needles, rosemary, each placed in one of the plastic jars with the lid on

Reusable plastic cups

Mortars and pestles

Copies of Resource 5A (one per child)

Optional: Smelly Louie by Catherine Rayner

Children requiring additional support could be provided with scaffolded models of language to support their responses.

Challenge children to identify all the senses that are being used during this activity and ask: *Which is the most important?*

CLIMATE ACTION PLAN:
Biodiversity and Nature

How good am I at identifying smells?

What do we already know?

Begin the lesson by recapping the children’s prior **learning about Nature** from the EYFS or from their known experience. Ask them: *Which body part do we use to smell? What are some of your favourite smells?*

Recap how they explored the **principle of Diversity** in their prior learning by asking them: *How many different autumn treasures did we explore in our lesson about touch? What did we see outdoors? How many different sounds did we hear when we went sound collecting? How many different fruits and vegetables did we taste?*

What are we learning today?

Ask: *What will we smell if we go outside today? How many different smells do you think there will be?* Record the children’s responses in a list and count them together. Draw the children’s attention to the number and diversity of smells in their list.

TEACHER TIP:
At this point in the lesson, or at another point in the school day, you could share with the children the book *Smelly Louie* by Catherine Rayner, which works well to support this learning.

Explain that smells are carried in the air then travel up the nose to scent receptors that send messages to the brain.

How are we learning today?

The next part of this lesson could take place outside. Explain to the children that they are going to be challenged to identify mystery smells.

STEM SENTENCES:
This smells like _____.
I like/dislike this smell because _____.

Place labelled plastic jars (see left), each containing a strongly scented natural material in a central position so the children can easily access them, but keep them covered to start. Divide the class into groups of five. The children in each group take it in turns to collect a jar while the others in their group shut their eyes. They take off the lid and hold it under the nose of each child in their group in turn so they can see if they can guess what’s in the jar from the smell alone without looking.

Discuss which smells were their most and least favourite and reveal the contents of the jars. Encourage the children to reflect on their predictions, how accurate they were and whether anything surprised them.

Ask the ‘smellers’: *What does it smell like? Do you recognise it?* Repeat, with a different child collecting a new jar for their group to smell.

TEACHER TIP:
If time allows, or at another point in the week, the children could make ‘perfumes’ using natural materials in water to capture the smell of autumn. They could search for a good stirring stick in the school grounds then collect or bring in autumnal items (e.g. freshly fallen leaves, acorns). Encourage them to stir, pound and mash the objects and to keep smelling.

TIME TO EXPLAIN:
Allow the children time to record what they think the content of each jar is by completing Resource 5A.

It is important to remind the children not to put anything in their mouth during this activity, to wash their hands after the activity and to ensure they understand what mushrooms look like and know not to touch them.

What have we learned today?

Encourage the children to reflect on their **learning about Nature** with reference to human senses and assess their understanding, by asking: *Which part of our body helps us to smell things?*

the BBC Bitesize clip [How do living things use smell to communicate?](#).

Discuss how animals use smell to communicate – to find food, to find a mate, to mark their territory – and often have a better sense of smell than humans. Watch

To end the lesson, invite each child to choose something from the activity that they liked the smell of. Ask them to sit quietly with their eyes closed, to smell it in their hands and to reflect on the aroma. Draw their attention to how amazing our nose and brain are at working together – another superhero sense!

Mystery smells

Animals including humans
Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense.

Working scientifically:
Identifying and classifying

Scientific enquiry type:
Identifying, classifying and grouping

Vocabulary relating to animals, including humans, working scientifically and thinking sustainably is highlighted within the unit introduction.

Chalk

Copies of Resource 6A (one per child)

Copies of Resource 6B (for children requiring additional support)

Children requiring additional support could be provided with the list of body parts on Resource 6B.

Challenge children to label additional parts of the body, and describe their functions.

CLIMATE ACTION PLAN:
Biodiversity and Nature

What are the different parts of my body called?

What do we already know?

Begin the lesson by recapping the **learning about Nature** that has been developed through this learning sequence. Call out one of the senses at a time and ask the children to point to the part of their body associated with it.

Recap how they have explored the **principle of Diversity** in their prior learning by asking

them: *How many different things can you name that we have seen/smelt/felt/touched/tasted during our learning so far?*

Draw out in the discussion the fact that the diversity of our superhero senses allows us to appreciate the incredible diversity of Nature, and that there is huge diversity in the way different animals use their senses.

What are we learning today?

During this sequence of learning, the children have explored the parts of the body that are associated with each sense. In this final lesson, they will extend their **learning about Nature** by exploring the rest of the human body.

Explain that the human body comes in lots of different shapes and sizes, which provides us with another example of diversity. Remind the children that

although our bodies are mostly made up of the same parts that do the same jobs, some of us might need help to make our bodies work better.

Share the BBC Bitesize clip [What are the parts of the human body?](#) and make a list of the parts of the human body that are mentioned in it. Working in pairs, the children complete the other activities on this webpage.

How are we learning today?

Take the children outside on to the playground, bringing the list of the parts of the human body with you. Organise the children into pairs or small groups to draw and label the parts of the human body. Ask one child in each pair or group to lie down on the playground so their learning partners can draw around them with chalk, creating an outline of the human body.

TEACHER TIP:
If it is not possible to use the playground, this activity can be done on large sheets of paper indoors.

Set the children the challenge of labelling the outline with as many parts of the human body as they can. Model this for them first, drawing on their phonics

knowledge to help with unfamiliar spellings. Ask the children: *Which parts of our bodies do we use to touch, see, hear, taste and smell?*

Ask them to label the parts of the human body associated with the five senses first and assess their learning. Allow the children time to label the other parts of the body on the class list and any others they know.

TIME TO EXPLAIN:
The children record the parts of the human body on Resource 6A (there are two versions of this resource for them to choose from).

STEM SENTENCE:
I use my _____ to _____.

What have we learned today?

Encourage the children to reflect on their **learning about Nature** with reference to human senses, and assess their understanding, by asking: *What do the different parts of our bodies do? Are all human bodies the same?*

To bring together the learning in this unit, remind the children of the enquiry question, *What kind of superhero do I want to be?* Ask them: *How do our senses make each of us amazing? How do our senses allow us to be real-life superheroes?* Draw out the

learning about the **principle of Diversity** by asking: *Do all superheroes have the same superpowers? Why is this a good thing?*

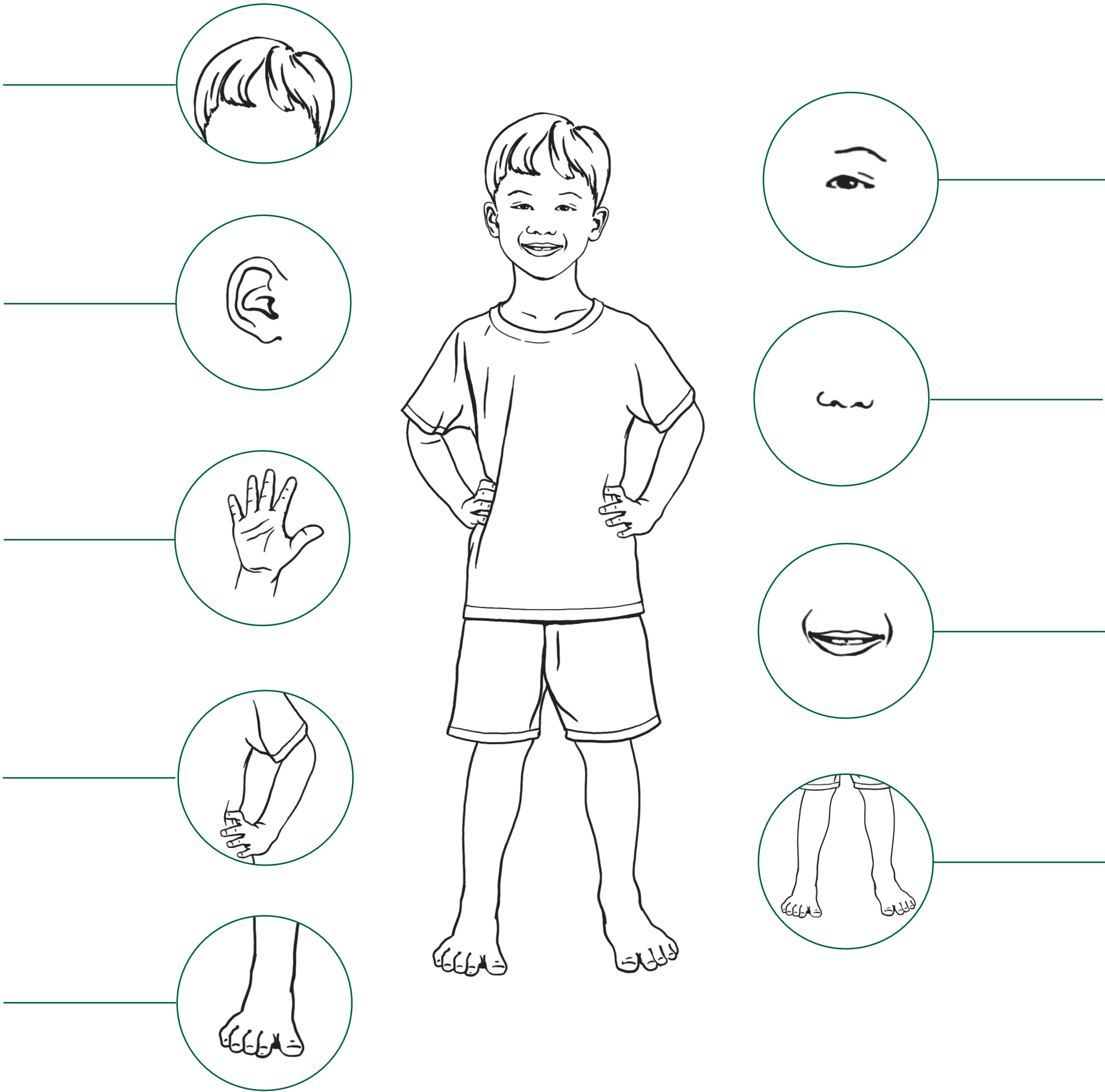
End the unit by taking the children outdoors to **learn in Nature**. Invite them to spend a moment exploring the space through their senses. For example, by running and feeling the rush of air against their faces, by closing their eyes and listening to the world around them, by cloud spotting (remind them never to look directly at the sun) or by feeling the rough bark of a tree.

Resource 6A



ear	nose	mouth	hair	eye
foot	hand	leg	arm	

Resource 6A



ear	nose	mouth	hair	eye
foot	hand	leg	arm	

hand	eye	ear	tongue	nose
fingers	eyelashes	hair	mouth	cheek
skin	eyebrow	head	teeth	chin
arm	leg	neck	shoulder	chest
elbow	knee	foot	hip	toes
	ankle	tummy	wrist	