

Wild Teaching Toolkit

Enrich your curriculum and support
wellbeing in your school grounds
or local green space.



Produced through the Growing among Trees Project in partnership with:

Welcome to the Wild Teaching Toolkit

The Wild Teaching Toolkit has been designed to provide you with a 'one stop shop', enabling you to take learning out of the classroom and into the wild, whether that be in your school grounds, local park or woodlands.

It is full of fun, Key Stage 1 activities that emphasise self-led learning whilst supporting children's mental health and wellbeing.

The Wild Teaching Toolkit has been created by Nature Nurture CIC as part of the 'Growing among Trees' partnership project.

The pack contains twelve session plans; six for both Year 1 and Year 2, with imminent plans to develop resources for all primary year groups. Each session is designed to last for half a day but can be shortened depending on your needs.

As well as supporting mental health and wellbeing, we have designed the sessions to enrich Science, Maths and Literacy, with handy **Curriculum Link Tables**

and **Back in the classroom** activities to help you integrate learning outcomes into your schemes of work. We have kept equipment and resources to a minimum and you'll find many of the resources are readily available at your school.

We recognise the challenges teachers face when considering outdoor learning, so you'll find tips on **Overcoming the barriers** and **Risk Assessment templates** for you to adapt to your settings.

We wish you all the best with your Wild Teaching journey!



The Growing among Trees project has been managed by Trees for Cities and funded by the Department for Environment, Food & Rural Affairs and the Department of Education's as part of their 'Children & Nature Programme'. Nature Nurture CIC facilitated the Wild Teaching Programme at primary schools in Reading and co-designed this toolkit with teachers, drawing on their challenges, understanding their needs and integrating their fantastic ideas.

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What's in your Wild Teaching pack?

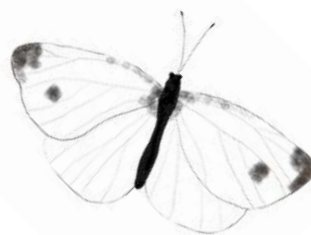
“Take a walk on the wild side...”

within your school grounds or local green space;
the great outdoors awaits...



Inside this pack you'll find everything you need to begin your Key Stage 1 Wild Teaching journey:

- The benefits of Wild Teaching
- Overcoming the barriers to Wild Teaching
- Top Tips for Wild Teaching
- Year 1 Session Plans
- Year 2 Session Plans
- Curriculum Links Tables
- Fact sheets
- Picture sheets
- Worksheets
- Bingo Ticksheets
- Six Golden Leaf Rules
- Signposting - next steps on your Wild Teaching journey
- Risk Assessment template - school grounds
- Risk Assessment template - off-site visits to local green spaces



The Wild Teaching Toolkit was written by Natalie Ganpatsingh and Teresa Verney-Brookes with graphic design by Felicity Wehrle. Illustration by Anne Wilson, Natalie and Isabelle Ganpatsingh, curriculum consultancy by Trine Darboe and poetry by Rosamond Penney.

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The benefits of Wild Teaching

Children need nature.

There are so many benefits to connecting children with the natural environment for learning. Here is a summary of research in this area.

Mental Health and Wellbeing



Communication skills and relationships among children improve through play in nature.

Pyle, 2002

Access to a green space can improve a child's resilience.

Kuo 2010

Even as little as five minutes spent in physical activity in nature can improve mood and self-esteem.

Barton and Pretty, 2010

Spending time in nature can make you kinder, happier and more creative

Suttie, 2016

People derive a sense of meaning and emotional wellbeing from being connected to the natural world.

Mayer & Frantz, 2004

A walk in nature boosts creativity, problem-solving and feelings of wellbeing.

Strayer 2016

A harmless bacteria, commonly found in soil, can act as a natural antidepressant by increasing the release of serotonin in our brains.

Lowry, 2017

Exposure to nature provides a buffering effect and is a stress reliever to highly stressed children.

Wells & Evans 2003

Learning in natural environments fosters pride, belonging and involvement in the community.

Fiennes et al, 2015

Experiencing the beauty of nature leads to an increased willingness to be generous, trusting and helpful toward others.

Keltner et al, 2014

Exercise in the natural environment may be more effective in reducing anger and depression than the equivalent exercise indoors.

Peacock, Hine & Pretty, 2007

Nature is important to children's development intellectually, emotionally, socially and spiritually.

Kellert 2005



And plenty more benefits...

Efforts to get children outside and engaged in healthy behaviors should be promoted as a means to combat child obesity.

Bell, Wilson & Liu, 2008

Contact with the natural world significantly reduces the symptoms of attention deficit disorder in children.

Taylor & Kuo, 2001

Time in nature may contribute to children's cognitive, emotional, social, and educational development.

Strife & Downey, 2009

A schools based learning programme taking place in the natural environment is associated with improvements in attendance rates.

Price, 2015

Outdoor play in a natural setting can improve motor strength, balance and coordination.

Fjortoft, 2001

Learning outside the classroom can also improve behaviour, social skills, health and wellbeing and engagement with learning.

Natural England 'Natural Connections Demonstration Project' 2016

Exposure to microbes prevalent in mud may help strengthen our immune systems.

Gilbert, 2017

For more than 30 days after a trip to a forest, your immune system function will continue to function more effectively.

Li and Kawada 2011

Time outdoors means children can absorb sunlight needed to make vitamin D, which supports bone development and immune system functioning.

Voortman et al., 2015

Outdoor activities provide benefits to children with autism, including promoting communication, emotion, cognition, interaction, physical activity, and decreasing autistic sensitivity.

Chang & Chang, 2018

People who feel connected to the natural world are more likely to engage in pro-environmental behaviour, such as travel choices and energy use.

Klanięcki, Leventon & Abson, 2018

Exposure to nature bolsters cognitive functioning

Faber Talyor et al., 2002

Lessons in the natural environment have positive after-effects on subsequent classroom engagement.

Kuo, Browning & Penner, 2018



Overcoming the barriers to Wild Teaching

Here are some common barriers to taking learning outside the classroom... and how to overcome them.

“What about bad weather?”

The comedian Billy Connolly once said “There’s no such thing as bad weather - only the wrong clothes”. Children thrive outdoors in all weather as long as they are comfortable, just avoid strong wind. Schools can build up a ‘welly bank’ and a box of spare waterproof coats. Parents can donate spare waterproof items that their children may have outgrown. Some schools apply for grants or their PTA raises funds to cover these items.

“How can we make time for outdoor learning when the curriculum is so full already”

Outdoor learning is a great way to support and enrich the curriculum, rather than an ‘add-on’. By its very nature, outdoor learning is cross-curricular, so with creative planning, you may save time. We have included core subject links within each of the sessions, which highlight how interdisciplinary outdoor learning can be.

“But what about all of the extra paperwork”

Many schools have a dedicated outdoor learning section on their intranet. All risk assessments and paperwork can be stored here and used by the whole school.

“We don’t have any outdoor resources or equipment”

This pack provides you with lots of top tips and links to other helpful resources, many of which are free. You may find that you already have some of the equipment within your school. In this pack, we have tried to suggest cheap and easy ways of sourcing equipment. The school intranet can also be used to store, swap and share resources and/or activities.

“We don’t have any outdoor space”

Planters or raised beds can help encourage nature into your school grounds. They are a fantastic resource if you have limited space. Are there any parks or woodlands nearby? Use Google maps to locate potential nearby Wild Teaching spaces within and contact your local authority ‘Parks and Open Spaces’ department to inform them of your plans. Wild Teaching doesn’t have to be faraway pristine nature, as it’s being outside that really matters!

“I’m worried about the Health and Safety aspects of taking lessons outside”

We have included a Risk Assessment template for sessions both in your school grounds and off-site green spaces. We have also included lots of advice in the ‘Top Tips’ section the Six Golden Leaf Rules to help keep your class safe. The Health and Safety Executive (HSE) have produced guidance to help you take learning outside the classroom: <https://www.hse.gov.uk/services/education/school-trips.pdf>

Top Tips for Wild Teaching



Remember your A,B,C before each session:

- A** - AGREE your muster call.
- B** - BOUNDARIES; demarcate these before you start the session
- C** - COLLECT and read the 6 Golden Leaf Rules

AGREE your muster call

This could be nature related such as 'twit-twoo' or a bell or whistle which is used to signal the end of an activity or to quickly gather the group in the rare case of an emergency.

BOUNDARIES; demarcate these before you start the session

This can be done by using existing physical features; such as "you can go as far as that tree and that building". Alternatively use rope, wool or place mini flags on fixed points to show the children the designated Wild Learning area.

COLLECT and read the Six Golden Leaf Rules

Print, laminate and spread out the Golden Leaf Rules in your Wild Learning area before each session. This is a fun and interactive way to embed basic rules to keep everyone safe. See Picture Sheet 'Six Golden Leaf Rules':

1. We don't eat anything and we wash our hands after the session
2. We stay within the set boundaries
3. We tell an adult if we see or find anything that is not safe
4. We are kind to each other and to all living things
5. We carry sticks safely
6. If we want to run, we must check for dangers first



Before the session:

Family communications - We recommend that you send a letter to all parents/carers prior to your outdoor learning sessions, reminding them to ensure children are suitably dressed. For example:

- ✓ Why we're taking learning outside the classroom; linking to the curriculum and supporting children's health & wellbeing.
- ✓ Wear long sleeved tops and long trousers, even in the summer months.
- ✓ In hot weather sun cream and hats should be packed.
- ✓ During the colder months, wear lots of layers to help keep warm.
- ✓ Bring a waterproof coat and waterproof trousers too, if they have them.
- ✓ Wear stout footwear or wellies

Lots of schools find it really helpful to buy, or ask for donations of wellington boots and cagoules for children who do not have their own.



Health and safety

- Going off site requires more planning, see 'Risk Assessment Template for off-site visits to local green spaces'.
- Add any 'on the day' changes to your Risk Assessment
- Ensure any open cuts are covered with a plaster; particularly when in contact with soil or water.
- Locate your first aid kit in a designated area

General tips

- Many of the activities in this pack involve getting really close to nature and collecting natural items. Part of the message we hope your class will take away is just how precious and important nature is, so please remind your class to try and collect fallen materials where possible. When collecting leaves, try not to collect too many from a single tree.
- Several activities in the pack require children to collect sticks so this needs to be done safely, by dragging them along behind them, as if they are taking it for a walk.
- The activities in this pack ask you to split your class into teams. We recommend that you assign one adult to each team where possible, unless you are confident to let groups work more independently.
- It is very important that children wash their hands after your outdoor learning session and we recommend no eating or drinking during the activities.
- If you know when you are planning to go outside, ask for volunteers as this will enable you to work in smaller, more intimate groups. In our experience, parents and/or grandparents are often more than willing to help, and once they see how much fun it is, will invariably volunteer again!
- If you have poisonous plants or stinging nettles within your Wild Teaching area, it is worth pointing these out.



Session 1: Sensational Senses

These sessions have been designed to link with:

Literacy



Maths



Science



For links to the specific areas of the National Curriculum covered in this session, see 'Year 1 Sessions: National Curriculum Table'.

Equipment List:

- Large marbles or smooth stones (per child)
- A twig
- A range of Colour Tiles cut from paint charts from a DIY store (per child)
- Pieces of washing-up sponge cut into small squares, in a jar of coloured water (per child)
- 6 x egg boxes
- Large tarpaulin or mats (space for whole class to lay on)
- Snack for back in the classroom

From resource pack:

- Touch Treasure Hunt **Worksheet** (per team)

Zoom in on nature using our five senses.

Our Senses: Can you name which part of your body is associated with each of your **five senses**? (smell, taste, sight, listening, touch)

Magic listening jewels: Lots of creatures live in and around this outdoor area and they all make their own **sounds**. What sound does an owl make? The sense of hearing is very important to animals so they can listen out for enemies and also to help them find their food. I am now going to give you a special jewel (either a large marble or a smooth stone) that will magically help you to hear lots of things out here. *Demonstrate how to carefully hold the jewels with both hands.* Let's close our eyes and stop

talking or making any noises, and let the magic listening jewel help us to **listen**. Hark, can I hear a hedgehog snoring? Did anyone else hear a **worm wriggling** under the ground? Ooooh was that fairy wings fluttering? Now we all need to find somewhere to sit, or maybe lean against a tree or fence. Are we comfortable? Okay let's start listening. *Sit as long as feels right for your class.* Now, let's tiptoe like mice back into a group.

The 'Talking Stick' (aka a twig): Does anyone want to use the talking stick to tell the rest of the group which sounds you heard. But, remember, you can **ONLY speak** when you're holding the stick. *As an extension, ask them to include **alliteration**, giving them examples such as a Brilliant, Buzzing Bee.* Were the noises you heard **natural** or **manmade**? How did it make you feel to sit so quietly?

Scratch and Sniff: We are now going to use our noses to smell 'natural' things. What does it smell like out here; does it smell different to our classroom? *Give each child a wet sponge.* Let's practice by **smelling** a leaf. Use the scratchy side of



Session 1: Sensational Senses

the sponge and rub the leaf; now give the wet leaf a good old sniff. Do you think it smells like cucumber? Now, let's go on a 'Sniff Safari'.

Touch Treasure Hunt: Can you think of any **touch** or feel **words**? Let's all touch our hair. How does it feel? Soft, bouncy, spiky, hairy? *Split your class into teams and give each team a Touch Treasure Word Sheet and a Treasure collecting box (eggbox).* Can you go and collect six, **natural** items of 'treasure' as listed on your Touch Treasure Hunt Sheet? When you have finished your hunt, can you swap your treasure boxes with another team and have a good feel of all their treasures. Can you **match** them up with the words on the list that you have just used. Can you think of another two **touch words** to add to the list? Go and find examples of these two. But 'shhh', don't tell the other teams what your two secret words are as you are going to swap your items over again, but this time the other team has to guess what your 'touch' words are.

Patterning: Amalgamate everyone's 'Touch Treasure' items and demonstrate

how to create **repeated patterns**. For example 2 leaves, 3 stones, 1 twig (repeat). Can you all make patterns too?

Colour matching: After all of your hard work, it's time for a rest! So let's lay on the grass or mat and look up at the sky. What colours can you see? Now, let's each take colour tile (from paint charts) and go and **match** this colour with natural items. Once you have found your colour, can you swap your colour tile with someone else? What colours were hard to find? Would this change according to what **season** we are in?



Back in the classroom:

Imagine you are holding your Magic Listening Jewel, can you remember what you heard. *Capture the ideas the children may have (wiggling worm, fluttering fairy, snoring hedgehog).* **Say your 'I can hear' sentences to a partner**, remember to try and use some describing words. Now have a go at **writing your sentences**.



Communication skills and relationships among children improve through play in nature. Pyle, 2002



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Session 2: Home Tweet Home

These sessions have been designed to link with:

Science



Literacy



Maths



For links to the specific areas of the National Curriculum covered in this session, see 'Year 1 Sessions: National Curriculum Table'.

Before the session: Print out the ten words from Mrs. Blue tit and lay them out around your outdoor area. You can weigh them down with stones.

Equipment List:

- Ruler (per team)
- Pencils (per team)
- Elastic bands and/or short lengths of wool
- Pretend or a hard boiled egg
- Air drying clay

From resource pack:

- Natural Materials Hunt Worksheet
- Blue tit Picture Sheet
- Letter from Mrs. Blue tit Picture Sheet
- Ten words from Mrs. Blue tit Picture Sheet

Mrs. Blue tit needs help to make her nest, do you think your class is up to the job?

Materials: What do we mean by natural and man made materials? *Can you describe where they are using positional language?*

Journey Sticks: In your teams can you go and find a stick that is between 10-15cm in length. *Divide your class into teams and give each a Natural Materials Hunt Worksheet and a pencil.* Here are some elastic bands and/or short lengths of wool so you can attach examples of the things listed on your worksheet. But remember, don't pick too many live things!

Swapsies: When you have finished, can you swap your stick with another team and see if you can guess which item is which? Did you notice that some materials have more than one property; for example wood is natural, hard and wooden?

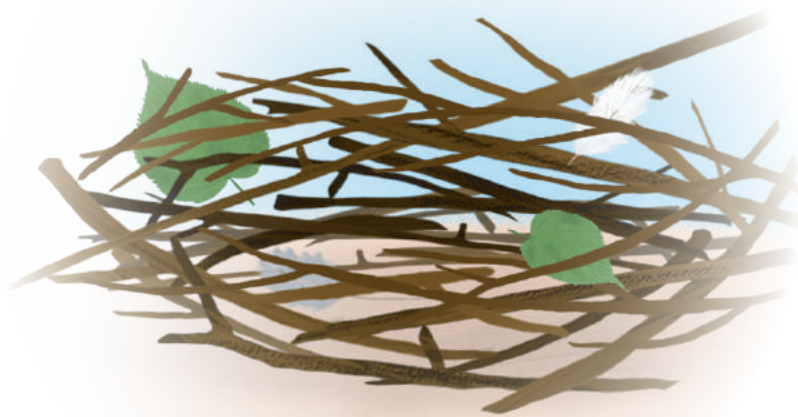
Who lives here?: Can you name any of the creatures that might live in and around this outdoor space? Did you mention a squirrel or a fox, which are mammals, or maybe a frog or toad, which are amphibians? The place where creatures live is called a 'habitat'.

Introduction to Blue tits: Does anyone know the names of any common birds which may live out here too? Where do birds live? In a pond or in the sea? No, in a nest of course, which they make in trees or hedgerows. What season do birds typically build their nests? Yes, in spring and summer, when there is plenty of food to feed their chicks. *Show Picture of Blue tit.* Can anyone guess what this bird is called?



Session 2: Home Tweet Home

“Dear children”: Well, I never, we have just received some post! Read the letter from Mrs Blue tit. Right, let’s go and see if we can find the **ten words** she has left us. Can you help me **read** these words? Wow, it looks like the words form a message; can we arrange them into a **sentence**? (Please can you help make a nest for my eggs).



Making nests: Most bird nests are shaped like a bowl, which helps keep the eggs the birds lay in them warm and safe. In your teams, can you make a nest for Mrs. Blue tit using only **natural materials**? What could you use to make it nice and **strong**? Yes, twigs would be perfect. To make a bowl shape, you will need to find things that are quite **flexible** or **bendy**. How about using leaves to make it **waterproof**? The inside needs to be nice and warm and cosy (**insulated**) so, can you find any **soft** grass, feathers or moss to line it with?

Birds Eggs: Show the class your egg and ask if it is a **2d or 3d shape**. Give each team a small lump of clay. Can you now make eggs and then pop them into your lovely nests? Mrs. Blue tit will now sit on her eggs for about 15 days, until her baby chicks hatch. Each chick will then eat around **one hundred caterpillars a day**. Can we count to one hundred in **multiples of ten**?

Creatures who eat other creatures are called **Carnivores**. Do you know what **Herbivores** and **Omnivores** eat?

Grand Tour: Now, can each team show the rest of the class your nest, explaining how you made it, which materials you used and why. Try and use **persuasive language** to convince everyone that yours is the best nest!

Bird spotting: Let’s have a walk around your outdoor space to see if you spot Mrs. Blue tit. You may see other birds too! Are they the same or different to Mrs Blue tit in terms of **shape, size**, colour? See if you can spot any birds nests or bird poo (which look like splashes of white paint). Can you also look for places that would be good for birds to build their nests?



Back in the classroom:

Can you **write a reply** to Mrs. Blue tit, telling her about all about your nests, including a list of the materials you used? Can you also research and then make a variety of bird feeders to put around your school grounds, so the birds will have plenty to eat all year round?



Even as little as five minutes spent on physical activity in nature can improve both mood and self-esteem.
Barton and Pretty, 2010

Books:

Owl Babies
Spikes Best Nest



Session 3: Terrific Trees

These sessions have been designed to link with:

Literacy



Maths



Science



For links to the specific areas of the National Curriculum covered in this session, see 'Year 1 Sessions: National Curriculum Table'.

Before the session: Affix the Tree Bingo Picture Sheets around your outdoor learning space.

Equipment List:

- A collecting bag (for leaf tickets)
- Pencils (per team)
- Large tarpaulin or mats (space for whole class to lay on)
- Magnifying glasses (per child)
- Plain paper (per child)
- Crayons (per child)

From resource pack:

- Tree Bingo Picture Sheets
- Tree Bingo Tick Sheets (per team)
- Tree Factsheet

Grab yourself a ticket and enter Tree World!

Leaf Tickets: Before you are allowed into this session, you will each need a 'leaf ticket', so can you all go and find a leaf that you think is really, really special. Now, in partners, can you explain to each other why your leaves are so special (maybe because it is so tiny, or has an unusual shape, or because it is such a beautiful colour etc).

Leaf gazing: Let's now hold our leaf up towards the sky, so the light shines through it. Look really closely; can you see the patterns of its delicate veins and its stalk? Is it the same colour and texture on both sides? Is it symmetrical? Can you see any nibbles (holes) in it and if so, what do you think made these holes? Are the edges of the leaf smooth, jagged

or lobed (like an oak leaf). We are now going to look even closer using a magnifying glass. Do you think you all know your leaf really well now, as we are going to collect them all in a bag, and you will need to find your special leaf ticket again at the end of the session!

Tree Bingo: Put the class into teams and give each a Tree Bingo Tick Sheet. Have a brief discussion about the difference between deciduous and evergreen trees. In our teams, let's go and match the leaf pictures to those on our Bingo Tick Sheets. Remember to shout 'Bingo' when you have found all eight!

Tree Bathing: It's now time to relax, so let's find a tree to lay beneath. Can we all look up into its branches, this is called its 'canopy'. How does it make you feel? Relaxed and calm maybe? Can you use adjectives to help describe your feelings? Why are trees important? (as habitats, for wood, fuel, food and or course they give us oxygen to breathe). What creatures might live underground amongst the



Session 3: Terrific Trees

trees **roots**; under its **bark** or on its **leaves**? Still laying down, we are going to put one arm in the air and pretend that our little fingers are hungry caterpillars which are looking for yummy fresh leaves to eat. Starting at the base/ **roots**, we are going to wriggle in an **upward direction** along its trunk until we find a branch to wriggle along. Keep going until you find a twig and then a delicious leaf. You may be able to spot leaves with holes in, where other hungry caterpillars have already been? Most caterpillars are **herbivores**! Can we remember how Blue tits feed caterpillars to their hungry chicks caterpillars. This is called a **Food chain**.

Touchy-feely: As well as having different shaped and sized leaves, different types of trees also have bark **textures** too. What, you don't believe me! Best you go and **feel** several trees yourselves then! Why not give the trees a hug too, as this makes most people feel really happy! Can you also **estimate the age** of your tree? Do you think it is young, medium or old? Some people say that trees have their own smell too. Have a sniff. What do you think?

Bark rubbings: Use a crayon and piece of paper to do a rubbing of the bark of your favourite tree. Can you write words on your

bark rubbings which **describe** its texture; for example is it bumpy or smooth. This word bank can be used to make **poetry**.

Adopt a tree: Visit your favourite tree during different **seasons** and **record** how it changes. How about **writing a name label** for your tree, which you can hang on its branches, then other people can learn its name too!

Wood Hunt: Now, go and have a good look around your school grounds to spot things made of wood.



Back in the classroom:

Can you all find your 'special leaf ticket' again? How about a game of 'SNAP' to see if anyone has the same type of leaf. Shall we now **sort** all of our leaves according to their **shape, size**, colour of leaves. Can you think of other ways to sort them? Can you fold your leaf in **half** and then into **quarters**?



People derive a sense of meaning and emotional wellbeing from being connected to the natural world. Mayer & Frantz, 2004



Books:

The Hungry Caterpillar
The Enchanted Woods
Little Red Riding Hood

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Session 4: Flower Power

These sessions have been designed to link with:

Literacy



Maths



Science



For links to the specific areas of the National Curriculum covered in this session, see 'Year 1 Sessions: National Curriculum Table'.

Equipment List:

- Trowels/Spades (per team)
- Magnifying glasses (per child)
- White fabric sheets (optional)
- Tape measures (per team)
- Drywipe pen
- Pots for mixing mud & water
- Water
- Paintbrushes - optional (per child)

From resource pack:

- Flower Factsheet
- Plant part Picture Sheet
- Flower Bingo Ticksheet (per team)

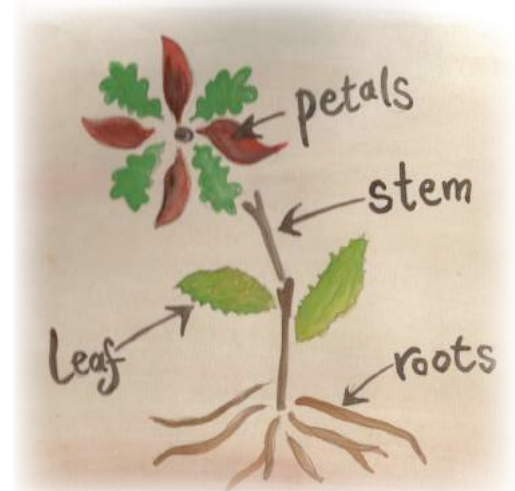
Can you dig it? Yes you can :-)

Naming the parts of a plant: *Dig up a plant, including its roots.* Do you know that one full tablespoon of soil contains around seven billion individual organisms; that is around the same amount of people there are on earth! Who can point to the roots? Who knows the names of the other parts of the plant? Let's now replant it back in the soil again, otherwise it won't be able to grow. What other things will this plant need to help it grow taller? Yes, food (nutrients); water, sunlight and space.

Plant Oscars: We are now going to act out the parts of the plant. So, first, let's make our fingers into wiggly roots and make lots of 'sucking noises' as we pretend to suck up water and nutrients from the soil. To be the stem we need to stand up really tall and strong and then make loud "whooshing" noises, which is the sound of the water and plant food being transported inside. We now need to pretend to be leaves; which act as huge factories that use sunlight and carbon dioxide to make food for the plant to grow, then blow out oxygen for us to breathe! So, let's try and sound as if we are lots of food processors mixing and making food; a bit like on Master Chef. Come on, a bit louder! Well done, you have just acted out a

process called 'Photosynthesis'! Finally, let's become the flower, whose job is usually to look pretty and smell beautiful so it can attract bees and butterflies. So, hold your hands to your face and pretend your fingers are petals; then make lots of 'ooooooh' and 'ahhhhhhhh' sounds; or whatever sounds you think are the most inviting!! Gosh, all of that is going on around us ALL of the time, can you imagine if the plants were as noisy as us, we would never get to sleep!

Natural Art: *Put the children into teams and give them a white fabric sheet (optional).* Can we make a rectangle picture frame on the ground using twigs (or similar). The longest sides should be 50 cm in length. We are now going to make a picture

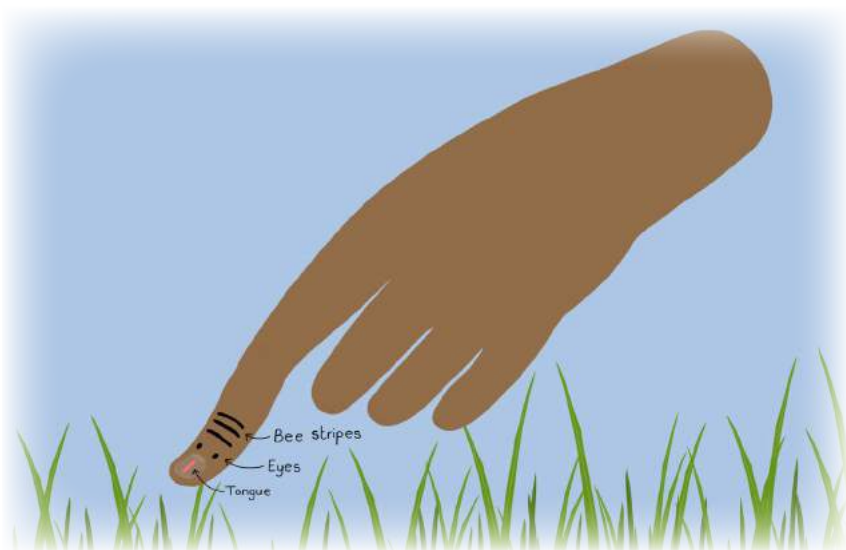


Session 4: Flower Power

of a flower, using only natural found **materials**. How about we pick some grass to make its roots? We could then use twigs or stones to make its stem. I bet there are lots of leaves that you can attach to the stem. What can we find to make the flower, remember we don't want to pick 'real' flowers as they are needed by the bees! Now put labels next to each part of your plant.

Bee a bee: We are now going to become bees' (Use a drywipe pen to make 2 eye dots on one of their fingernails). Can you now all 'buzz-off' and see if you can find any **daisies** or **dandelions** (refer to Flower Bingo Tick Sheet). Bees love

flowers as they contain a lovely sugary drink called nectar, which they make into honey. Can you now 'buzz off' again with a magnifying glass and **find another 5 different flowers**? At each flower, can you **count** its petals. Are they all the same colour **size and shape**? Can you see any other colours inside the flower? Do they all smell different? Also feel the stem; is it round or square and is it hairy or smooth? Can you think of any **'ing' words to describe** how you flew around; such as whizzing or zooming.



Mud painting: Let's make some lovely paint by mixing mud and water together in our pots. If you don't have paint brushes, sticks are just as good. What else could you use? Write your name using mud paint. Can you also paint the amount of '0's that 7 billion has.

Back in the classroom:

Plant some wildflower seeds in a pot so you can watch them grow and hopefully they will attract bees. Can you write an **Acrostic poem** related to the parts of the plant you found? (Pretty, Exciting, Terrific, Amazing, Lovely)



A harmless bacteria, commonly found in soil, can act as a natural antidepressant by increasing the release of serotonin in our brains.
Lowry, 2017



Bumblebee Conservation Trust
<https://www.bumblebeeconservation.org/learning-zone/>

Produced through the Growing among Trees Project in partnership with:



Session 5: Hedgehog party!

These sessions have been designed to link with:

Literacy



Maths



Science



For links to the specific areas of the National Curriculum covered in this session, see 'Year 1 Sessions: National Curriculum Table'.

Equipment List:

- Hedgehog puppet/soft toy - optional
- Air drying clay
- Plastic or paper plates (per child)
- Tissue paper
- Scissors (per team)
- Sellotape (per team)

From resource pack:

- Mr Spike Picture Sheet

Let's help Mr. Spike celebrate his birthday in style...

Factoids: What kind of creature is a hedgehog? Is it an amphibian or reptile, no, it's a mammal of course! Unlike us humans, hedgehogs sleep during the day and are active at night; this is called 'nocturnal'. During the winter months they hibernate; does anyone know what this word means? Let's have a look at the picture of Mr Spike. Who can estimate how many spines an adult hedgehog has (between 5,000 and 7,000). Who can think of words that would describe what it would feel like to stroke a hedgehog? These spines help protect from predators and when they are scared they curl up into a tight, spikey ball.

Mr. Spike says: Who wants to play a game? This is the same as Simon Says, but in this

game, you only do what Mr Spike Says! If you do an action which Mr Spike did NOT tell you to do, then you have to sit out for a round. Can you think of any 'ing' words to describe a hedgehogs behaviour? How about eating (worms), drinking (water, NOT milk), curling (up into a ball), walking (around on all fours), 'snuffling' (around to look for food), sleeping (during the day) and scratching (their fleas).

Birthday Party: Hey, a little bird has just told me it's Mr. Spike's birthday today. Shall we throw him a party? Hedgehogs are Carnivores and their favourite food is worms (yuk!). However, you are not going to serve 'real' food at this party, you are going to use our imaginations and pretend! Split your class into teams and give each a plate. Can you make him a party meal? Which natural items can you find that look like worms; twigs maybe? Oh look, this moss looks like broccoli, and these leaves look like lettuce. How about sprinkling some pepper (mud) on top?

Tall Stories: In small teams, can you now go and find Mr Spike a really special birthday present. Once again, you have to really use



Session 5: Hedgehog party!

your imagination and make up stories about what you find. For example, can you find a big leaf? This could be a flying carpet that will take Mr Spike on lots of adventures. Where could he fly too and who will he meet? Or, can you find a really special, precious stone that fell out of the crown of a Fairy-Queen as she flew over your school grounds? Wrap your presents up in tissue paper and swap with another team to see if they can guess what your present is before they open it up! Can you put all your items together and use them to compose a story. Maybe The Fairy-Queen was travelling on the magic carpet on her way to visit the Fairy King, when her crown was stolen by a crow, who accidentally dropped it when he was scared by a clap of thunder?

Clay Hedgehogs: Shall we make a hedgehog of our own to take home? Give out clay to make its body. What could you use to make its spikes? Small twigs maybe? It also needs eyes, ears, a nose and a mouth so it can look out for enemies and to find and eat its food. How about using stones to make these? Don't forget to give your hedgehog a name! Find a partner and let your hedgehogs have a chat. Can they ask each other if they like being a hedgehog and maybe what it is like to walk around in the dark? Take them for a walk to see if you can find any good places (habitats) for them to live and to hibernate. They really like it under sheds, or in other nooks and crannies and they particularly like to hide in piles of dead leaves.



Back in the classroom:

People often feed hedgehogs bread and milk, but this is really bad for them. Can you make some posters to put up around school to let other people know this? It also helps to leave gaps of 13 cm x 13 cm between garden fences, so hedgehogs can pass through. Can you use a ruler to make a hedgehog doorway this size?



Hedgehog Street

<https://www.hedgehogstreet.org/>



Learning in natural environments fosters pride, belonging and involvement in the community.

Fiennes et al, 2015

Produced through the Growing among Trees Project in partnership with:



Session 6: Minibeast Quest

These sessions have been designed to link with:

Literacy



Maths



Science



For links to the specific areas of the National Curriculum covered in this session, see 'Year 1 Sessions: National Curriculum Table'.

Equipment List:

- 15 Sheets of A4 paper
- Drywipe pen
- Rulers (per team)
- Trowels (per child)
- Minibeast Kit - spoons, magnifying glasses, bug pot or clean, used yoghurt pots (per team)
- Tray (per team)
- Chalk (per child)

From resource pack:

- Minibeast Hunt Factsheet
- Minibeast Bingo Picture Sheets
- Minibeast Recording Worksheet (per team)

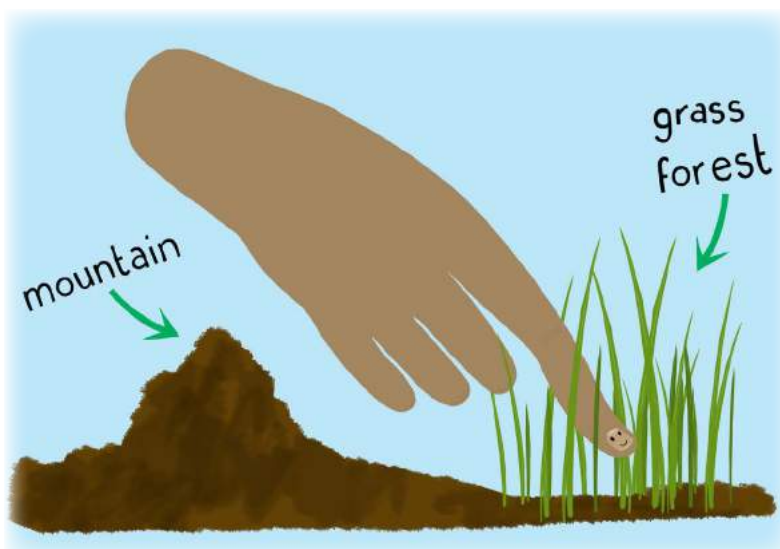
Who would of thought it; there's a minibeast safari on our doorstep!

Ant world: Today we are going 'On Safari', but instead of looking for big animals, we will be looking for tiny creatures we call 'Minibeasts'. Let's start by transforming you all into little, tiny ants. First, we need to draw two tiny dots on the nail of your index fingers; these will now become your 'ant eyes'! Then, you need to (pretend) shrink to the size of an ant; which is around 0.5 cm long (look at ruler). So either kneel or lie down and use your new ant eyes to explore the underworld. As you will see, the grass is now as tall as huge trees; any slight lumps on the ground have now become large mountains and any cracks are now deep scary

valleys, so be very careful! What else can you see? Was it fun being an ant or was it a bit scary?

Grouping Minibeasts: Use the *Minibeast Bingo Picturesheets*. Can you all help count the number of legs each creature has, starting with the ladybird (six); spiders (eight); woodlouse (more than eight legs). Hang on, the worm has no legs, is that a trick question! Leave these pictures in a shady place for the next activity.

Minibeast Hunt: It's now time to explore our open space to try and find some 'real' minibeasts. Let's start by looking under logs, stones, flowerpots or anything else you can find laying around! But don't lift anything too heavy or ask an adult to help. When you find these little creatures, we **MUST** pick them up carefully with a spoon and put them into a pot. You can then have a really good look at them using a magnifying glass. What colour are they? Can you use verbs to describe how they move? Shall we give them a silly name? Importantly, can you count how

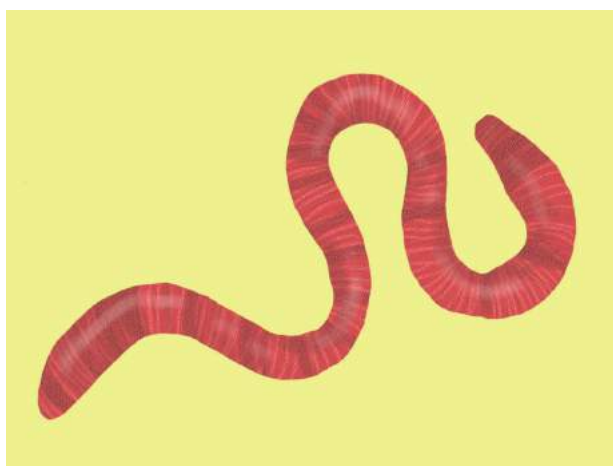


Session 6: Minibeast Quest

many legs they have and then place your pot on the relevant creature (Bingo) Picture Sheet.

Show and tell: Tell each other about the minibeasts you have found before you put them carefully back where you found them.

Worm Charming: Let's go and find an area of short grass. Can we all sing 'The Grand Old Duke of York', doing lots of exaggerated marching/stomping actions. We will start quietly and then sing it several times, getting louder each time. Hopefully you may start to see some worms appear, as they think that all of your stomping is heavy rain and they don't want to stay underground in case they drown! *If the weather is very dry, dampen the area with a watering can first.*



Worm Safari: If you don't have any success with this method, let's all grab a trowel and find a suitable area where we go digging to find worms. Remember to fill the holes in again though! Gently put worms you find into a white tray. Can you describe how they move? Can you estimate how long they stretch? Worms are known as 'nature's natural recyclers' as they eat dead leaves and other organic matter. Can you also have a look around your grounds to see if you can find any worm casts (otherwise known as worm poo!).



Listening to worms: If you gently put any worms you find onto a piece of paper and listen carefully, can you hear the worm making scratchy noises? Because believe it or not, worms have lots of minute hairs. Can you use adjectives to describe these sounds? Make sure you put the worms carefully back where you found them!

Chalk worms: Can you find an area in your playground where you can use your chalk to draw a long, wiggly worm. Can you then help each other to write words inside your worms that describe how you feel being outside.

Back in the classroom:

Using the Minibeast Picture Sheets we used in our bingo game count the number of legs on each minibeast. Can you make up some minibeast addition number sentences and calculate the total number of legs? For example: 1 lady bird(6) + 1 spider(8) =



Exercise in the natural environment may be more effective in reducing anger and depression than the equivalent exercise indoors. Peacock, Hine & Pretty, 2007



Produced through the Growing among Trees Project in partnership with:



Session 1: Wild Wellbeing

These sessions have been designed to link with:

Literacy



Maths



Science



For links to the specific areas of the National Curriculum covered in this session, see 'Year 1 Sessions: National Curriculum Table'.

Before the session: Tie a long sturdy rope between trees or other sturdy physical structures (avoiding low hanging branches holes in the ground or prickly plants).

Find an area suitable for children to walk barefoot.

Equipment List:

- A long rope
- Blindfolds/dark material strips (enough for half the class)
- Towels or wipes (for feet)
- Large tarpaulin or mats (space for whole class to lay on)
- Rulers (per team)
- Elastic bands and/or short lengths of wool
- Clipboards (per child)
- Paper (per child)
- Pencils (per child)

Let's immerse ourselves in the great outdoors

A walk in the dark: What do we mean by nocturnal creatures and can you think of any examples? Some creatures such as worms and moles live in underground **habitats**, so are perfectly **adapted** to live in dark places. We are now going to put on a blindfold and pretend to be a nocturnal animal, but don't worry, as long as you keep BOTH hands on the rope and walk slowly, you will be safe! In fact, let's ask an adult to demonstrate this first! *Place one adult at the start of the rope and another at the end.* Find a **talk buddy and discuss** how it felt.

Barefoot Walk: We are now going to explore different **habitats** using our feet, so let's take off our shoes and stinky socks! Let's walk using different parts of our feet; starting on our tiptoes; then the outsides of our feet and then on our heels! Now let's try different speeds, then skipping and hopping. How about we stalk around as if we are a fox looking for its **prey**? Now, get into partners. One wears a blindfold and the other is their guide (being careful to lead them VERY slowly and not push or pull them). Now, swap over.



Sky bathing: I think it is time for a well earned rest! So, let's lay on the ground and gaze **upwards**. Can you see birds flying over? Are there any clouds in the sky? Can you see any shapes or faces in the clouds? Which **direction** are they floating? If you are under a tree, maybe you can see its branches? **Talk** to the person laying next to you and **discuss** what you can both see. Now close your eyes (no snoring though) and think about

Session 1: Wild Wellbeing

your breathing. Can you breathe in through your nose and breathe out slowly through your mouth? Repeat this 3 times. Do you now feel calm and relaxed?

Journey Sticks: A great way of recording a journey is to collect items along the route and to tie them in (chronological) order on a stick; either using wool or elastic bands. Aborigines (in Australia) and Native Americans used Journey Sticks as a kind of 3D map to tell stories of their travels and adventures. So, let's get into teams and then go and find ourselves a stick that is more than 15 cm, but less than 20 cm in length. We are now going to go on a 'truly fantastical' journey around our school grounds, collecting interesting natural items we find on route and attaching them to our stick. For example a feather which could have been from a really rare bird that no human has seen for over 100 years; or a leaf that has been nibbled by a unicorn! Remember to try and collect things that have fallen to the ground rather than picking lots of live things. At the end of your journey, team up with another group and recount your stories to each other, using the items on your stick to help you remember the sequence of your journey.



Sit Spots: Grab yourself some paper and a pencil, then find yourself a comfortable place to sit; up against a tree would be ideal! Draw a little sketch of yourself in the centre of your paper. Now, close your eyes and silently listen to the sounds of nature around you. Focus on sounds to your left and then to your right. Are these sounds nearby or faraway? Write words to describe what you can hear to the left or right of the drawing you did of yourself. Can you hear any noises behind or above you? What other direction are these sounds coming from?



Back in the classroom:

Thinking back to our time outside, what sounds did you hear, what did it feel like walking on the grass, what did you see when lying on the grass looking up at the sky, how did you feel? Can you write some words and phrases to describe what you felt, saw and heard? You could use this descriptive language to write a Haiku poem.



*Access to a green space can improve a child's resilience.
Kuo 2010*

Books:

Wellbeing in the Primary Classroom: A practical guide to teaching happiness

Produced through the Growing among Trees Project in partnership with:



Session 2: Habitat Detectives

These sessions have been designed to link with:

Literacy



Maths



Science



For links to the specific areas of the National Curriculum covered in this session, see 'Year 1 Sessions: National Curriculum Table'.

Equipment List:

- Blue wool or paper
- Paper and scissors for making labels (each team)
- A4 paper (each team)
- Clipboards (each team)
- Pencils (each team)
- Ruler (each team)
- Drywipe pen

From resource pack:

- Food chain Picture Sheet

Super sleuths, are you ready to roam to find a home?

Hungry caterpillars: Show the group the picture of the caterpillar and discuss its features; such as its antennae and its six legs. Split your class into 4 teams. Can each team now transform themselves into one very hungry caterpillar. Most caterpillars are herbivores and they love to munch on leaves. In your teams can you go and see if you can find any leaves with holes in?

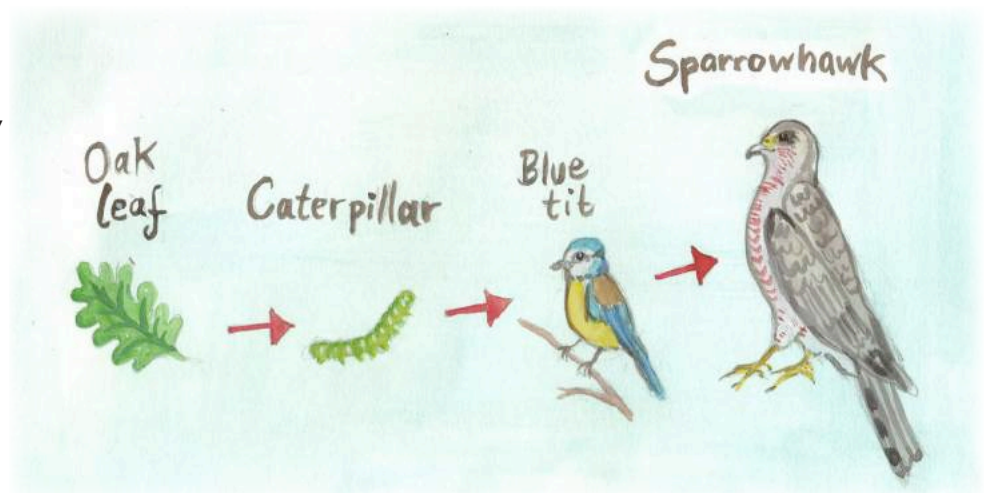
Blue tits: It's now time to get back into character, but this time you are going to be a type of bird, called a 'Blue tit'. Can you guess what Blue tits like to feed their chicks? Yes, juicy caterpillars. So can you fly around and see what it would feel like to be a bird looking for your food (prey).

Disappearing habitats: Who can predict what would happen to the caterpillars, if a developer decided to buy this open space and then chop down all of the trees and plants to build more houses or a new road? How would this affect the Blue tits and Sparrowhawks too?

Habitats: We are now going to think of some of the other plants and animals that are living out here, in and around our school grounds. Can you name any? Does anyone know what the word 'habitat' means? Yes, a natural environment or home for a variety of plants and animals. Can you think of the names of any habitats? Habitats can be very large, such as an ocean or a desert. What creatures

Sparrowhawk Tag Game:

Now, with a rather sinister look, tell them that whilst they were flying, the adults have transformed into a bird of prey called a Sparrowhawk. Can you guess what Sparrowhawks like to eat. Yes, Blue tits! Play a quick game of Catch or Tag. Well done, you have just acted out a food chain.



Session 2: Habitat Detectives

would you expect to find living in an ocean or a woodland? What special features do these creatures have to make them suited (adapted) to live in those habitats? Other habitats can be really tiny; for example woodlice live under logs or stones. This is called a 'micro habitat'.

Habitat Detectives: *Divide your class into teams and give each group paper and pencil. Now, just like Detectives you are going to see how many habitats you can find and then write them down as a list. Extra points will be given to teams who can also name some of the plants or creatures that might live in these habitats!*



Mini-habitats: *Ask each team to make a 50 cm x 50 cm square frame using natural materials; sticks are ideal. Inside these frames you are going to make as many mini-habitats as you can think of, using natural found materials. If you made your frame on a grassland area, you already have your first habitat! Maybe you could make a miniature log pile using tiny twigs; poke more twigs into the ground and put leaves on them, so, hey presto you have a tiny woodland! Can you make a mountain and a valley? Or, how about digging a tiny little burrow for a fox, or make a teeny leaf pile for a hedgehog. Give each team a few lengths of blue wool; so they can now include a variety of different wetland habitats too (such as streams, rivers, ponds, lakes). If you decide to make an mini-ocean, you could maybe find some yellow leaves and make a mini-beach too! Can you also label each habitat. Once they have finished, ask each team to go and visit each other's mini-worlds. In order to visit each other's mini-habitats, you will have to pretend to be as small as an ant. Can you give your visitors a 'Guided Tour' using mathematical vocabulary such as "turn clockwise".*



Back in the classroom:

Imagine that your school has decided that they need more parking spaces for teachers to park their cars. They want to use the land we have been exploring today. Can you write a letter or email to your headteacher explaining why this would be a bad idea for all the plants and animals that live in these habitats. Remember to use persuasive language.



*Spending time in nature
can make you kinder, happier
and more creative.*

Suttie, 2016



The Wildlife Trusts:

<https://www.wildlifewatch.org.uk/build-a-hedgehog-home>

Key Stage 1: Year 2



Session 3: Location, location, location...

These sessions have been designed to link with:

Literacy



Maths



Science



For links to the specific areas of the National Curriculum covered in this session, see 'Year 1 Sessions: National Curriculum Table'.

Equipment List:

- Bag of 'really useful' man-made items (i.e string, sellotape, blu-tac)
- Pencils (per team)
- Clipboards (per team)
- Tape measures (per team)
- Air drying clay

From resource pack:

- Creature Card Factsheets (Hedgehog, Badger, Frog, Grass snake)
- Grand Designs Worksheet

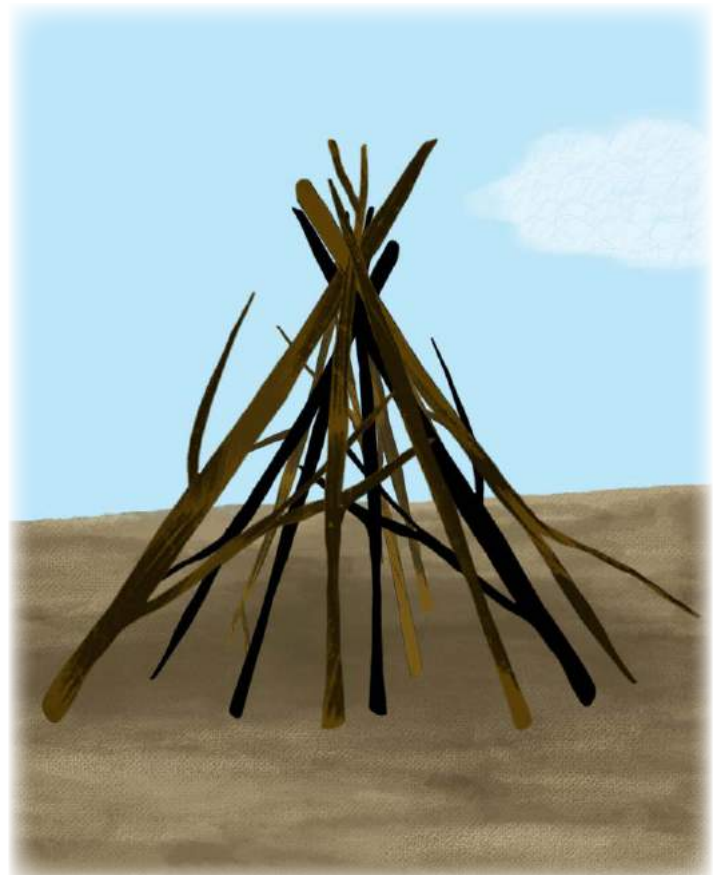
The Ideal Home Exhibition!

Staying Alive: In order to survive all animals (including humans) need five basic things for survival. Can you name what these are? (*oxygen, food, water, shelter and a mate of the same species*) BUT, you can't use your voices to answer, so you will have to mime an action!

Clay creatures: Which animals do you think might live out here in your school grounds? Put your class into teams and give each a 'Creature Card' and some air drying clay. In your team, can you make a clay version of the creature on your cards. Don't forget to give your creatures a name too! Can you now introduce your creatures to each other and importantly can you mention their predators.

Mini-shelters: Can you now make a mini-shelter (habitat) for your creature, using only natural found materials. But, they must be less than 1 meter in height. Your shelters will need to be strong, but we don't have any bricks out here, so what could they use instead? Yes sticks would be a great ideal! It also needs to be warm and cosy (insulated);

dried leaves and grass would be a great choice hey? But, what happens if it rains later? How about using leaves to make it waterproof. How are you going to make your mini-den safe from predators; maybe find something prickly, but be careful.



Session 3: Location, location, location...

Grand Designs Worksheet: Ideally, you need to attract another creature of the same species to come and move into your wonderful, new mini habitat, so you can **reproduce**. Thus, you need to make your shelters as 'attractive' as possible! Give each team a 'Grand Designs' Worksheet, which explains they can only use five different natural materials according to their properties. Tell them an adult will come around and offer them one extra item from the 'Really useful **man-made items** bag'.

Habitat Estate Agents: It's now time for a Grand Tour of all of your wonderful new abodes, so you can tell each other about your luxurious habitats; explaining what **materials** you used according to their **properties** and why. A nice way of doing this is to ask each team to become 'Estate Agents' and then use **persuasive language** to 'sell' the idea that their shelter is by far the best! Can each team suggest a selling **price**, based on the fantastic facilities it offers; such as its great views, the fact it is so near the local school and has lots of room to extend!

Nature Pizzas: So far, we have provided our creatures with shelter and hopefully a mate of the same species will arrive soon. There is definitely lots of air out here and we could easily collect rainwater to drink, so that leaves food. Give each team a small lump of clay and ask them to make it into a 'Pizza Base'. We now need some toppings, so are your creatures **herbivores, carnivores or omnivores**? We don't want to collect 'real' creatures, but we can find things in nature that look like the food they like to eat. For example, twigs could be worms, leaves could be lettuce! Can they note down all of the ingredients they use on the back of their worksheets.



Back in the classroom:

Can they write a recipe for their pizza including all ingredients and **quantities** needed. Can they also include how to make it using **instructional language**? The pizza will of course need a name; how about a 'Worm and Pineapple'?



A walk in nature boosts creativity, problem-solving and feelings of wellbeing. Strayer 2016

Books:

The Gruffalo
Where the
Wild Things
are

Produced through the Growing among Trees Project in partnership with:



Session 4: Pollinators' Paradise

These sessions have been designed to link with:

Literacy



Maths



Science



For links to the specific areas of the National Curriculum covered in this session, see 'Year 1 Sessions: National Curriculum Table'.

Before the session: Affix the Flower Bingo Pictures Sheets around your outside area.

Equipment List:

- Paper or plastic cups (per child)
- Plain paper and pencils (per team)
- Scissors (per child)
- Paperclips (per child)
- Tape measures (per team)
- Stop watches (per team)

From resource pack:

- Flower Bingo **Ticksheet** (per team)
- Set of six Flower Bingo **Picture Sheets**
- Dandelion Life Cycle **Factsheet**
- Seed spinner **Worksheet** (per child)

Buzz off and join the Pollinators' Party!

Plant Bingo: Divide your class into teams and give each a Plant Bingo Tick Sheet and pencil. In your team, can you go and match the pictures on your Tick Sheet with the Flower Picture Sheets. Remember to shout 'Bingo' when you match all six!

Plant Hunt: In your teams can you now have a really good look around your outdoor area and see if you can find any of the 'actual' flowers that are on your Tick Sheet. Compare their shape, size and colour. Can you also swap information with other teams and use directional language so they can find and visit flowers that you have already spotted?

Dandelions: Did you find any dandelions during your hunt? Dandelions start their life cycle as a tiny seed. Do you know what seeds need to start growing (germinate)? Yes, soil, food (nutrients) water, sunlight and space. (Refer to the Dandelion Factsheet and discuss its lifecycle from germination to seed dispersal).

Flower Potions: Why do you think Dandelions look and smell so nice? Indeed, to attract butterflies and bees to pollinate them. But not all flowers smell nice, some smell really pongy; like rotting flesh, as they are trying to attract flies. Yuk! Go and find a leaf and crush it so it releases its smell. Can you describe its smell? We are now going to make our own 'Flower Potions' by collecting lots of natural, smelly things and putting them in a cup. Find a stick and each time you add an ingredient, give your Flower Potion a really good stir and it will

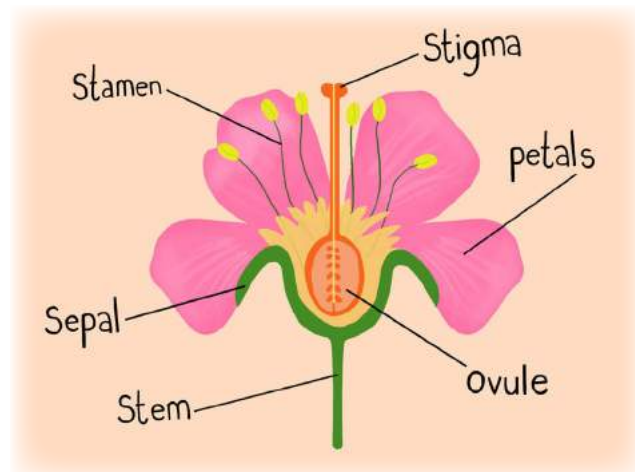


Session 4: Pollinators' Paradise

smell even stronger! Don't forget to give your Flower Potion a name! If you make a yummy potion for butterflies or bees, you could use **alliteration** such as 'A Delicious Delight'. But, if it's a yucky smelling Potion, how about naming it 'Stinky Smelly Socks'. Come back together and share your potions with a partner and see if they can guess if your potion is meant to attract bees or flies!

Pollination: Bees have a really long tongue, called a proboscis. It is similar to a straw and they use it to suck up yummy nectar that flowers make. Bees are also very hairy and as they are drinking the nectar, pollen from the plant's stamens, stick to these hairs. When the bee visits another flower, this pollen then drops off their hairy bodies and onto the stamen and hey presto the plant is **fertilised**. This process is called **pollination**!

Pollinators' Party: We are now going to transform ourselves into a bee, pretending that our index finger is now our 'proboscis'. Grab a magnifying glass and 'buzz off' to find a flower. Then, pretend to suck up nectar with your long tongue (don't forget to make lots of sucking noises too) and tap your hairy legs as if you are sticking grains of pollen to them. Have a look



inside the flower; can you see the male and female parts? Then, fly off and visit another five flowers, remembering to sprinkle some of your (pretend) pollen on them before you leave!

Dandelion Seed Game: It's now time for a game, so let's each make ourselves a seed spinner. You are going to pretend this is a Dandelion seed, which looks like a parachute and is easily blown away by the wind. In small teams, can you throw your seeds into the air, then **measure** and **record how far** it travels, **which direction** it goes and also where it lands. You can also **time** how long they stay in the air. Have a discussion about the place your seed landed. If it were a 'real' seed, would it have enough light, food, water and space to germinate?



Back in the classroom:

Research and write a **non-fiction leaflet** about one of the UK's most famous plants; the Bluebell, which in contrast to a Dandelion, starts its life cycle as a bulb. Compare your results from the seed game, what was the **longest distance** that a seed travelled, what was the **shortest distance**? Did all the seeds fly in the same **direction**? Compare **how long** the seed spinner stayed in the air.



Exposure to nature provides a buffering effect and is a stress reliever to highly stressed children. Wells & Evans 2003



Produced through the Growing among Trees Project in partnership with:



Session 5: Tree-mendous!

These sessions have been designed to link with:

Literacy



Maths



Science



For links to the specific areas of the National Curriculum covered in this session, see 'Year 1 Sessions: National Curriculum Table'.

Before the session: Affix the Tree Bingo Picture Sheets around your school grounds (matching them up to the same tree where possible; but not essential)

Equipment List:

- Raisins (per child)
- Air drying clay
- Old CDs or DVDs or a mirror tile (per child)
- Pencils (per child)
- Tape measures (per team)
- Clipboard (per team)

From resource pack:

- Tree Bingo Picture Sheets (with 1 extra copy of the Oak)
- Food chain Picture Sheets
- Tree Factsheet
- Tree Worksheet

Mighty oaks from little acorns grow.

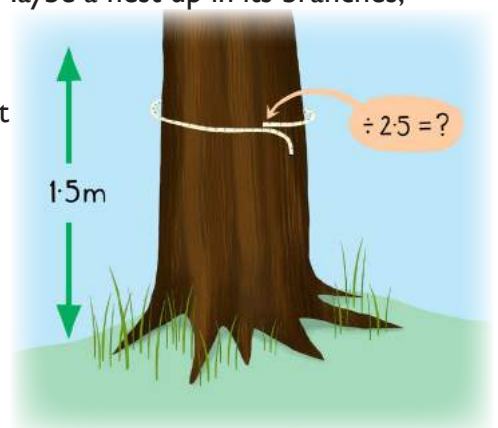
Squirrels: Does anyone know any 'squirrely' factoids, such as what kind of creature they are (mammals) and what is their natural habitat? Give each child a raisin, which they have to pretend is an acorn. Squirrels love to feast on acorns and when there is a glut of them during the autumn, they often hide them in secret places (called a cache) so they will have plenty of food throughout the winter months. Can you now transform yourselves into squirrels; don't forget that they have big teeth, a lovely bushy tail and they can leap up to 2.5 metres. Using your tape measure; see who can leap the farthest. Now, go and hide or bury your acorns.

The Mighty Oak: Does anyone know the name of the tree that acorns come from? Show picture of Oak tree leaf/acorn. It has been estimated that a mature oak tree supports over 350 species - more than any other native tree. They can grow up to 40m in height and can live for over 1000 years; how amazing is that? Can you name any of the creatures that live in and around trees? As well as being brilliant

habitats, how else are trees important?

Tree Bingo: Split your class in teams and give each a Tree Bingo Tick Sheet and pencil. In your teams, can you go and match the pictures on your Tick Sheet with the Tree Picture Sheets. Remember to shout 'Bingo' when you match all eight!

Befriend a Tree: Give each team a 'Tree Worksheet' and ask them to have a good look around and choose their favourite deciduous tree. Can you see any signs of creatures living on your tree? Maybe a nest up in its branches; a hole made by a woodpecker or maybe an ant running up the trunk of a tree. Can you hug your tree and estimate how many years old it is? Let's



Session 5: Tree-mendous!

now use our tape measures to find its **age** and **height**. Refer to the Tree Factsheet for instructions.

Eye in the sky: Give out the CDs (or mirrors) which really help children to focus on each part of the tree. If you put your mirrors under your chin, and look into it, it's like having an extra eye on the top of your head! Walk around a tree; can you see up into its canopy? Does it feel weird to be walking among its branches? Now use the mirror to explore the tree trunk and its bark. Now, put your mirror at **right-angles** against your forehead and look up into the mirror; you are now in 'upside-down-land'. Can you see the tree roots?



Clay Faces: I wonder what your tree would say if it could talk? Give each child a lump of clay. Can you flatten your clay onto the trunk of your tree to make it a face, and then use natural found materials to make its eyes, ears, mouth, nose, hair etc. Now can you go and find a microphone (a twig) which you will use to 'interview' your tree'. Make sure you **ask your tree lots of questions** such as 'How are you feeling today? Do you have any friends? What makes you happy, sad or afraid? Who or what is your favourite visitor? Now, go and **interview** someone else's tree face.



Squirrels Revisited: Tell your class you are going to count to 30, during which time they need to go and find their acorns. Those who didn't find your acorn, give yourselves a jolly big pat on the back as you have just planted an oak tree! Squirrels are very forgetful and often can't remember where they hide their acorns, so are responsible for planting lots of trees!

Back in the classroom:

Write a letter to your tree, telling it how much you enjoyed meeting it and how it made you feel when you hugged it. Don't forget to tell your tree about any creatures you spotted living on or around it too!



Experiencing the beauty of nature leads to an increased willingness to be generous, trusting and helpful toward others. Keltner et al, 2014



Produced through the Growing among Trees Project in partnership with:



Session 6: Marvellous Minibeasts

These sessions have been designed to link with:

Literacy



Maths



Science



For links to the specific areas of the National Curriculum covered in this session, see 'Year 1 Sessions: National Curriculum Table'.

Before the session: Affix the Tree Bingo Picture Sheets around your outdoor learning space. Put out pitfall traps if you are using this method.

Equipment List:

- Minibeast kit (spoons, magnifying glasses, bug or clean, used yoghurt pots)
- White fabric sheets (per team)
- A4 paper (per child)
- Pencil (per child)
- Clipboards (per child)
- Air drying clay

From resource pack:

- Minibeast Factsheet
- Minibeast Picture Sheets
- Minibeast Recording Worksheet

Roll up, roll up, roll up your sleeves, it's time to get down on your knees!

Minibeast Bingo: Put the class into teams and give each a Minibeast Bingo Tick Sheet. In our teams, let's go and match the minibeast pictures to those on our Bingo Tick Sheets. Remember to shout 'Bingo' when you have found all eight!

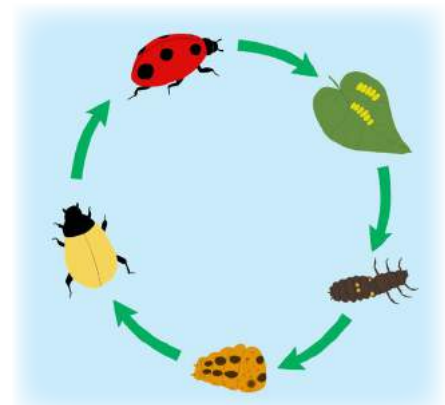
Minibeast Hunt: We are going to try and find some of these minibeasts now, but where do you think we will find them? Some minibeasts, such as slugs, snails and woodlice are perfectly adapted to live in dark, damp places such as

under stones or logs. These are called micro-habitats, so shall we have a peep? Ask an adult to help you lift any heavy items. Make sure you show the other children what you have found before putting them carefully back where you found them. Use your Minibeast Recording Worksheet to record the creatures you find using a tally.

Life cycles:

Some of the creatures you find, such as

slugs and woodlice, start their life as eggs, then emerge as tiny versions of the adults, then they just get bigger! Other creatures, such as ladybirds and butterflies have a different life cycle. They also start their life as an egg, but the youngsters (larvae) look completely



Session 6: Marvellous Minibeasts

different to the adults. Can you start to think about the **life cycle** of any of the minibeasts you find? Do you think it is like that of a slug or more like that of a ladybird?

Shake a tree: which minibeasts do you think might live in and around **plants** and **trees**? Again, remember to use a spoon when picking minibeasts up! Let's **compare and contrast** the minibeasts we found on the tree to those we found in damper, darker **micro-habitats**. What differences did you notice; particularly in terms of colour. Let me give you a little hint, who has heard of the term 'camouflage'.

Pitfall traps (optional): Empty the pitfall traps using your spoon and pots again.

Long grass: Are there any areas of longer grass or any flowers out here in your open space? If so, let's go and see if we can find any minibeasts here! On a warm sunny day, it is great just to sit quietly, then wait, watch and listen. If you also put out the white fabric sheet again, minibeasts will often come to you! Use your Minibeast Recording Worksheet to record the creatures you find using a tally.

Minibeast Posters: What was your favourite minibeast that you found today? Let's all grab some paper, as we are going to make a poster about it! First, make a large detailed sketch of your creature. Remember to include how many legs it has, any special markings or patterns; does it have wings or antennae. Did you find out its name, if not, why not make one up! Now write a list of things you know about your creature; such as where you found it (its habitat) and was it well camouflaged?

Clay Minibeasts: We are now going to make a minibeast using clay and **natural**, found materials. It can be based on one you have just found, or you could make up a completely new one. What kind of creature is it? If it is a type of insect, you could find six twigs for its legs. If it is a **carnivore**, it will need big jaws to eat its prey. Where does it live and how is it **adapted** to live in this **habitat**? How does it protect itself from **predators**? Maybe it has a special, super-long stinger or maybe it spits poison when it's angry? **Introduce** your creature to the rest of the class and tell them all about it. But, remind them to be careful if it bites or stings!

Back in the classroom:

Use the data you collected on your Minibeast Recording Worksheets to construct a pictogram or block diagram. If you recorded minibeasts at different locations create a different pictogram or block diagram for each location. You could use these to compare the types and numbers of minibeasts found at the different locations.



OPAL: <https://www.opalexplornature.org/sites/default/files/7/image/Invertebrates%2520guide-%2520UPDATED%2520FINAL.pdf>



Nature is important to children's development intellectually, emotionally, socially and spiritually.
Kellert 2005

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National Curriculum Links, Year 1 Sessions

		Year 1 Session					
		1	2	3	4	5	6
Year 1 English							
Spoken language	Listen and respond appropriately to adults and their peers						
	Ask relevant questions to extend their understanding and knowledge						
	Articulate and justify answers, arguments and opinions						
	Maintain attention and participate actively in collaborative conversations						
	Use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas						
Reading	Speak audibly and fluently with increasing command of Standard English						
	Apply phonic knowledge and skills to decode words						
Writing	Learning to appreciate rhymes and poems, and to recite some by heart						
	Saying out loud what they are going to write about						
	Composing a sentence orally before writing it						
	Sequencing sentences to form short narratives						
	Add prefixes and suffixes						
	Use a capital letter for names of people and the personal pronoun 'I'						

Year 1 Maths							
Number	Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any number						
	Count in multiples of twos, fives and tens						
	Recognise and create repeating patterns with objects and shapes (non-statutory)						
	Solve one-step problems that involve addition and subtraction						
	Recognise, find and name a half as one of two equal parts of an object, shape or quantity						
Measurement	Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity						
	Compare, describe and solve practical problems for lengths and heights						
	Measure and begin to record lengths and heights						
Geometry	Measure and begin to record capacity and volume						
	Recognise and name common 2D and 3D shapes						
	Describe position, direction and movement, including whole, half, quarter and three-quarter turns						

Year 1 Science							
Working scientifically	Asking simple questions and recognising that they can be answered in different ways						
	Observing closely, using simple equipment						
	Performing simple tests						
	Identifying and classifying						
	Using their observations and ideas to suggest answers to questions						
Plants	Gathering and recording data to help in answering questions						
	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees						
	Identify and describe the basic structure of a variety of common flowering plants, including trees						
Animals, including humans	Identify and name a variety of common animals, including fish, amphibians, reptiles, birds and mammals						
	Identify and name a variety of common animals that are carnivores, herbivores and omnivores						
	Identify, name, draw and label the basic parts of the human body and say which part is associated with each sense						
Everyday materials	Distinguish between an object and the material from which it is made						
	Identify and name a variety of everyday materials						
	Describe the simple physical properties of a variety of everyday materials						
Seasonal changes	Compare and group together a variety of everyday materials on the basis of their simple physical properties						
	Observe changes across the four seasons						

National Curriculum Links, Year 2 Sessions

		Year 2 Session					
		1	2	3	4	5	6
Year 2 English							
Spoken language	Listen and respond appropriately to adults and their peers						
	Ask relevant questions to extend their understanding and knowledge						
	Articulate and justify answers, arguments and opinions						
	Maintain attention and participate actively in collaborative conversations						
	Use spoken language to develop understanding through speculating, hypothesising, imagining and exploring ideas						
	Speak audibly and fluently with increasing command of Standard English						
Writing	Writing narratives about personal experiences and those of others (real and fictional)						
	Writing about real events						
	Writing poetry						
	Writing for different purposes						
	Planning or saying out loud what they are going to write about						
	Writing down ideas and/or key words, including new vocabulary						
	Encapsulating what they want to say, sentence by sentence						

Year 2 Maths							
Number	Identify, represent and estimate numbers using different representations						
	Read and write numbers to at least 100 in numerals and in words						
	Use place value and number facts to solve problems						
	Solve problems with addition and subtraction						
	Solve problems involving multiplication and division						
Measurement	Choose and use appropriate standard units to estimate and measure length						
	Choose and use appropriate standard units to estimate and measure mass						
	Compare and order lengths and record the results using >, < and =						
	Compare and sequence intervals of time						
Geometry	Identify and describe the properties of 2D and 3D shapes, including the number of edges, vertices and faces						
	Use mathematical vocabulary to describe position, direction and movement						
Statistics	Interpret and construct simple pictograms, tally charts, block diagrams and simple tables						
	Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity						
	Ask and answer questions about totalling and comparing categorical data						

Year 2 Science							
Working	Asking simple questions and recognising that they can be answered in						
	Observing closely, using simple equipment						
	Performing simple tests						
	Identifying and classifying						
	Using observations and ideas to suggest answers to questions						
	Gathering and recording data to help answer questions						
Living things and their habitats	Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other						
	Identify and name a variety of plants and animals in their habitats, including						
	Describe how animals obtain their food from plants and other animals, using						
Plants	Observe and describe how seeds and bulbs grow into mature plants						
	Find out and describe how plants need water, light, and a suitable temperature						
Animals, including	Notice that animals, including humans, have offspring which grow into adults						
	Find out about and describe the basic needs of animals, including humans, for						
Uses of everyday	Identify and compare the suitability of a variety of everyday materials,						
	Find out how the shapes of solid objects made from some materials can be						

Trees

Trees and woodlands are ‘tree-mendously’ important. They are the biggest plant on the planet and their leaves, fruits and nuts provide humans and other animals with yummy sources of free, healthy food. Trees also provide valuable homes (habitats) for a wide variety of wildlife.

Trees also do lots of other clever things, such as absorb greenhouse gases, stabilise soil and can act as brilliant sound barriers, thus helping to reduce noise pollution from roads, etc. The wood from trees can be used to make all manner of useful things including tools, furniture, homes, musical instruments and in the past it was even used to make ships too! Wood is also an important source of fuel.

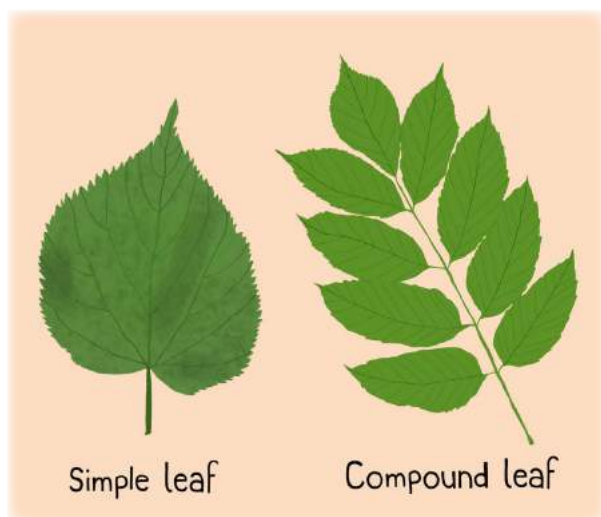
During the summer months you can tell trees apart by their leaves.

These leaves are like factories that absorb carbon dioxide (CO₂) and the light from the sun and they turn these ingredients into food (in the form of simple sugars) that helps the tree grow. The posh science word for this is ‘Photosynthesis’! During this process, trees also give out oxygen for us to breathe! Isn’t nature amazing?

At different times of the year you can also identify trees by their fruit, buds and the look and feel (texture) of the bark, also by their colour and height and also the girth of the trunk.

Trees can be divided into two main types; broadleaved (which have flat and wide leaves such as oak and silver birch) and conifers (with needle-like leaves and cones such as scots pine and douglas fir).

Most broadleaved trees are ‘deciduous’ and lose their leaves in autumn, growing lovely new fresh leaves every spring. Most conifers are ‘evergreen’, which means they keep their leaves all year round.



Can you estimate, as a percentage, how much of the UK is covered by woodland?

If you estimated around 13 percent, you are spot on!

Check out Trees for Cities learning resources for all year round tree learning fun www.treesforcities.org

Dandelions and Daisies

Common dandelion

The name Dandelion is derived from the French 'dent de lion' as its jaggedly toothed leaves are thought to look like lion teeth! There are lots of myths about these plants, such as if you pick them you will wet the bed, giving it the nickname of 'Tiddle-beds'!!

Their favourite habitat is grasslands of all kinds including garden lawns, school playing fields and also more traditional meadows. They also provide a brilliant, early source of nectar during the spring for a wide range of pollinators such as bees.

The yellow flower head of a dandelion is actually made up of lots of tiny, individual flowers known as florets. If you carefully pick one of these petal-like florets, you can see its stamen (male part).

Its fluffy, white seed head is known as a 'clock'. By blowing on the clock and counting the number of times it takes all the seeds to be released into the wind, you're supposed to be able to tell the time!



Common Daisy

The Common daisy is perhaps one of our most familiar flowers. It can be seen flowering almost all year-round; with its yellow and white flowers brightening up areas of short grass such as school playgrounds and road verges.

Its name derives from 'days eye' as its flower was thought to look like a small sun which opens very early in the morning and closes again in the evening.

It has oval or spoon-shaped leaves, and a hairy flower stalk which can grow to a height of 10 cm. Some children make daisy-chains with them and others say they look like fried eggs!

'He loves me, he loves me not' is a common rhyme sung by children as they pluck off daisy petals. Like the dandelion, each 'petal' is actually an individual flower.



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Minibeasts

What are Minibeasts? The term minibeast is a child friendly term for invertebrates, which are animals without a backbone. Many minibeasts (such as spiders and beetles) have their skeletons on the outside, a bit like a suit of armour, which is called an exoskeleton. Minibeasts can be easily grouped according to how many legs they have:

0 legs: Annelids (earthworms) and molluscs (slugs and snails)

6 legs: Insects (bees, beetles, butterflies etc.)

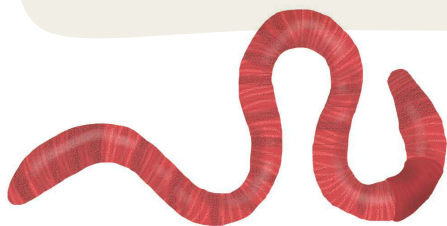
8 legs: Arachnids (spiders and harvestmen)

More than 8 legs: Myriapods (millipedes and centipedes) and crustaceans (such as woodlice)



Top Tips to encourage minibeasts into your school grounds:

1. Place logs, stones, carpet tiles, sticks and piles of dead leaves etc. in dark, damp areas then lots of minibeasts will soon move in!
2. If you have a playing field or similar, leave a one meter 'no-mow' strip around its perimeter, as this is a really cheap and easy way of creating a linear long-grassland habitat
3. Plant wildflowers in pots, window boxes and other containers to create 'mini meadows'
4. Collect and plant tree seeds and/or follow this link to apply to the Woodland Trust for free trees: <https://www.woodlandtrust.org.uk/plant-trees/schools-and-communities/>
5. Is there an area you could put aside as a dedicated 'Digging Area' so children can use sticks or trowels to find worms and other minibeasts that live in the soil



Putting up simple signs that indicate any areas you create are now 'Wildlife Areas' or 'Nature Reserves' (rather than just neglected) really helps too!

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Creature Cards

Hedgehog

(*Erinaceus europaeus*)

Hedgehogs are mammals



Habitat

- Gardens, hedgerows, meadows, edges of woodlands.
- Their home is called a 'nest'
- Make a nest in piles of dry grass and dead leaves

Prey (food)

- Hedgehogs are carnivores
- Their favourite food is beetles, caterpillars and worms
- They will also eat slugs, snails, birds eggs and carrion (dead creatures)

Predators (enemies)

- Other mammals "try" to get through their prickles including foxes, badgers, dogs
- Humans (especially cars and chemicals such as slug pellets)

Special features (adaptations)

- Hedgehogs have a great sense of smell; which is its main sense
- They have over 5,000 spikes and roll up in a ball to protect themselves from predators

Other interesting hedgehog factoids

- Hedgehogs sleep through the winter (hibernate)
- They are sometimes white (which may attract predators)
- They have 3-5 babies, which are normally born in June or July
- Their young are blind and pink, but sprout a few white bristly hairs within hours of being born
- Hedgehogs can live to be 5 or 6 years old – but most survive for less than 2 years in the wild

Creature Cards

Common frog

(*Rana temporaria*)

Frogs are amphibians



Habitat

- Frogs live in ponds during the spring
- They then spend much of the rest of the year in woodland, gardens, hedgerows and long grassland
- In winter they hibernate in pond mud or under piles of rotting leaves, stones or logs.

Prey (food)

- Young tadpoles feed on algae, but then become carnivores
- Adult frogs eat insects, snails, slugs and worms, which they catch with their long, sticky tongue

Predators(enemies)

- Birds of prey, herons, badgers, snakes and various small mammals such as hedgehogs

Special features (adaptations)

- Frogs can breathe through their skin as well as their lungs
- They are able to lighten or darken their skin to match their surroundings

Other interesting common frog factoids

- Frogs have smooth skin (unlike toads who have rough, warty skin) and their colour can range from green to brown and even red or yellow
- They hop and jump rather than walk
- They are more active at night
- They lay their eggs in large jelly-like clumps, which is called 'frogspawn'
- Baby frogs are called tadpoles and look very different to an adult frog
- Their average lifespan is between 5-10 years

Creature Cards

Blue tit

(*Cyanistes caeruleus*)

Blue tits are birds



Habitat

- Blue tits are common in woodland, hedgerows, parks and gardens
- They start building their nests during March in cracks and holes in trees or walls and in nest boxes

Predators (enemies)

- Bigger birds such as sparrowhawks and magpies, domestic cats, rats and squirrels

Prey (food)

- Blue tits are omnivores and eat insects (particularly caterpillars), fruits, seeds and nuts

Special features (adaptations)

- Blue tits are extremely acrobatic and will often hang upside down from branches or garden bird feeders in search of food

Other interesting blue tit factoids

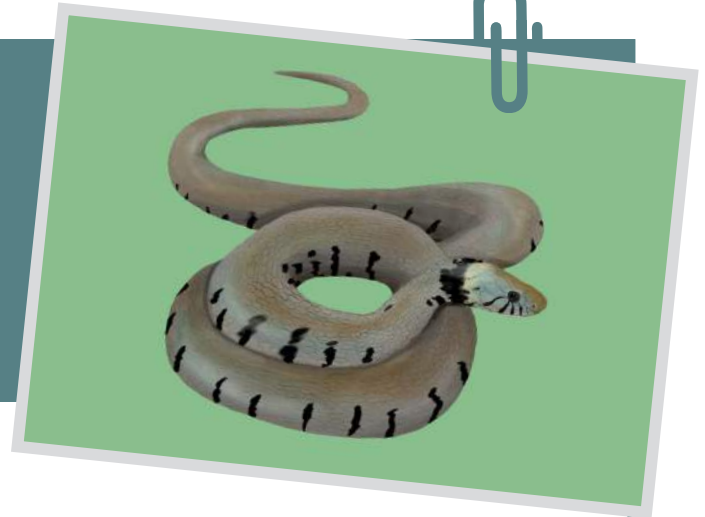
- The blue tit is wonderfully colourful, with a bright blue cap, white face, black stripes across the eyes, bright yellow breast and blue, green and white wings.
- It is quite a small bird, weighing in at around 11g and is around 12 cm in length
- Female blue tits lay around 7–14 eggs
- Once these eggs hatch, the chicks spend around three weeks in the nest before flying away (fledging)
- They are one of our most common birds here in the UK, with an estimated population of around 3.4 million pairs

Creature Cards

Grass snake

(*Natrix natrix*)

Grass snakes are reptiles



Habitat

- Grass snakes live in woodlands and gardens
- They particularly like log piles and compost heaps, where they also hibernate
- In the warmer months, they like to swim in ponds and then sunbathe on its banks

Prey (food)

- Grass snakes are carnivores
- Their favourite food is frogs and toads but they will also eat small mammals, fish and small birds, which they swallow whole!

Predators (enemies)

- Birds in the crow family, birds of prey, foxes, cats

Special features (adaptations)

- They are well camouflaged and can move fast
- They 'play dead' when threatened
- Also, let out a foul-smelling substance from their anus when in danger

Other interesting grass snake factoids

- Grass snakes are the UK's largest reptile and can grow to over 1 metre long
- The only snake in the UK that lays eggs
- Perform an aggressive display; hissing and striking out without actually opening their mouths (they rarely bite)

Dandelion Life cycle

Seed: The individual parachute-like seeds are then dispersed by the wind.

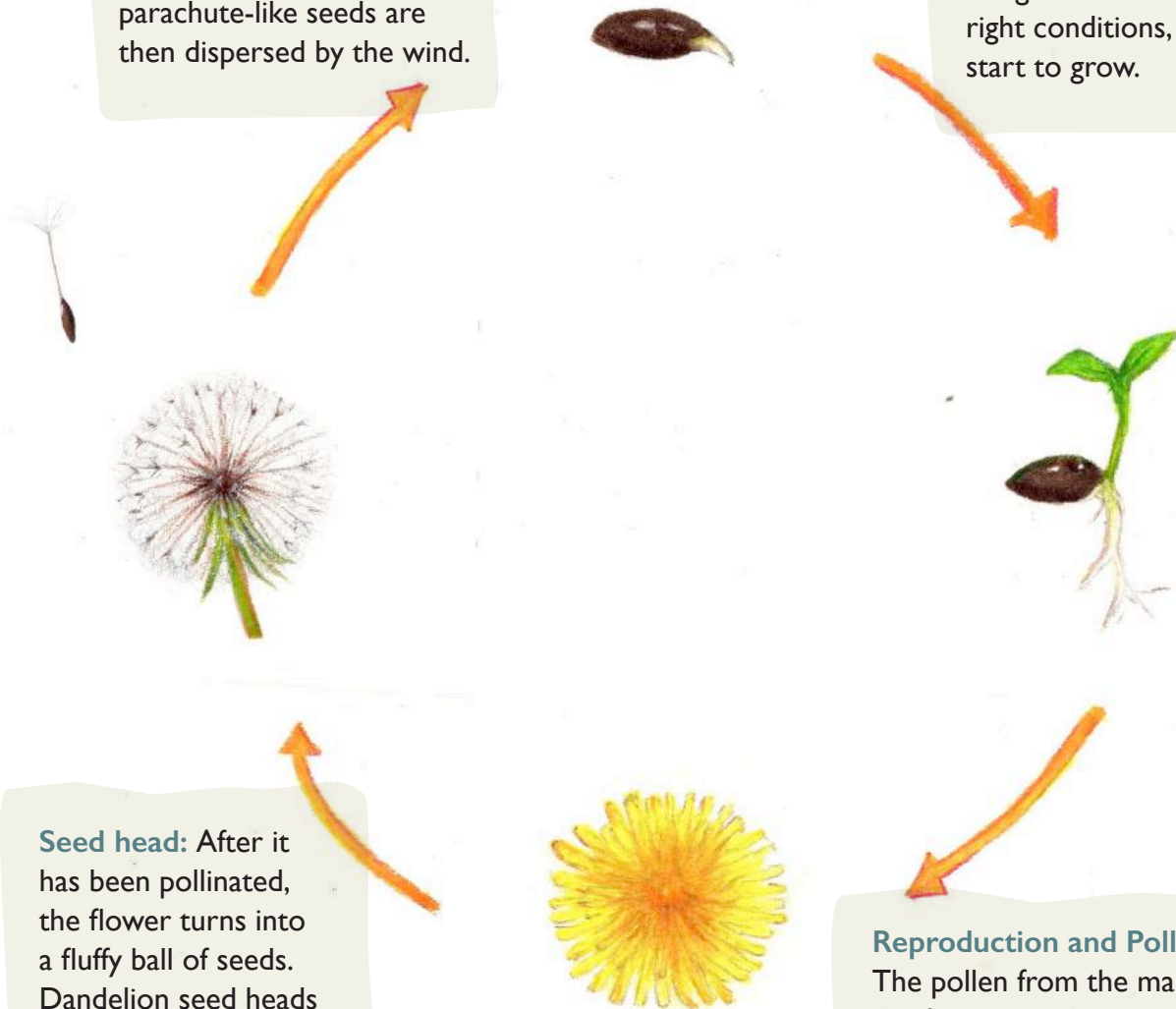
Germination:

The seeds then land on the ground and under the right conditions, it will start to grow.

Seed head: After it has been pollinated, the flower turns into a fluffy ball of seeds. Dandelion seed heads are sometimes called 'clocks'

Reproduction and Pollination:

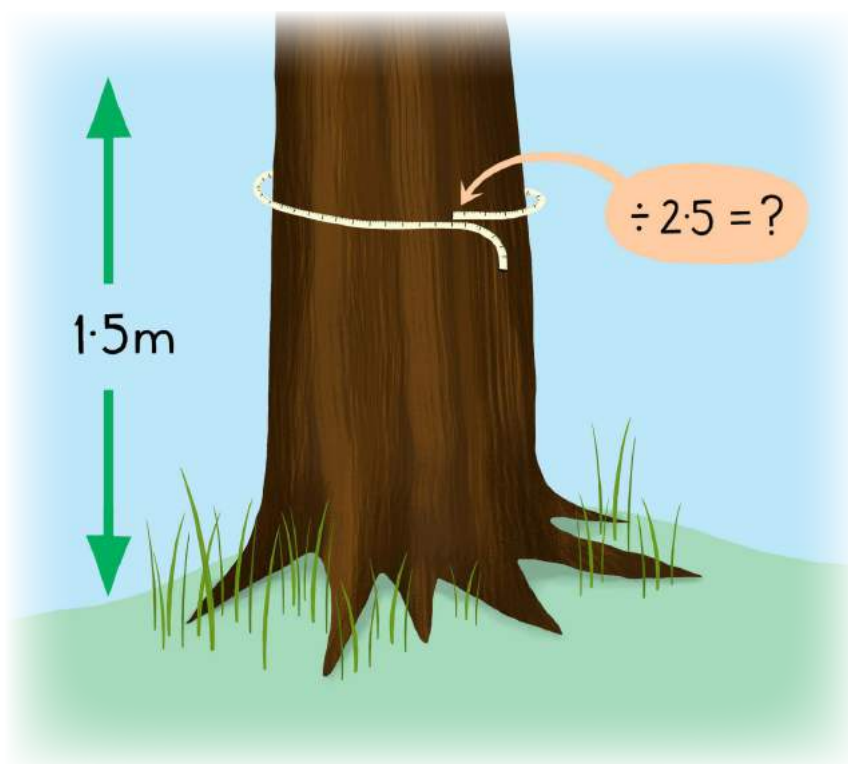
The pollen from the male part of the flower needs to travel to the female part of another flower (of the same species). But, plants can't walk (imagine if they could) so they need help! This is where butterflies, bees, flies and other 'pollinators' are vital as they do this job for flowers!



How to Measure Trees

On average, most deciduous trees add 2.5cm to their girth (circumference) every year.

So let's measure the girth of our tree at 1.5m above the ground (try and avoid any lumps or bumps on the trunk). Now divide the girth of the tree by 2.5 and this will give us a rough idea of its age in years. What was the difference between this calculation and your original estimate?



Now let's estimate the **height** of your tree. It may help to know how tall you are first!

Walk away from the tree and look upside down between your legs until you can see the top of the tree. You may need to keep moving backwards and forwards until you can see it. When you get the right spot, put a stick in the ground. Measure the distance between the stick and the tree. This is how tall your tree is! We call this 'twigonometry'.

Back in the classroom, you can use this data to construct graphs, pictograms and tables etc.

Minibeast hunting



Where to look for minibeasts:

1. **Under logs, stones, carpet tiles, flowerpots:** Or anything else you can find to look underneath! Remember to remind children not to lift anything too heavy
2. **In the soil:** Use a trowel or a stick to dig around in the mud!
3. **On trees and shrubs:** (Shake a tree) Place a white fabric sheet under the branches of a tree or shrub and give its branches a shake. Minibeasts such as caterpillars, shield bugs and spiders will fall onto the sheet, which acts as a canvas so all the creatures are easy to see. Also have a good look around the cracks and crevices of the tree's bark where minibeasts like to hide.
4. **Pitfall traps:** These are pots which are buried at ground level, so any minibeasts walking past will tumble into them. This method requires preparation before the session, but does give great results. Use this web link for (easy) instructions: <https://www.rspb.org.uk/globalassets/downloads/kids--schools/teaching-resources/make-a-pitfall-trap.pdf>
5. **Long grass or overgrown areas:** These are great in the summer months for grasshoppers, crickets and many flying minibeasts. Put out a white fabric sheet, then sit, watch and listen and they will often come to you !



Basic minibeast collecting equipment:

- **Spoons** to pick the minibeasts up; so we don't hurt or damage them
- **Pots** to put them in; clean yogurt pots or similar are great if you don't have any bug pots
- **Magnifying glasses** so the children can look really closely at what they find and also count their legs, but they are not essential



Whichever method you use, it is really important to stress that children must use **spoons** to *carefully* pick up any creatures and treat them gently and with respect.

ALWAYS put the creatures back where you found them as we don't want these lovely minibeasts to become homeless!

Letter from Mrs. Blue tit

Please

can

you

help

make

a

nest

for

my

eggs.



Letter from Mrs. Blue tit

I'm Mrs. Blue tit, how do you do?
Come gather round, I've news for you:
There are words all around this space,
You'll find them hiding, It's not a race.
Together it will all make sense,
There's no need to go beyond the fence.
How many words do you think there are?
Look carefully and don't go far.
As you find them one by one,
Space them out and have some fun.
Now you'll be able to read out loud
You can do it and make me proud!

Good luck!

Mrs. Blue tit xxx



Flower parts labels

Roots

Petals

Stem

Flower

Leaf

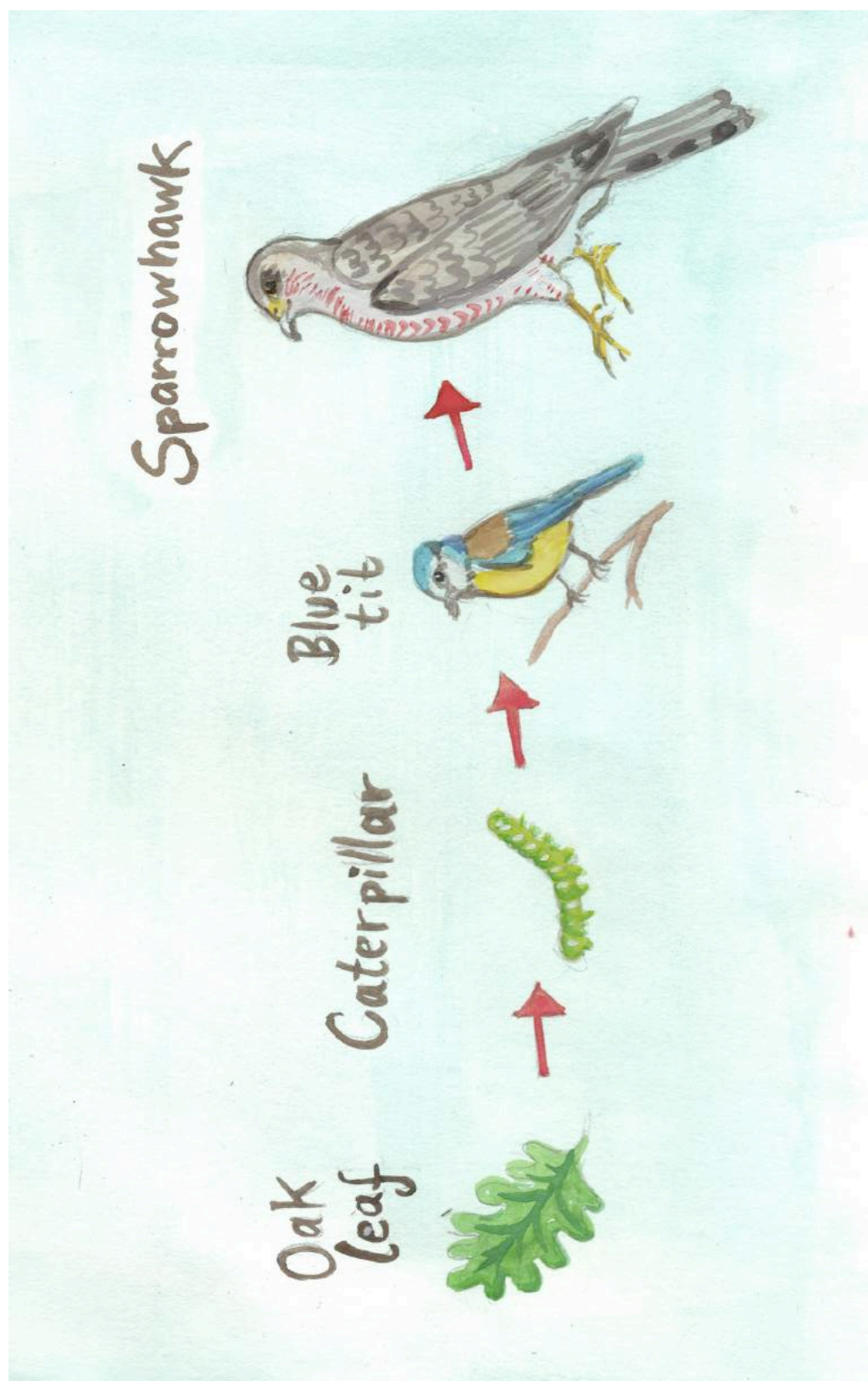
Sepals



Mr. Spike the Hedgehog



Food Chain



WORKSHEET

This Ticksheet accompanies Year 1 Session 6 and Year 2 Session 6. You can print and laminate for each team and use drywipe markers.

Minibeast Recording Sheet

Name: Date:

Describe the weather today:

Tick (✓) or tally (||||) what you find

Name of creature	 Trees	 Grassland	 Under logs or stones	Other habitats
Total:				

Touch Treasure Hunt

Please collect examples of the following 6 touch words:

Hard

Soft

Prickly

Tickly

Rough

Smooth

Note: Try not to pick too many living things
as we want to be nice to nature!

Natural Materials Hunt

Can you find examples of the following materials
and attach them to your stick.

Bendy

Not bendy

Waterproof

Transparent

Hard

Wooden

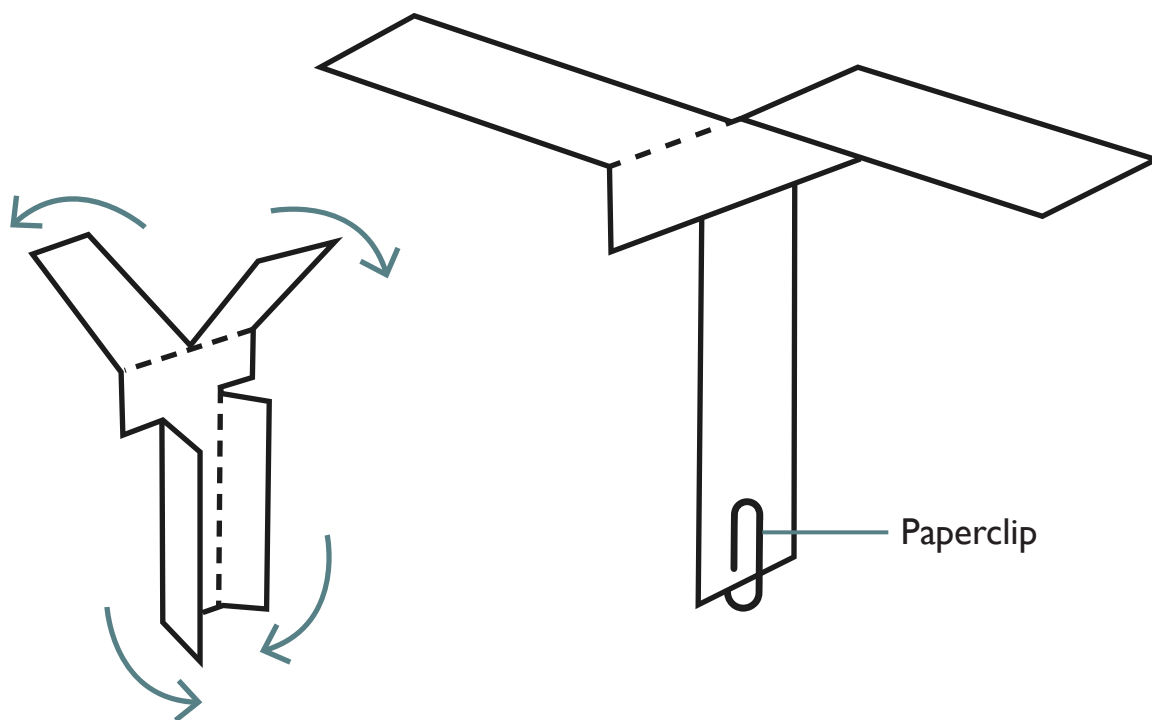
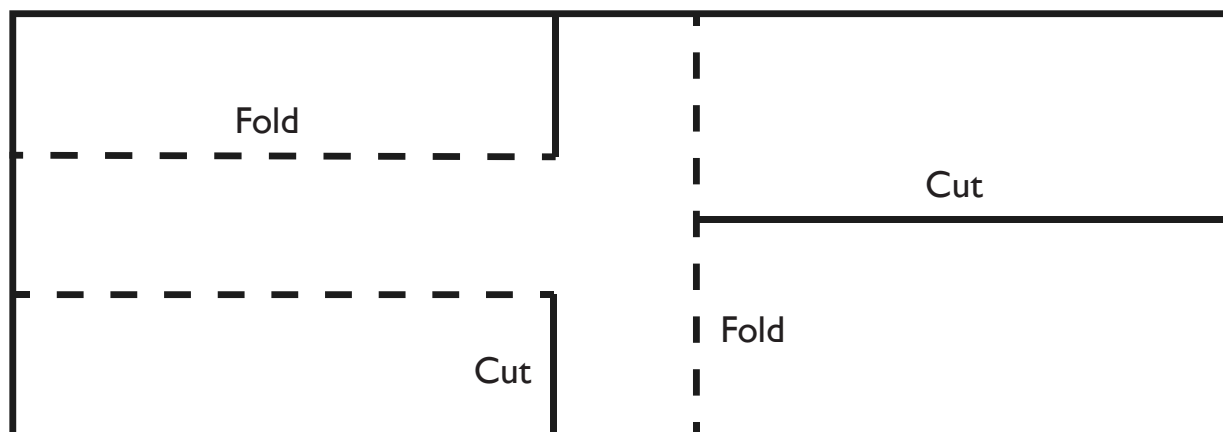
Grand Designs

	Name of Material	Is it natural or manmade	Properties of the material	How or why did you use this material
Example	Wood (twigs)	Natural	Strong and flexible	To make the structure of the shelter nice and strong
1				
2				
3				
4				
5				
6				

Why is your Grand Design so brilliant and what special features does it have?

Suggested Selling Price: £

Seed Spinner



Tree Bingo



Oak ☐



Ash ☐



Hawthorn ☐



Holly ☐



Sycamore ☐



Cherry ☐



Silver birch ☐



Hazel ☐

Oak



Ash



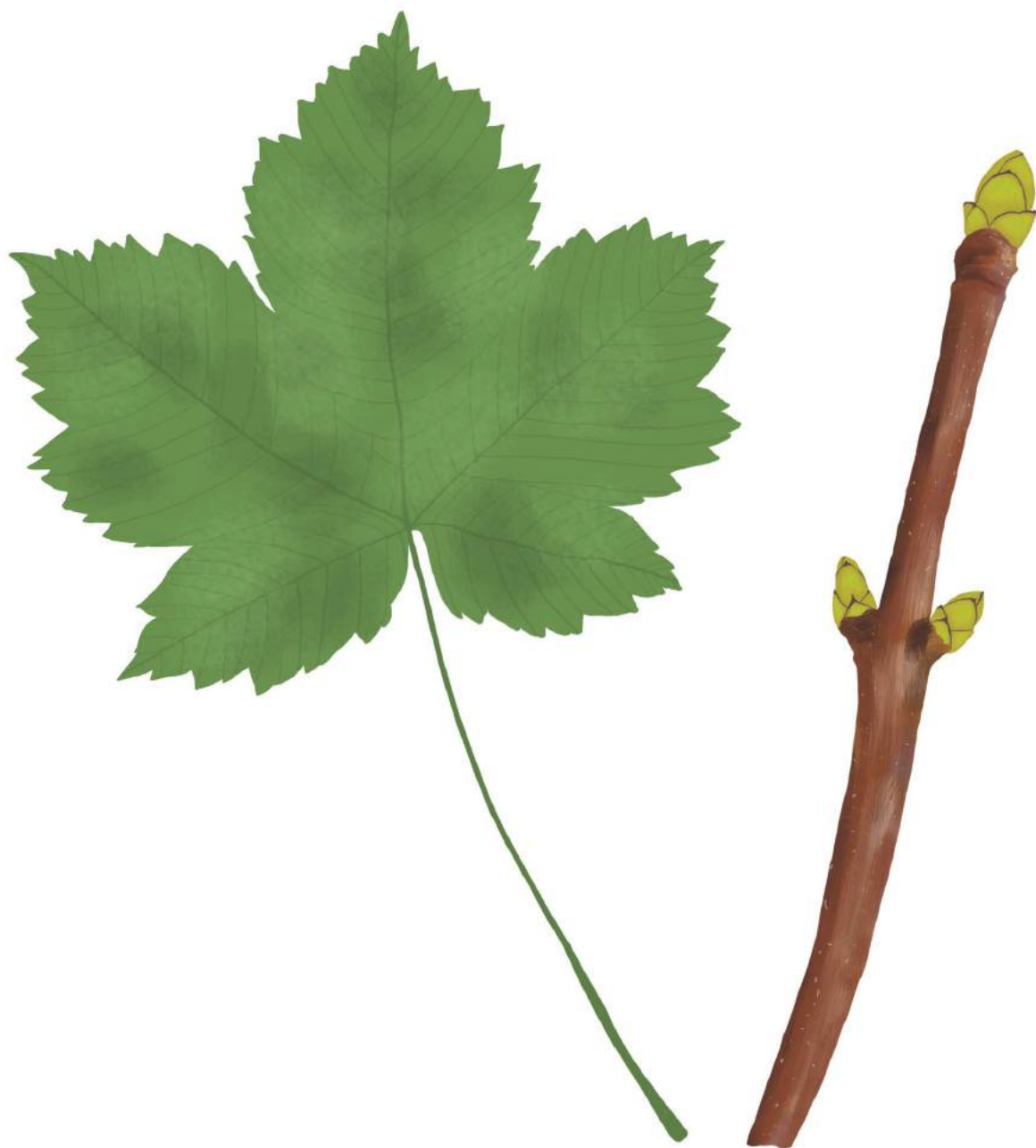
Hawthorn



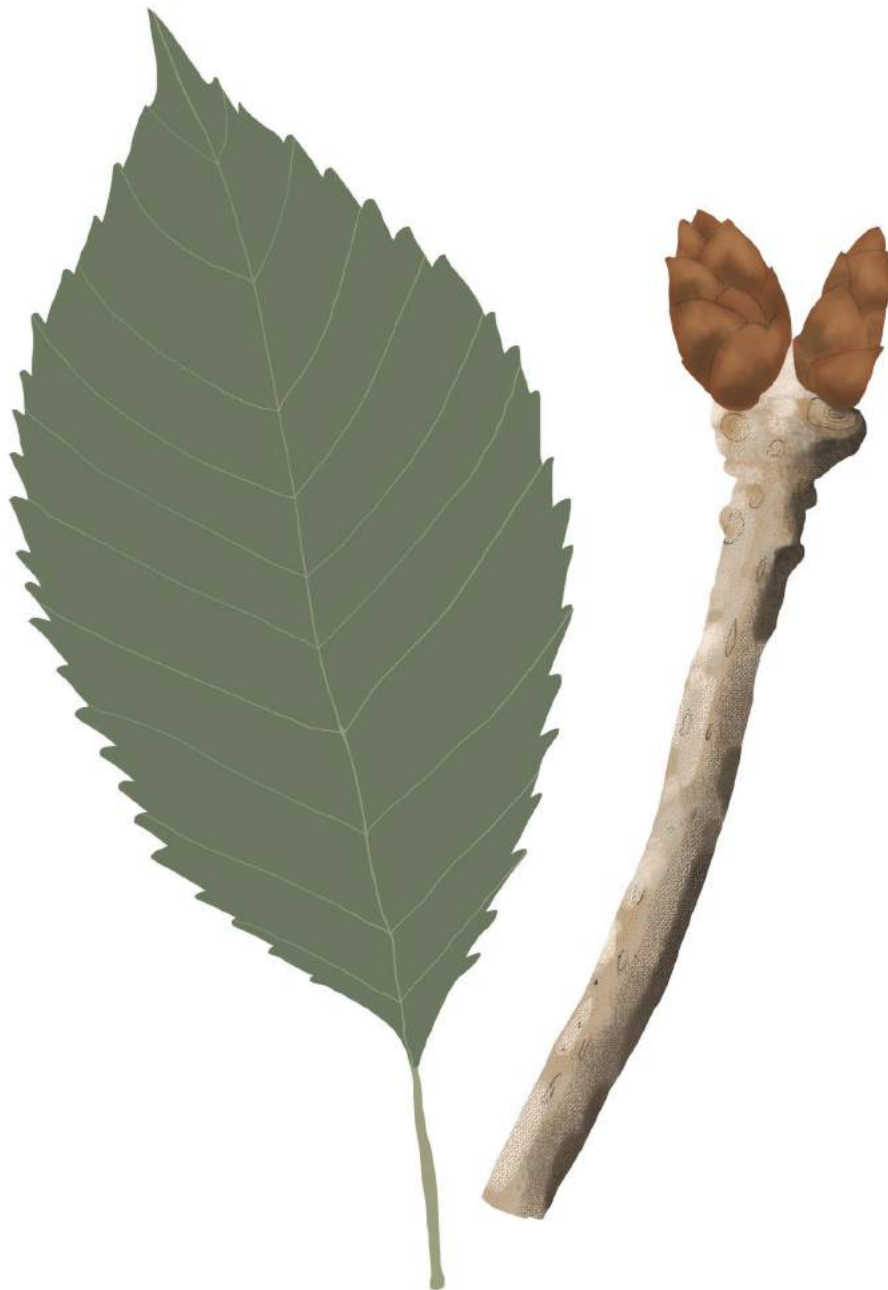
Holly



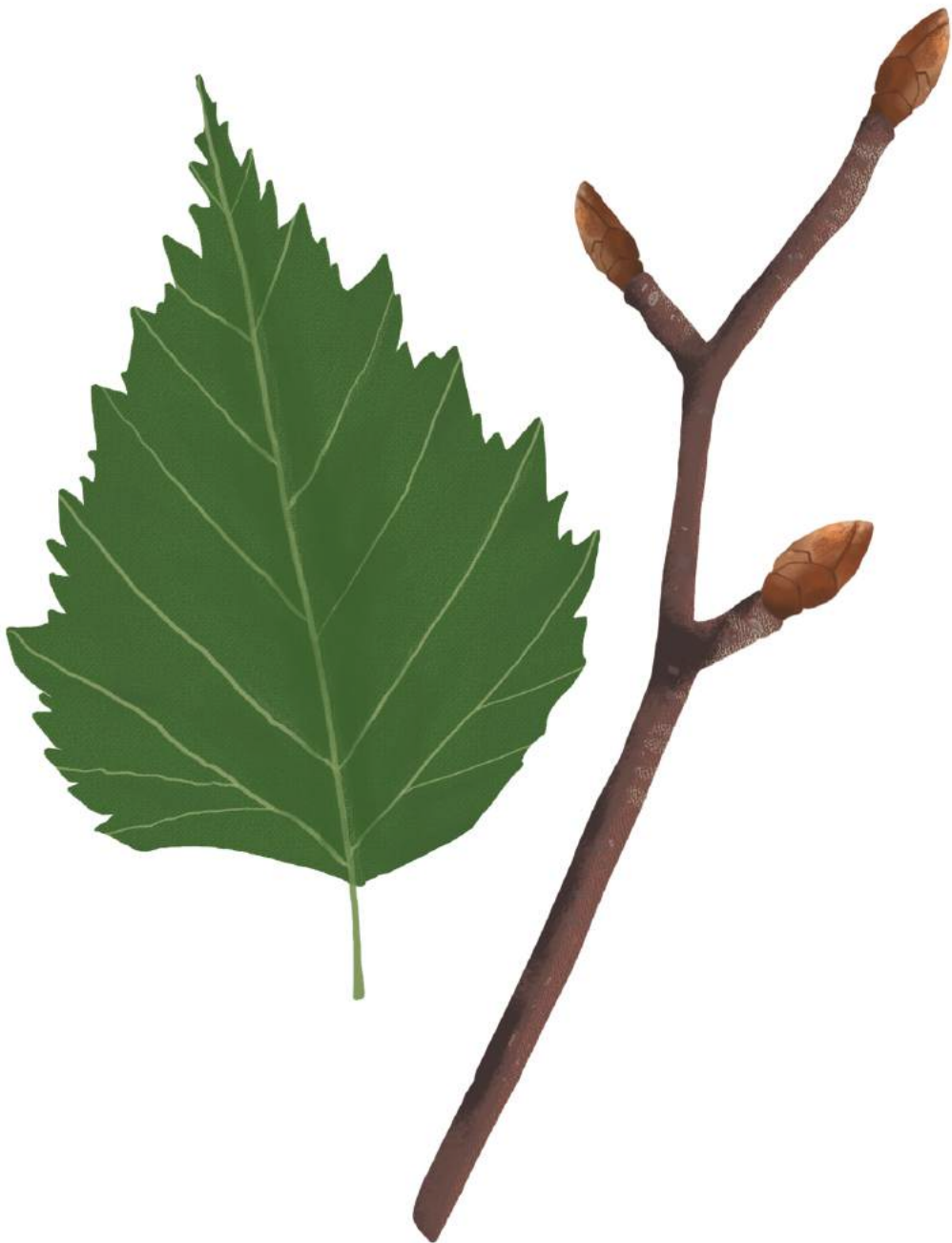
Sycamore



Cherry



Silver Birch



Hazel



Minibeast Bingo



Ladybird ☐



Spider ☐



Slug ☐



Butterfly ☐



Woodlouse ☐



Snail ☐

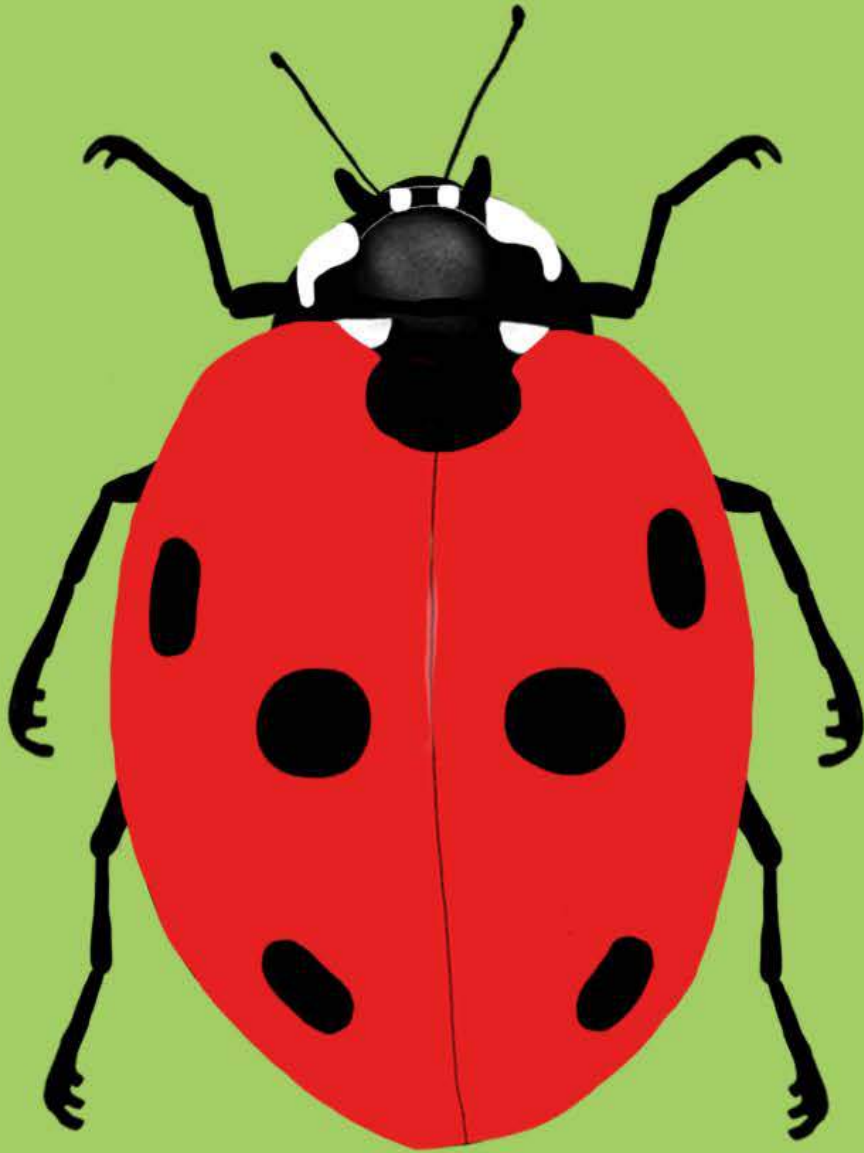


Ant ☐



Worm ☐

Ladybird



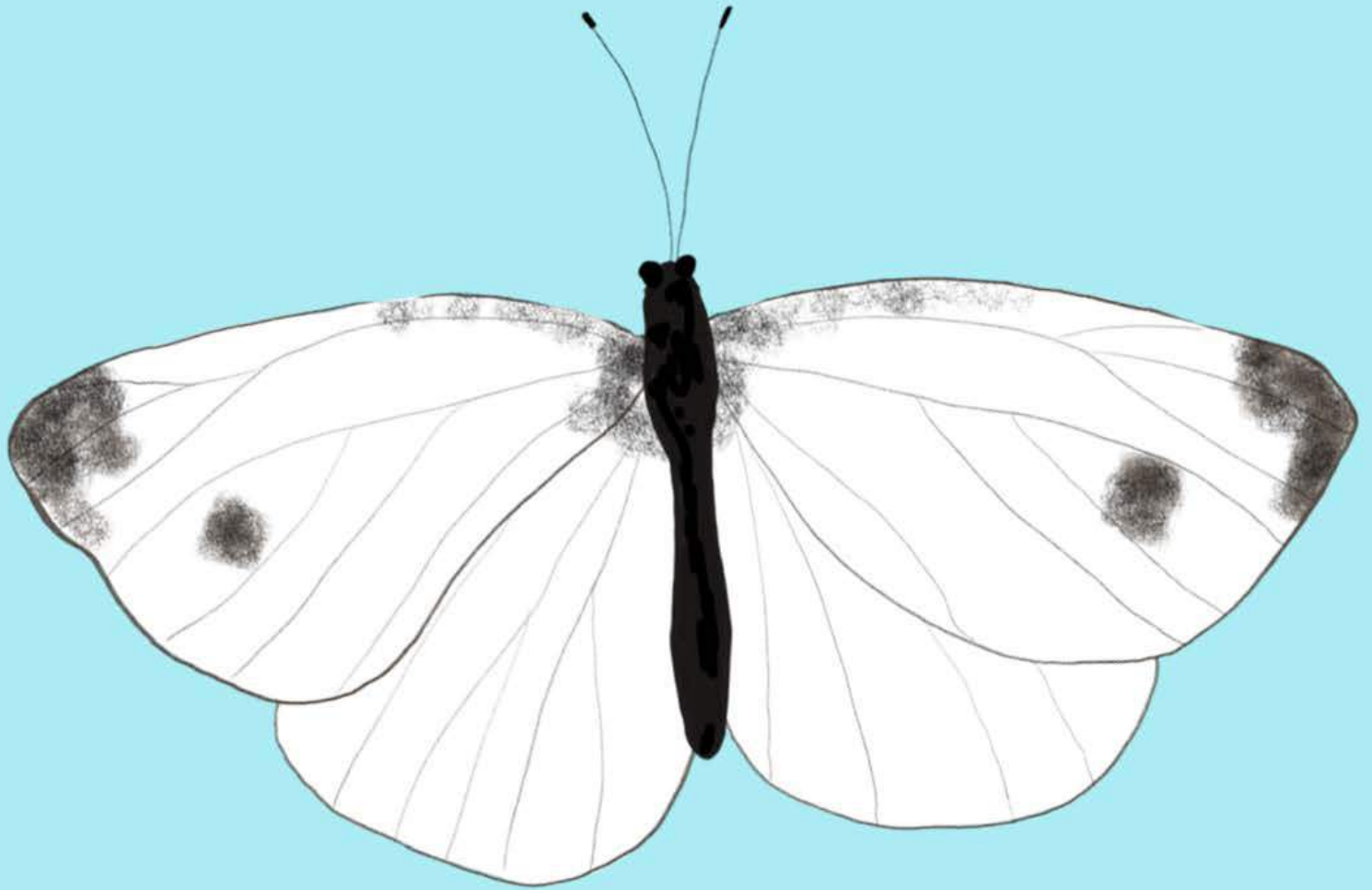
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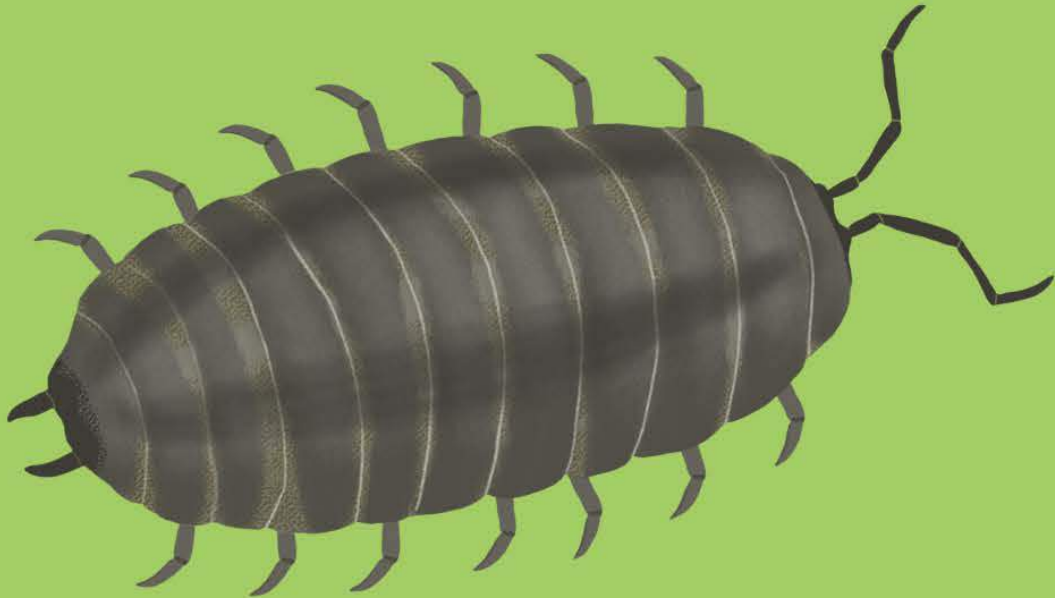
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Butterfly



Woodlouse



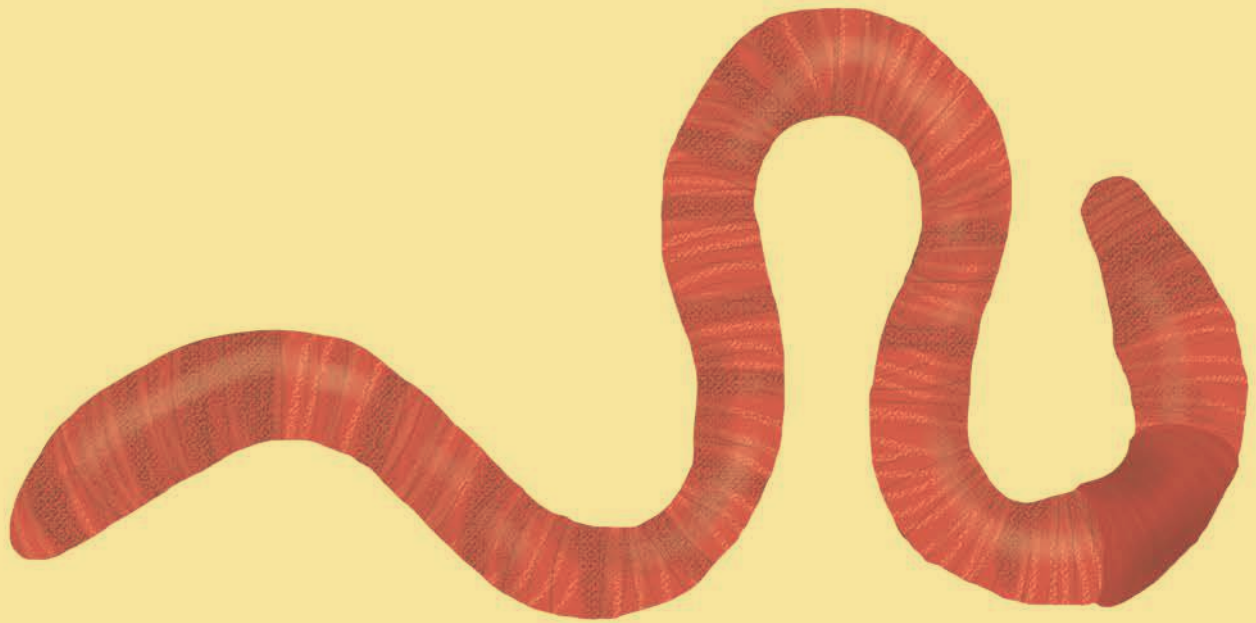
Snail



Ant



Worm



Flower Bingo



Dandelion ☐



Daisy ☐



Groundsel ☐



Red dead nettle ☐



Ribwort plantain ☐



Red Clover ☐

Dandelion



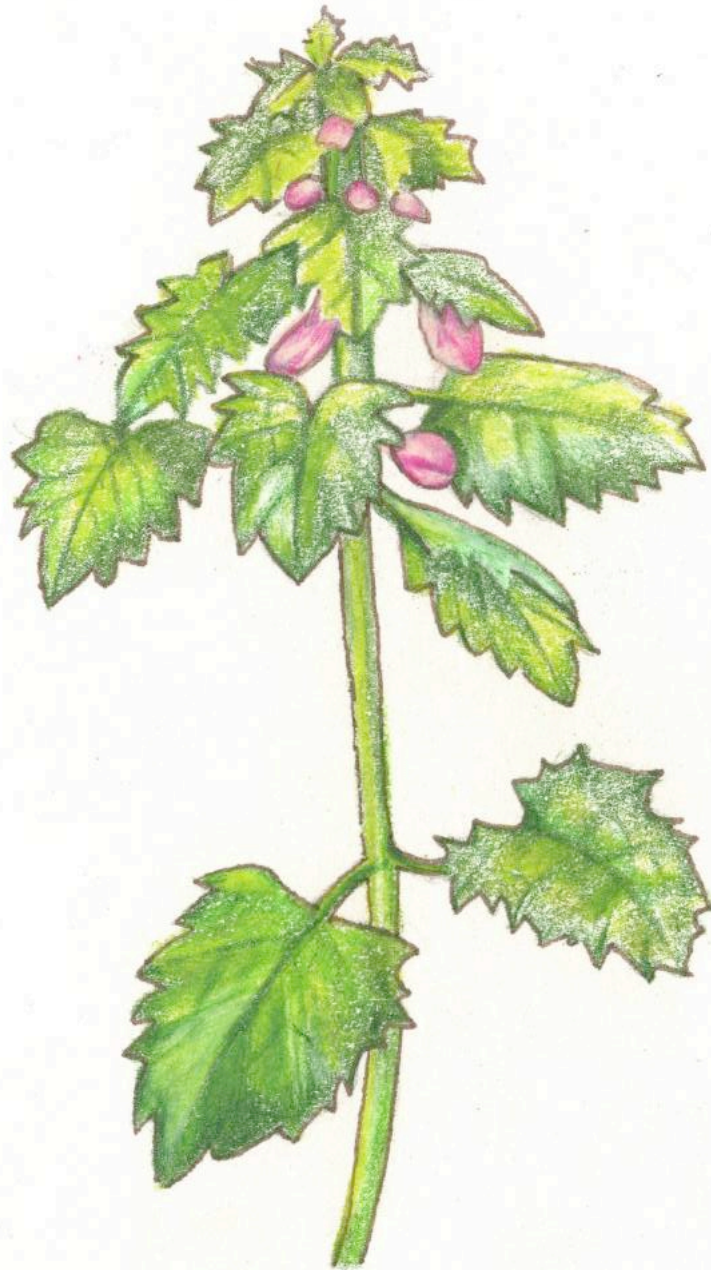
Daisy



Groundsel



Red Dead Nettle



Ribwort Plantain




Red Clover



1.

We don't eat anything and we
wash our hands after the session





2. We stay within
the set boundaries

3. We tell an adult if we see or
find anything that is not safe




4.

We are kind to each other
and to all living things



5. We carry sticks safely





6. If we want to run, we must
check for dangers first

Signposting -

next steps on your Wild Teaching journey

There are loads of amazing organisations out there offering free resources. Take a look and click the logo to link with their websites.



Forestry England - teaching packs, lesson plans, lovely spotter guides and outdoor teaching tips and risk assessments. <https://www.forestryengland.uk/learning-resources>



Wildlife Watch - a fab club for nature loving children, offering loads of events and a quarterly magazine. <https://www.wildlifewatch.org.uk/activity-sheets>



Council for Learning Outside the Classroom - a multitude of resources to connect schools with food, farming and the environment. <https://www.lotc.org.uk/resources/education-resources/>



Trees for Cities - primary curriculum guides and a wealth of advice on enhancing children's urban spaces. <https://www.treesforcities.org/our-work/schools-programme/edible-playgrounds/educational-resources>



OPAL - supporting children's research with survey sheets and a diverse range of ID guides and apps. <https://www.opalexplornature.org/schools>



Wild Time Learning - engaging, simple and easy to implement activities on a user friendly site. <https://wildtimelearning.com/>



RSPB - awards, school trips and outreach visits engage children in first-hand nature experiences. <https://www.rspb.org.uk/fun-and-learning/for-teachers/>



Sensory Trust - fueling creativity and adventure with great resources and guidance for inclusive nature-based sensory activities. <https://www.sensorytrust.org.uk/>



Woodland Trust, 'Trees for Schools' - enhancing learning in nature with beautiful ID and spotter sheets as well as lesson plans. <http://www.treetoolsforschools.org.uk/categorymenu/?cat=activities>



Countryside Classrooms - a multitude of resources to connect schools with food, farming and the natural environment. <https://www.countrysideclassroom.org.uk/>



Learning through Landscapes - building teacher confidence in outdoor learning through accessible workshops and resources. <https://www.ltl.org.uk/free-resources/>



Wildfowl and Wetlands Trust - lovely age-related activities that are easily implemented. <https://learningzone.wwt.org.uk/resources/after/>



People's Trust for Endangered Species - comprehensive and beautiful resources on UK based animals in their Kids Gone Wild section. <https://ptes.org/kids-gone-wild/>



Field Studies Council - visitor and residential centres supporting mental health through nurturing care for the environment and a range of fantastic weatherproof wildlife ID guides. <https://www.field-studies-council.org/>

Risk Assessment Template for school grounds



NB: This template is for guidance only. It is important that you write your own Risk Assessment for your setting

Assessing risk outdoors

Assessing risks for taking children outdoors is easier than you think. The benefits of taking children outside are so great and the risks can be measured and managed with a straight forward approach.

When making a risk assessment outside, just like inside the classroom or for school trips, there are three aspects to think about:

- **Benefit** – the positive outcomes of the experience/planned activities
- **Hazard** – the potential for something to cause harm
- **Risk** – the likelihood of it happening

Check the outdoor area(s) you will be using prior to the session to ensure nothing has changed and also to clear any litter or animal faeces. Analyse the Lesson Plan/s you intend to deliver to consider the potential hazards in relation to your class.

Because of the ever-changing nature of outdoor, green spaces, we have also included a 'Dynamic on the day Risk Assessment' section, so you can add any unforeseen factors when applicable.

If you are ever unsure of your evaluation check with other school staff so that you can get a balanced view of the risk and benefits inherent in a site or activity.

Review your risk assessments every quarter as there may be changes to the site, activities or cohort of children or adults.

On the next page is a template that you can use to make your own risk assessments of the planned lessons specific to the site you will be using and the children in your care.

Name of site:	Location of site <i>(include GPS if possible)</i> :	Nearest Hospital/A&E Department:	Nearest phone/person with mobile <i>(is there phone reception?)</i> Name: Number:
Assessor:	Date of assessment:		
Checked by:	Date of review:		

LH.S = likelihood score (1 – 5)

S.S = Severity score (1 – 5)

Activity	Possible Injury/harm	Who could be harmed?	LH. S 1 - 5	S.S 1 - 5	Risk level LH.S x S.S	Existing controls	Action required	By whom?
Walking to and from the outdoor learning area	Child becoming detached from group – lost child	Children	1	3	3	All members of staff familiar with lost child policy and procedures. Members of staff to walk at front and to rear of group. Good communication between staff at all times - proximity/walkie talkies/ phones. Staff aware and make use of the safest route to the learning area..	Children asked to walk in pairs where appropriate (buddy system). Children made aware of the dangers/consequences of becoming detached from the group.	Staff
All activities taking place outdoors.	Sun-stroke, heat stroke, hyperthermia	All	1	4	4	Advise parents about appropriate clothes and hats for their children. Lots of layers in cold weather. Sun-cream applied in hot weather.	Any child showing symptoms of hyperthermia to be taken inside to warm up. Change programme if necessary. Plenty of fluids in hot weather.	Staff
Extreme weather conditions (wind, storms)	Falling trees, branches	All	2	4	6	Check 24 hour weather reports. Do not enter woodland areas in high winds/electric storms.	Relocate or cancel session as necessary. Monitor weather throughout session. Identify areas of shade. Ensure appropriate clothing is worn.	Staff
Uneven ground, slips, trips, falls.	Broken bones, sprains, cuts, grazes.	All	3	2	6	At least one member of staff must have up-to-date First Aid training. First aid kit left in known, designated area. Staff to carry mobile phones	Children asked not to run and made aware of uneven ground, holes, tree roots etc. and any wet/ slippery areas at start of session.	Staff & children

Collecting natural materials and contact with hazardous plants (berries, fungi etc.) or dog faeces	Poisoning, nausea ill health, E-coli (rare), Toxocariasis	All	2	4	8	Area is checked prior to visit and hazardous plants such as Foxglove, Lily of the Valley (use an ID chart) and dog faeces removed. Each child is in sight of staff at all times. Staff First Aid trained and mobile phone with staff.	Children advised not to put ANYTHING (including fingers) into mouth and to wash hands with soap after all outdoor learning sessions and before food is eaten.	Staff & children
Contact with insects (bees, wasps etc.)	Sting, insect bites, allergies	All	2	3	6	At least one member of staff must have up-to-date First Aid training. First aid kit left in known, designated area. Staff to carry mobile phones	Children made aware of how to behave eg not swatting at wasps or bees where necessary.	Staff & children
Contact with allergens	Severe allergic reactions	All	2	5	10	Staff to be aware of all children/ adults with allergies (health forms filled out and checked prior to all sessions). Any medication/Epipen on site & easily accessible. Any training given to staff if	Follow emergency evacuation procedure in the case of any person suffering from severe allergic reaction.	Staff
Puncture wounds from sticks or prickly plants	Puncture wounds	All	2	3	6	Clear any low branches prior to session. At least one member of staff must have up-to-date First Aid training. First aid kit left in known, designated area. appropriate. Working mobile phone/signal checked before session.	Point out any areas of nettles or brambles to the children.	Staff & children

Litter	Trips, cuts from litter	All	2	3	6	Staff to check teaching area and clear litter etc. prior to start of session (using gloves, litter pickers).	Children told if they see anything 'unsafe', or that should not be there, to tell an adult and NOT to touch. All adults to be vigilant.	Staff & children
Tree layer – general well-being of trees and dead, broken or rotting branches	Puncture wounds, bruises, head injuries	All	1	6	6	Staff to check tree canopy and lower branches before session. Remove any small branches.	Report any unsafe looking trees. Relocate session if necessary.	Staff
Accident or ill health	Child or adult becomes ill or are hurt during the session.	All	1	8	8	Be aware of any medical conditions of any participants (health forms filled out and checked prior to all sessions). Any medication on site & easily accessible. Any training given to staff if appropriate.	Designated first aider stays with ill or injured person. One adult phones emergency services. One adult stays with and occupies the rest of the group.	Staff
Lost child	Child lost	Children	1	9	9	Staff to be familiar with Lost Child Policy and Procedures. Children told to stay with the group before session. Adults do regular head counts and have a list of children present readily available. Adults to be aware of any persons entering the session area.	Follow Lost Child Policy. Have up to date photos of each child available to give to police if necessary.	Staff
Tick bites	Rash, round, red inflamed area of skin. Lyme Disease (rare).	All	1	8	8	All adults and children to wear long trousers and long sleeved tops. First aid kit to include tick remover/staff trained in how to recognise and safely remove ticks.	Avoid waking through areas of long grass.	Staff

Carrying sticks	Puncture wounds, pieces in the eye.	All	1	7	7	Tell children how to carry sticks safely – one end pointing to the ground. Choose sticks no longer than your forearm. Tell children how to break sticks safely – snapping them towards the ground. First aider and kit easily accessible and contains sterile eye wash pods.	Remind children about the rules when necessary.	Staff & children
Sessions near water/ponds	Drowning, stomach bug from ingestion of water, infection of open cuts	All	1	5	5	Staff to closely observe and supervise children throughout the session. Staff to be alert to children near the edge of the pond and maintain safe work practices. Staff to carry out regular head count checks. Cover any cuts with waterproof plaster before working with water or pond life.	Tell children to kneel while at water's edge or come away from the edge if necessary and about danger and consequences of falling in if needed.	Staff

Dynamic, on the day Risk Assessment

LH.S = likelihood score (1 – 5)

S.S = Severity score (1 – 5)

Activity	Possible Injury/harm	Who could be harmed?	LH. S 1 - 5	S.S 1 - 5	Risk level LH.S x S.S	Existing controls	Action required	By whom?

Risk Assessment Template for off-site visits to local green spaces



NB: This template is for guidance only. It is important that you write your own Risk Assessment for your setting

Assessing risk outdoors

Assessing risks for taking children outdoors is easier than you think. The benefits of taking children outside are so great and the risks can be measured and managed with a straight forward approach.

When making a risk assessment outside, just like inside the classroom or for school trips, there are three aspects to think about:

- **Benefit** – the positive outcomes of the experience/planned activities
- **Hazard** – the potential for something to cause harm
- **Risk** – the likelihood of it happening

You should familiarise yourself with your off-site green space in advance. If you are using a publicly accessible green space, allow more time for site reccie and picking up litter. Analyse the Lesson Plan/s you intend to deliver to consider the potential hazards in relation to your class.

Because of the ever-changing nature of outdoor, green spaces, we have also included a 'Dynamic on the day Risk Assessment' section, so you can add any unforeseen factors when applicable.

If you are ever unsure of your evaluation check with other school staff so that you can get a balanced view of the risk and benefits inherent in a site or activity.

Review your risk assessments every quarter as there may be changes to the site, activities or cohort of children or adults on your trip.

On the next page is a template that you can use to make your own risk assessments of the planned lessons specific to the site you will be using and the children in your care.

Name of site:	Location of site <i>(include GPS if possible)</i> :	Nearest Hospital/A&E Department:	Nearest phone/person with mobile <i>(is there phone reception?)</i>
Assessor:	Date of assessment:		Name:
Checked by:	Date of review:		Number:

LH.S = likelihood score (1 – 5)

S.S = Severity score (1 – 5)

Activity	Possible Injury/harm	Who could be harmed?	LH. S 1 - 5	S.S 1 - 5	Risk level LH.S x S.S	Existing controls	Action required	By whom?
Getting to site on foot	Child becoming detached from group – run over, lost	Children	1	9	9	All members of staff familiar with lost child policy and procedures. Members of staff to walk at front and to rear of group. Good communication between staff at all times - proximity/walkie talkies/ phones. Staff aware and make use of the safest route to site.	Children asked to walk in pairs where appropriate (buddy system). Children made aware of the dangers/consequences of becoming detached from the group.	Staff
Getting to site by minibus or public bus service – road traffic accident	Minor bumps and bruises, major injury (very rare)	All	1	9	9	Vehicle regularly serviced and well maintained with current MOT. Driver is appropriately trained with a current, clean driving licence. Staff check everyone's safety belt. All equipment and bags stowed safely, securely and away from aisles and emergency exits. At least one member of staff to have up to date first aid training. First Aid kit in known, easily accessible location. Staff to carry mobile phones.	Children asked to keep noise to an acceptable level so driver is not distracted. Children reminded to keep their safety belts on until told that the vehicle has come to a final stop.	Staff & children
All activities taking place outdoors.	Sun-stroke, heat stroke, hyperthermia	All	1	4	4	Advise parents about appropriate clothes and hats for their children. Lots of layers in cold weather. Sun-cream applied in hot weather.	Any child showing symptoms of hyperthermia to be taken inside to warm up. Change programme if necessary. Plenty of fluids in hot weather.	Staff

Extreme weather conditions (wind, storms)	Falling trees, branches	All	2	4	6	Check 24 hour weather reports. Do not enter woodland areas in high winds/electric storms.	Relocate or cancel session as necessary. Monitor weather throughout session. Identify areas of shade. Ensure appropriate clothing is worn.	Staff
Uneven ground, slips, trips, falls.	Broken bones, sprains, cuts, grazes.	All	3	2	6	At least one member of staff must have up-to-date First Aid training. First aid kit left in known, designated area. Staff to carry mobile phones	Children asked not to run and made aware of uneven ground, holes, tree roots etc. and any wet/ slippery areas at start of session.	Staff & children
Collecting natural materials and contact with hazardous plants (berries, fungi etc.) or dog faeces	Poisoning, nausea ill health, E.coli (rare), Toxocariasis	All	2	4	8	Area is checked prior to visit and hazardous plants such as Foxglove, Lily of the Valley (use an ID chart) and dog faeces removed. Each child is in sight of staff at all times. Staff First Aid trained and mobile phone with staff.	Children advised not to put ANYTHING (including fingers) into mouth and to wash hands with soap after all outdoor learning sessions and before food is eaten.	Staff & children
Contact with insects (bees, wasps etc.)	Sting, insect bites, allergies	All	2	3	6	At least one member of staff must have up-to-date First Aid training. First aid kit left in known, designated area. Staff to carry mobile phones	Children made aware of how to behave eg not swatting at wasps or bees where necessary.	Staff & children
Contact with allergens	Severe allergic reactions	All	2	5	10	Staff to be aware of all children/ adults with allergies (health forms filled out and checked prior to all sessions). Any medication/Epipen on site & easily accessible. Any training given to staff if appropriate. Working mobile phone/signal checked before session.	Follow emergency evacuation procedure in the case of any person suffering from severe allergic reaction.	Staff

Puncture wounds from sticks or prickly plants	Puncture wounds	All	2	3	6	Clear any low branches prior to session. At least one member of staff must have up-to-date First Aid training. First aid kit left in known, designated area.	Point out any areas of nettles or brambles to the children.	Staff & children
Litter, hazardous waste, inc. needles	Trips, cuts from litter	All	2	3	6	Staff to check teaching area and clear litter etc. prior to start of session (using gloves, litter pickers). If needles or other hazardous waste are found, do not attempt to clear. Contact your Local Authority (Parks Department) who will clear this waste. Relocate the session to another area.	Children told if they see anything 'unsafe', or that should not be there, to tell an adult and NOT to touch. All adults to be vigilant.	Staff & children
Tree layer – general well-being of trees and dead, broken or rotting branches	Puncture wounds, bruises, head injuries	All	1	6	6	Staff to check tree canopy and lower branches before session. Remove any small branches.	Report any unsafe looking trees. Relocate session if necessary.	Staff
Accident or ill health	Child or adult becomes ill or are hurt during the session.	All	1	8	8	Be aware of any medical conditions of any participants (health forms filled out and checked prior to all sessions). Any medication on site & easily accessible. Any training given to staff if appropriate.	Designated first aider stays with ill or injured person. One adult phones emergency services. One adult stays with and occupies the rest of the group.	Staff
Contact with dogs	Dog bite	All	1	7	7	Staff to be aware of any dogs entering the area. Before start of session children advised not to approach or touch any dogs (Can wave instead).	Children reminded not to approach or touch. Designated first aider to treat child. Other staff to stay with and occupy rest of the group where needed.	Staff & children

Lost child	Child lost	Children	1	9	9	Staff to be familiar with Lost Child Policy and Procedures. Children told to stay with the group before session. Adults do regular head counts and have a list of children present readily available. Adults to be aware of any persons entering the session area.	Follow Lost Child Policy. Have up to date photos of each child available to give to police if necessary.	Staff
Tick bites	Rash, round, red inflamed area of skin. Lyme Disease (rare).	All	1	8	8	All adults and children to wear long trousers and long sleeved tops. First aid kit to include tick remover/staff trained in how to recognise and safely remove ticks.	Avoid waking through areas of long grass.	Staff
Carrying sticks	Puncture wounds, pieces in the eye.	All	1	7	7	Tell children how to carry sticks safely – one end pointing to the ground. Choose sticks no longer than your forearm. Tell children how to break sticks safely – snapping them towards the ground. First aider and kit easily accessible and contains sterile eye wash pods.	Remind children about the rules when necessary.	Staff & children
Sessions near water/ponds	Drowning, stomach bug from ingestion of water, infection of open cuts	All	1	5	5	Staff to closely observe and supervise children throughout the session. Staff to be alert to children near the edge of the pond and maintain safe work practices. Staff to carry out regular head count checks. Cover any cuts with waterproof plaster before working with water or pond life.	Tell children to kneel while at water's edge or come away from the edge if necessary and about danger and consequences of falling in if needed.	Staff

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