

outdoor learning pack



for primary school teachers in Scotland, England, Northern Ireland and Wales



getting there... (and back again!)

NFORMATION

Activity Type



Curriculum areas

All, including Health and Wellbeing / Physical Education

Length

10 - 20 mins



Raising awareness of the things that are around them will help to immerse your class in the natural environment.



Leave a trail

One group goes ahead and leaves an obvious trail using natural materials or chalk to show the other group where to go (agree your symbols first).

Slow, quiet walking

Moving slowly and quietly increases awareness and appreciation of the natural world. Taking shorter strides than normal, place one foot down carefully in front of you without putting any weight on it. Slowly shift the centre of gravity from the back foot to the front one. Practise this technique by asking the class to walk across the woodland to reach one member of the class (who has their eyes closed) without being heard by them!



Varied vision

Encourage children to view the world around them in different ways. Try to think of interesting perspectives on your route each time you do it – overhead, under leaves, backwards, through strips of coloured plastic.

Focus in on the very small or the very TALL! Using fingers to make a frame, imagine you are a camera and the variety of shots you could view – landscape, macro (close up), wide-angle.

··· Liked those? Try these!

"Nature and Survival for Children" from Tom Brown's Field Guides "Sharing Nature with Children – Parts I & II" by Joseph Cornell



getting to know your trees

NFORMATION

Activity Type

Curriculum areas Science, Maths, Languages, Arts

Length **15 – 25 mins**

There's more to tree identification than just learning a name. The senses can be used to really explore what makes each one unique.



Shape

Leaf shapes can distinguish one tree from another as can the tree's profile.



Surface

Twigs, leaves, bark on the trunk – each species has its own range of textures. Explore them thoroughly with your class and then see if they can tell different trees apart with their eyes closed.



Scent

Scratch the surface of some leaves and you'll smell the difference...



Sound

Sitting and listening under different trees (when in leaf) will give another perspective on your trees and their 'music'.

Record your findings

The needles of Douglas Fir trees smell like spicy oranges; beech tree trunks look like elephant legs; aspen leaves sound like the sea. Your children can invent their own 'tricks' to help recognise different tree species. Explore different ways to describe the sensory experiences you've had of your trees and use it to write poems to hang on a Po-e-tree.

More things to do with trees

- > "Meet a Tree" activity available from Joseph Cornell's Sharing Nature website
- "Measuring the height of a tree" Science and Plants for Schools www.saps.org.uk/attachments/article/141/SAPS_How_to_find_the_height_of_a_tree.pdf
- > Once you really know your trees, the names will be easier to remember in many languages. (see the Gaelic and Modern Language tree-name sheets on page 21)

••• These might help too...

Craigmillar Wildlife Web activities – **www.wildlifeweb.org.uk** WildPlay Kitbag activities – **www.herefordshirewt.org/discover-learn**



animal homes

What are the features that make somewhere a good home? Sheltered, warm, dry, near water and food-sources – plus fresh-air provided by all the green plants of course.

A Cun Scien Techn.
Length 30 – 45

Activity Type

Curriculum areas Sciences, Arts, **Technology**

30 - 45 mins



Which natural materials could be used to build one if you were a native animal living in the local woods? Which have the best properties for building? Which are best for warmth?









- Decide which native mammal each small group is going to make. Make your mammal from clay and natural materials.
- Gather some more natural materials and build a shelter in a suitable place (i.e. on the ground for a hedgehog, in a tree for a squirrel).
- Put each mammal in its new home and allow an opportunity for the children to visit each other's shelters. Discuss the different techniques, materials and positions of each shelter.
- Extend the activity into thermal properties of materials by using bottles filled with hot-water as the 'animals'. Take each animal's temperature at the start, leave them in their homes for a set time and then return later to retake temperatures.

Inspiration

A wonderfully colourful collection of activities, crafts and games which encourage children to get outdoors can be found in "Nature's Playground" and "Make it Wild", by Fiona Danks & Jo Schofield.

*** Homes stories to tell to get children started...

"Do Lions Live on Lily Pads?" by Melanie Walsh

"A House is Built at Pooh Corner for Eeyore" by A. A. Milne







minibeasts in the trees

Safely looking for minibeasts can be tricky in urban woods so if you don't want to encourage hunting at ground level, why not look in the trees?



Activity Type

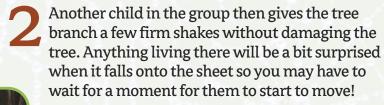
Curriculum areas **Sciences**, **Maths**

Length **30 – 45 mins**





Working in small groups ask two children to stretch out a sheet of white cloth (not fluffy material or your beasties will stick to it) beneath a tree branch. When choosing their tree, remind children to be aware of any thorns or prickly leaves.







Use a paint-brush to gently scoop minibeasts into the pot (the winged ones will fly away fairly quickly!) ready for the child with the ID sheet to see what they might have found. Comparing the variety of life found on different tree species will help to assess their biodiversity value.

Other minibeast hunting Ideas

- Look under the leaves of the trees and bushes nearby.
- Check out the bark lots of things live there! If you have trees in your school grounds, tie some strips of corrugated card around the trunk and check back in a few days to see what's taken shelter under them.
- Dead wood (fallen logs or branches) offer an excellent habitat for lots of different minibeasts from the ones found on living trees.



..... Liked those? You'll love these!

Countryside Classroom www.countrysideclassroom.org.uk/
Outdoor Learning Directory www.outdoorlearningdirectory.com



numeracy

NFORMATION

Activity Type

Curriculum areas

Maths, Sciences

Length **30 – 45 mins**

Measuring, recording and ageing trees offers numerous opportunities to explore numbers and shape.



Height

Try to see the top of a tree whilst looking upside-down between your legs! When you can see the top, ask someone to measure the distance between you and the tree. Add your leg length for a good approximate height of the tree – it's just trigonometry really!

Age/Girth



You can age a tree by counting its rings of growth. But that's not very easy unless it has been cut down! Fortunately, the approximate age of a tree can be estimated from the girth (circumference) of the trunk at 1.5m above the ground.

Although each tree grows at a slightly different rate (just like us), on average the new growth on its girth is 2.5cm per year. Dividing the tree girth (in cm) by 2.5 = age in years. Can the children find a tree their age? Which is the oldest and fattest?

Other things to do with trees, leaves and seeds!

- > Count the number of paces between one tree and another how close do they grow to each other?
- > Plot them onto a map or grid-squared paper.
- > Compare shape or area of leaves or seeds.
- > Find the largest, tallest, furthest, widest...
- > Count the number of edges on leaves of different species.

...... Liked those? You could try these...

Record fat, old trees or ones with an interesting history! www.ancient-tree-hunt.org.uk

Record tree health and more www.opalexplorenature.org/schools



literacy

NFORMATION

Activity Type

Curriculum areas

Languages, Sciences

Length

30 - 45 mins

The natural world is a wonderful source of inspiration for both written and spoken language. Visits to your local green space will give children a shared real-life experience to be recorded or discussed in class.



Recipe for a Woodland*

Sitting outside, give each child a pencil and a piece of paper and ask them to write a recipe for their own woodland. Encourage the children to be as creative as they can. Which ingredients would they add? How would they make sure it was sustainable? Think about biodiversity and external influences like the weather.

Oxymorons

Writing up a journey using specific literacy techniques, "Walking through that barren greenspace in the deafening silence was such sweet sorrow..."



Collective noun faking

A parliament of owls; a storytelling of rooks; an army of frogs; a glint of goldfish; a prickle of hedgehogs. These are all real names for groups of animals that reflect their characteristics.

You couldn't make them up, could you?! Or could you...?

Other Ideas

- > Word games, word groups, adjectives, nouns, onomatopoeia.
- > Poems like Haiku, Acrostic, Lyric or Shape.
- > Traditional stories, fairy tales, mythology & folklore often set in the natural world they can be used to challenge popular misconceptions about woods. Encourage children to read books outside. Set up a storytelling or quiet reading space to enable this to happen.

Liked those? Try these for more great ideas...

"Jumpstart! Literacy – games and activities for 7 – 14 years" by Pie Corbett Literacy Outdoors www.creativestarlearning.co.uk/c/literacy-outdoors/

 $\textbf{*``Recipe for a Woodland'' is one of Joseph Cornell's ``Sharing Nature'' activities which are available for free from www.sharingnature.com$



art or science?

NFORMATION

Activity Type
Curriculum areas

Sciences, Arts

Length **30 – 45 mins**

Art and science often overlap – in the real world as well as the curriculum. From beautiful scientific images of natural history to the artistic creativity & imagination required for scientific progress, the line has been blurred.



Woodland sounds

Wind rustling leaves, branches creaking, people walking, birds singing or moving in the undergrowth. What direction are the sounds coming from? How far away do they originate from?

Vibrations created by sharply tapping on living and dead wood produce a variety of sounds. Do all tree species sound the same? How can you tell the difference between living and dead wood other than sound?



Shadow drawing

Observing the passing of time and the movement of the sun can be achieved together by putting a stick in the ground, marking the shadow and then returning after a short while to see how far the shadow has moved.

Make it more artistic by attaching a piece of white card to the stick, carefully trace the shadow of a plant and then come back to redraw it when it has moved. Use charcoal or soft pencils to give the drawings a 'shadowy' effect.

Other ideas!

- > Move like a minibeast it may take more than one person to get the correct number of legs though...
- > Make up a dance about a tree, a pigeon or some grass.
- > Set up a woodland theatre: string up a tarpaulin between some trees for a roof and there you have your natural stage just as Shakespeare would have done!

··· Help make your school grounds more interactive...

Eco-school www.eco-schools.org.uk Grounds for Learning www.ltl.org.uk



wildart

NFORMATION

Activity Type

Curriculum areas
Arts, Technology,
Sciences

Length **30 – 45 mins**

Andy Goldsworthy – British artist living in Scotland known for being an 'environmental or land artist'. His ethos is to create both temporary and permanent sculptures, using natural and found objects, which draw out the character of their environment.



Wild Art is a very versatile way to explore many different things. It can be used as a form of personal expression or be more focused.

Why not look at identifying patterns, highlighting colours or shapes in nature.

You could explore ways to view the natural world differently, to spark imagination for a later art session.

It doesn't just have to be 2-dimensional. 3-D structures and sculptures can be a great way to explore the properties of different materials!





Comprehension of abstract concepts can be assessed through the use of natural art.

This picture shows one group's understanding of 'The Water Cycle'. Taking a photograph of it provides a permanent record whilst the transient art just blows away...



Masks or Hats
Dreamcatchers
"Talking to the Earth" by Gordon MacLellan



••• Environmental artists from the U.K.

Andy Goldsworthy www.goldsworthy.cc.gla.ac.uk
Antony Gormley www.antonygormley.com
Tim Knowles www.timknowles.co.uk





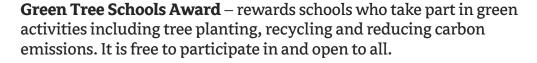
follow-up opportunities



Nature Detectives – 100's of free resources for, children, families and schools, including Leaf ID Sheets, Games and Outdoor Play ideas.



Natures Calendar – record your nature observations each spring and autumn and help us to record the impact of the changing climate on the natural world. This really is Real World Learning!





The John Muir Award – is an environmental award scheme focused on wild places. It encourages awareness and responsibility for the natural environment in a spirit of fun, adventure and exploration.



OWL Scotland – is dedicated to increasing the use of Scotland's outdoor environments for learning. Learning outdoors, be in playgrounds, towns, cities, parks or our stunning natural environments, actively engages young people and connects their broader learning with the world around them.



Council for Learning Outside the Classroom – is the national voice for learning outside the classroom. We believe that every young person (0-19yrs) should experience the world beyond the classroom as an essential part of learning and personal development, whatever their age, ability or circumstances.

Bringing the outdoors in through cookery

Highlight local woodland produce:

Fruit = apples, pears, sloes, damsons

Berries = elderberry, blackberry, blaeberry, raspberry

Nuts/Seeds = walnuts, sunflower

Flowers/Leaves = nettles, elderflowers, lime

Ecological & Carbon footprints for schools

Search for 'Sustainable development education' on www.educationscotland.gov.uk

Or for assessing your individual impact...

WWF Footprint Calculator footprint.wwf.org.uk

Environmental footprint calculator

www.greenschools.net

Ideas and resources to shrink your carbon www.carbondetectiveseurope.org