Memorial Park Biological Heritage Pack

- KS1 and KS2 Lesson Plans -
- Key Species Info Sheets -

This Biological Heritage pack aims to support schools in using Memorial Park as an outdoor learning space to further children's education, including using the new Forest School area within the park.

The activities are put together so that there is one classroom or school based activity and one activity in the park for Key Stage 1 and 2.

The pack has been put together as part of the regeneration of Memorial Park in Great Harwood in 2024. The project has been a collaboration of Profitts CIC, Friends of Memorial Park, The Prospects Foundation and Hyndburn Brough Council and was funded by the Lancashire Environmental Fund the National Lottery Heritage Fund.

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Intro to the Park

Memorial Park has been a public space since 1921. The first part to be built was the WW1 War Memorial in 1926 and the rest of the park has been built around it over the past 100 years. There are 2 main habitats in Memorial Park: managed grasslands and parkland trees, and Round wood which is deciduous woodland.

Park address:
Memorial Park, Church Lane, Great Harwood, BB6 7PT

The park is owned and managed by Hyndburn Borough Council.

Lesson plans

KS1
Habitats and intro to Bug Hunting
Nature Trail and Bug Hunting

KS2
Ecosystem and food webs
Nature trail, Scavenger Hunt and Connecting to Nature

Timings have been left out of the lesson plans to accommodate the timings for your group, although they should be achievable in around an hour. Park-based lessons would benefit from being a bit longer - 1.5 hours, to allow the students time to explore the park and engage with nature during the activities.

Each lesson plan shows curriculum links, and the kit and prep required. Some activities have suggestions for how they could be changed to better suit your class.

We hope you find these ideas useful.

KS1 lesson plan – school based

Habitats and bug hunting

Objective

- Discover the different habitats at Memorial Park and where the species that live there live.
- Learn about habitats, microhabitats, camouflage, and where insects live.

Curriculum links

- Identify and name common animals – including fish, amphibians, reptiles, birds, and mammals
- Compare habitats and microhabitats

Equipment

- PowerPoint (downloadable from the Friends of Memorial Park webpage)
- Habitat corners sheets (printable from Appendix 1 in this pack)
- Around 100 4cm long strands of wool of different colours (please use real wool or cotton so that it is biodegradable as some are likely to get lost)
- A board with hook Velcro attached, to collect and display the 'worms' (example photo is Appendix 2 in this pack)
- Insect scavenger hunt sheets (printable from Appendix 3 in this pack)
- Pencils (one per person)
- Any bug hunting kit you have (pots, paintbrushes, magnifying glasses). Old houmous/other plastic pots are good for this.
- Access to an outside space in the school grounds

Prep

- Print habitat name sheets (one of each)
- Hide the woolly worms around the search area
- Print bug scavenger hunt sheets and cut them in half

Activities

Intro

- Discuss what a habitat is and what types of habitats there are in the world. Although Memorial Park is quite small, it has different places where plants and animals can live.

Starter: Habitat corners

- Place a habitat corner sheet in each corner of the room. Call different species found in Memorial Park. The students walk to where they think that species lives. Some can have multiple answers and can cause discussions.
- Examples: woodpecker, pigeon, robin, grasshopper, snowdrop, oak tree, fungi, woodlouse, nettles.

Microhabitats

- Discuss what a microhabitat is, and examples of this. Focus on microhabitats the students might find in the playground or school grounds where insects may live (e.g. leaf litter, under logs, cracks in pavement and walls)

Woolly Worms

- Go into the playground. Explain the game to the students. “You are all birds looking for things to eat.” What do birds eat? (seeds, insects, slugs, worms, etc). “You need to collect worms to bring them back to the nest. You can only bring one worm at a time.” The nest is the Velcro board. Show them what a ‘worm’ looks like (a strand of wool).
- “What eats birds?” (Birds of prey). Do they know any types of birds of prey? Sparrowhawks eat birds. “If I shout ‘sparrowhawk’ come back to the nest”.
- Remind them to only collect one at a time. Once all of the brightly coloured ones have been found, call ‘sparrowhawk’. Discuss with the students: Was it easy? What colours have been found? (it will hopefully be mainly red, pink, yellow, orange)
- Go again. This time let them look until they have found all the worms. Call ‘sparrowhawk’ to collate the group. Discuss with the students: Was it as easy as last time? What colours did you find this time (should be greens, browns, darker colours). Why was it harder to see them? (camouflage)
- Link this to the next activity by asking what colours the insects will likely be to blend into their surroundings.

Bug hunt

- Hand out bug hunting sheets and pencils, and any bug hunting kit you have.
- Students look round their school grounds and try to find as many species as possible on the scavenger hunt. Can use this as a comparison between the school grounds and the park (which is better for nature?)

Round up: Discussion/ animal charades

- Students get into small groups and use physical theatre to act out the favourite bug they found. Other groups guess what it is.
- Suggestion: Students write a bingo sheet (3x3) of natural things they think they’ll find in Memorial Park. Take the sheets with you to the park and see how many they can spot.

KS1 lesson plan – park based

Nature trail and bug hunting

Objective

- Discover the different habitats at Memorial Park and where the species that live there live.
- Discover and classify insects in different habitats and compare them.

Curriculum links

- Identifying common wild and garden plants - deciduous and evergreen trees
- Identify and name common animals – including fish, amphibians, reptiles, birds, and mammals
- Explore the properties and uses of different materials

Equipment

- High adult: child ratio, allowing the class to separate and groups to work autonomously.
- Risk assessment for activity (printable from Appendix 9 in this pack)
- Any bug hunting kit you have (pots, paintbrushes, magnifying glasses). Old humous/other plastic pots are good for this.
- Insect scavenger hunt sheet (and possibly bingo sheets) from classroom session.
- Nature rubbing post trail map (printable from Appendix 4 in this pack).
- Nature trail worksheet, per person (printable from Appendix 5 in this pack).
- Crayon or coloured pencil for brass rubbings. Some to share per group.
- White sheets for bush shaking
- Sweep nets for grassland bug hunt, if possible

Prep

- Collate kit

Activities

Intro

- Cover risk assessment considerations (boundaries, staying with groups, dogs, litter, etc.)

Starter: Nature rubbing trail around the park

- Find the rubbing posts around the park, take a rubbing and answer the question on the sheet at each post, and try to look for the plants and animals on the posts where the posts are situated.
- Suggestion: Split into groups and go round the posts as a circuit this will cause less of a backlog as each person makes their rubbing. Could also share one sheet between a group of 5 to speed the activity up.

Bug hunt

- Split students into two groups (one in each habitat) or leave them as one, depending on numbers, knowledge and confidence of staff.
- Gather group. We're looking for invertebrates. What does that mean (no spine). What are examples of animals with no spines? (any insect, worms, octopus, squid, jellyfish, starfish, spiders).
- Woodland habitat bug hunt (Round Wood, Forest School site)
- What are they likely to find in this habitat? (slugs, snails, woodlice, centipedes, millipedes, etc.) Look around. What colour are they likely to be? (Brown, grey)
- Safety (in risk assessment). Demo rolling a log (away from you, with hands not feet) and picking up an insect using a brush to brush it into the pot. No shaking the pots. Keep slimy (slugs and snails) in a separate pot from non-slimy to stop the slimy being eaten. Put the log back at the end of the demo (put the roof back on its home). Explain boundaries (as far as they can see a teacher, or specific trees).
- Hand out any bug hunting kit. Students search for insects to tick off their scavenger hunt sheet. Good places to look are in leaf litter, around the bottom of trees and under logs.
- After 15 minutes (or when they lose focus) bring them back together. What was their favourite invertebrate? Have a show and tell where the pair pick and talk about their favourite find and show everyone.
- Talk through how to put the animals back (carefully, and where you found them) and let the bugs be released.
- Move to grassland area.
- Grassland habitat bug hunt (rewilding area to the east of the war memorial)
- How is this habitat different? (drier, sunnier, more ground cover, less rotting material) Will they find the same or different in this habitat? What types of insects are they likely to find? (Grasshopper species, cricket, spiders, lady birds, shield bugs, etc.) What colours are they likely to be? (green, brown, striped)
- Safety (in risk assessment). Demo bush shaking, and sweep netting if you have the nets. Using a brush to brush it into the pot. No shaking the pots. Boundaries.

- Hand out any bug hunting kit. Students would work in groups to try bush shaking and sweep netting. Or they will find things just by looking and rummaging in the grass too.
- After 15 minutes (or when they lose focus) bring them back together. What was their favourite insect? Have a show and tell where the pair pick and talk about their favourite find and show everyone.
- Talk through how to put the animals back (carefully, and where you found them) and let the bugs be released.

Round up: Discussion/Nature Art

- Were the insects different in different parts of the park? Were they different to the ones found in the school grounds? Why? (more habitat, differing habitats?).
- Students use natural materials to make their favourite insect they found. This could be done in the woodland area where there are lots of sticks and leaves.

How to bush shake:
-Lay a white cloth under the bush
-Vigorously, but with control, shake the bush. Be careful not to harm the bush.
-Insects will fall off the bush onto the sheet. Look at the insects!

How to sweep net:
-Walk through long grass with the net dragging through the grass next to you. Sweep quite deep into grass to catch insects hiding further down the grass stems.
-Hold the top of the net together to stop insects jumping or flying out.
-Turn the net inside out to empty it onto the white sheet. Look at the insects!

KS2 lesson plan – school based

Ecosystem and food webs

Objective

- To explore the species of Memorial Park and how they are interconnected.
- To discuss food webs and chains.

Curriculum links

- Science - producers, predators and prey - food chains and webs (Y4)
- Life cycles of a mammal, an amphibian, an insect and a bird (Y5)
- Adaption to the environment and how this leads to evolution (Y6)
- Science - using classification keys to group plants, vertebrates and invertebrates (Y4) Classifying living things (Y6)

Equipment

- PowerPoint (downloadable from the Friends of Memorial Park webpage)
- Ball of string/wool
- Small piece of paper, or sticky note, per person
- Pens/pencils

Prep

- Collate kit
- Hand out sticky notes/paper to each person
- A large open space

Activities

Intro

- Introduce Memorial Park and the habitats there (grassland, bushes, flowers, woodland and a stream). Recap classifications of living things.

Starter:

- Split the class into 4 sections. Each section is given a classification (plants, vertebrates - mammals, vertebrates - birds, invertebrates). Each person thinks of a species in their classification that might live in Memorial Park and writes it on the paper.
- Suggestion: for younger years you may need to provide more scaffolding and explanation of classifications. Use the Key Species pages for ideas.

- Recap the function of producers, predators and prey and as a class decide on an action for each of them. As each person reads their species suggestion out, the class decides whether it is a producer, predator or prey and does that action.

Main: Memorial Park Ecosystem Web

- Students stand in a circle. Each represents the species that they chose at the start of the session. Pick someone to start. They will be the sun.
- Without letting go of the end, the sun throws the ball of yarn to another organism and states how they are connected to each other in the ecosystem. For example, the sun may throw the yarn to the plant because the sun helps the plant to grow.
- The new person will keep hold of the yarn and throw the ball to another person, while stating how they are also connected. Continue until everyone is connected. The sun may need to be used multiple times to connect plants. The web does not necessarily have to be a food chain. For example, a mouse could link to a grass because it uses long grass for shelter.
- Discuss as a group what would happen to the ecosystem in different scenarios. Pluck one of the strands, and note the vibrations across the web. If one connection was dropped it would disturb the whole web. Discuss reasons why different parts of your ecosystem might be disrupted. For example if there was a drought because of climate change, or the ground was tarmacked, and all the plants died, who else would be affected? People representing plants drop their thread. Reflect on what happened. What happens when an organism is removed from the ecosystem?

Food web

- Challenge the pupils to draw a food chain or web for their species (or another species) in relation to Memorial Park. This could be done in small groups or individually.

Round-up

- Link this to what the students will find at Memorial Park. Ask the pupils to think of one clue that they could find to show their food chain is happening in Memorial Park. Will they see birds eating seeds? Or holes in leaves where caterpillars have eaten them? Challenge them to find this clue when they visit the park.

KS2 lesson plan – park based

Nature trail orienteering

Objectives

- To learn and use compass and map skills to navigate round the park.
- To learn about the key species in the park.

Curriculum links

- Geography - use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world
- Science - using classification keys to group plants, vertebrates and invertebrates (Y4) Classifying living things (Y6)

Equipment

- High adult: child ratio, allowing the class to separate and groups to work autonomously.
- Risk assessment for activity (printable from Appendix 9 in this pack).
- Compass (1 per group)
- Ways of finding North info sheet
- Wildlife orienteering map of park (printable from Appendix 6 in this pack). One per group.
- Nature rubbing trail worksheet (printable from Appendix 7 in this pack). One per person.
- Crayon or coloured pencil for brass rubbings. One per group.
- Star orienteering group tracker sheet (printable from Appendix 8 in this pack).

Prep

- Collate kit
- Complete the council forms to alert them that you'll be using the park

Activities

Intro

- Cover risk assessment considerations (boundaries, staying with groups, dogs, litter, etc.).

Starter: Compass Directions

- Recap compass directions by labelling 4 bases North, South, East and West and students running to the correct one.
- Discuss different ways of finding north:
  - The sun. Rises in the east and sets in the west. At midday it is directly south.
  - Nature. Look at isolated trees in the park – branches are more horizontal on the southern side as they grow towards the sun (mainly south). On the northern side the branches are more vertical, and there is likely to be more moss.
  - Compass. The direction the red needle points as it is magnetic).
  - Map. The top of the map is north.
- Use this to find north in the park (when standing at the entrance or shelter, towards Round Wood).

Nature rubbing orienteering trail around the park

- Hand out the trail maps, worksheets and pencils/crayons. Students find where they are on the map and set the map so that the top of the map is facing north.
- Students work in groups of 3 or 4 to find the rubbing posts using the map. At each post they make a rubbing and answer the question on the sheet.
- Suggestion: Run this as a 'Star orienteering' course so that each group checks in with the teacher after visiting each rubbing post. The teacher sends groups to a different post number each time and manages where they go. Use the orienteering sheet provided to keep track of where groups are.
- After a set amount of time, or once the groups have found all 10 markers, compare answers on the worksheet. Discuss what the students learnt about the key species.

Key species scavenger hunts

- As part of the restoration of Memorial Park in 2024, habitat management was carried out to increase the biodiversity. The first step of this management was surveying the area to see what wildlife was there and how we could support it. Carry out a mini species survey to see what condition the woodland is in now.
- Split into groups. Each group has a different survey sheet for a different species group. Younger years can use the scavenger hunt sheets instead.

- Come together as a class and each group reports their findings. What was their most abundant species? What was their most interesting find?

Round up: Discussion/Nature connection

- Allow students time to explore their space. Using natural materials they could make their favourite key species. Play Meet a tree or Soundscapes, or make a Sound Map (described on page 13). Or use the open space to play Predator, Prey, Barrier (described on page 14).

Other activities to do in the Park

- **QR code trail** - Using a device that can scan QR codes (tablet or phone), visit each of the posts and scan the code to read more about the species and complete a nature connection activity. The codes link to pages on the Friends of Memorial Park website so can also be accessed via a desktop.
- **Stickies** - Prepare smalls cards with double sided sticky tape on one side. Remove the cover and collect small natural objects (not living creatures!) stick to the tape. This could be one from each colour of the rainbow, different shades of green, something that surprises you, etc.
- **Journey sticks** - Find a stick to be the journey stick. On a walkthrough the woods or park pick up objects of interest and attach them to the stick using wool. The stick represents your journey.
- **Meet a Tree** - Work in pairs. One person closes their eyes or is blindfolded and is led by their partner to a tree. At the tree they use their sense of touch and smell to get to know the tree (feel for branches, moss, lichen, roots, hug the tree to find out how big it is). When they are finished their partner leads them away. The person opens their eyes/removes blindfold and tries to identify their tree.
- **Soundscape** - Students close their eyes and listen for as many sounds as they can in a minute. Discuss how many they counted.

- **Find your flock -** Pick 3 different bird sounds as a group (e.g. tweet, quack, honk, chirp). For older years this could be the same noise but said differently (e.g. tweet - tweettweet, or tweeeeeeeet). Students stand in a circle, close their eyes and the teacher taps out a number (1,2,3) on each persons shoulder. The number correlates to a call . All of the students make their noise at the same time
- **Never ending scavenger hunt** - Choose a letter to start with. Students work in pairs to find an object starting with that letter. The next object they find has to begin with the last letter of the previous item (e.g. twig, grass, soil, litter, root, tree,...)
- **Make a Sound Map** - Sit and listen to the sounds. On a piece of paper draw a dot representing yourself in the centre and what sounds you can hear around you.
- **Build a mini-den** - Using twigs and leaves build a den for a teddy bear. Test how waterproof it is, or add to the den with furniture and a garden.
- **Predator, Prey, barrier** - Spread out in an open space. Everyone is prey. Each person silently picks one person in the group to be their predator and another to be their barrier. Barriers to predation could be camouflage, hiding, defences, etc.). On Go, each person tries to move around so that the barrier person they chose is between them and their predator. The group will form an equilibrium over time. Remove one person and the group will start moving again. This shows how interdependent individuals in the group are.
- **Build a tree** (for a dry day) - using physical theatre students create a tree. One person is the trunk, some are the roots, some are branches, leaves flowers, seeds, etc. Others can be pollinators, or animals that live in/feed off the tree.
- **Nature drawing** - pick something close up to draw, then something far out. Try different perspectives and colours.
- **Leaf bashing** - make art using the pigment of leaves and berries. Lay the leaf on top a piece of wood , put the fabric on top and hammer over the entire area of the leaf. These can make flags or bunting.

Forest School area at Memorial Park

As part of the Memorial Park restoration project in 20204, an outdoor learning and Forest School area was created in Round Wood.

A shelter was also bought which can be erected by groups. The kit is currently looked after by St Bartholomew's Primary School.

Leading group sessions at Memorial Park

Hyndburn Borough Council requires notification for group activities taking place in public parks. To do this please email the Green Spaces Officer, Fraser Beesley-Monteath: **Fraser.Beesley-Monteath@hyndburnbc.gov.uk**

Things to include:
- risk assessment
- copy of the public liability insurance
- details of when and what activities will take place

If you are running a prolonged programme in the park, such as Forest School, one email with all the dates and times planned for the programme is enough.
Fraser can also be contacted to meet groups in the park and support and advise on the site maintenance, etc.

Activity risk assessments are provided in the Appendix section of this pack. The site specific risk assessment, including emergency access points and nearest defibrillator, is in Appendix 9 of this pack.

Habitats in Memorial Park

The key habitats in Memorial Park are grassland and woodland. These support different species.

Mowed grassland such as that in most of the park doesn't support many species, so we've left a corner of the park (next to the memorial) to allow other plants to grow. This also provides habitat for insects such as grasshoppers, crickets and beetles, and cover for small mammals like mice and voles.

Round Wood is designated as a Biological Heritage Site due to nationally rare fungi found there. The main tree species in Round Wood are beech and oak. Holes and crevices in the trees create roosting space for bats and woodpeckers, and dead leaves and wood on the floor create habitat for invertebrates such as woodlice and centipedes. In May there is an impressive display of bluebells.

Key Species

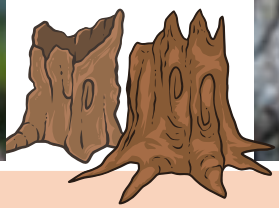
Each of the key species was chosen to represent part of the natural history of Memorial Park. Each is pictured on a brass rubbing post around the park.

Fact sheets on each of the key species are included below. These can be used to inform session plans (for example the Ks2 classroom wood web lesson plan) or as a basis for a display in school about Memorial Park. When this pack was being tested with classes at St Bartholomew's School in Great Harwood, the Year 5 students used the information to create posters which are now part of the nature QR trail linked to the rubbing posts. They are also displayed on the Friends of Memorial Park website (www.greatharwoodfomp.co.uk).

Fungi

The best time to see mushrooms is in autumn. However they are only a a tiny part of the fungi. They are the fruiting bodies of the fungi, like apples on an apple tree. Most of the fungi lives underground as a network of threads called the mycelium.

There is a type of fungus in Memorial Park which is very rare in the rest of the UK. Is it called *Psathyrella narcotica*. Because of this, Round Wood is designated as a Biological Heritage Site and is protected. The fungus grows on decaying wood, such as the fallen stems and branches. To create more habitat for fungi, fallen trees are left in the woodland and piles of deadwood have been created.



Did you know?

- Fungi can be found worldwide, including in the Arctic and Antarctic, deserts, and freshwater!
- There are over 15,000 species of fungi in the UK.
- Fungi are not classed as plants or animals – they have their own grouping. They are more like animals than plants. They don't need sunlight to grow, instead they rely on other organisms for food – just like us!
- The largest organism in the world (by area) is a fungus. It is a type of Honey mushroom and covers 2,384 acres (1806 football pitches), in the USA. The fungus is over 2,400 years old and feeds on living and dead wood.

Pipistrelle Bat

Pipistrelle bats are the smallest and most common bat species in the UK. There are 17 species of bat in the UK but only five of them are found in Lancashire.

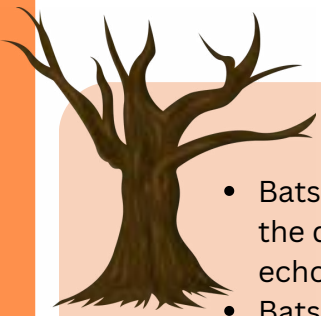
A pipistrelle bat weighs the same as a 20p coin and their body is about the size of your thumb. However, they live for around 20 years!

Bats are nocturnal so hunt at night. They hide away in roosts during the day and emerge at dusk. They can eat 3000 midges in one night. Bats also eat flies and moths, and some eat nectar from flowers!

During the winter (October to April) bats huddle together and hibernate in hollow trees, old buildings and under bark. In Round Wood there are specially made bat boxes where they can roost.

Bat box in Memorial Park

Bats use echolocation to find their prey and navigate while they fly. They make a noise and the noise bounces back at them. They use this 'echo' to work out how far away objects are. This is why they have such big ears!



Did you know?

- Bats are not blind! They can see as well as we can in the dark. However, they fly at night so use echolocation to navigate as it is more reliable.
- Bats give birth to one young a year, called a pup. Pups are blind at birth and live with their mothers for only 6 to 8 weeks!

Poppy

Poppies are a native wildflower that grow naturally in England. Poppies grow 80cm tall flower and from June to August. They have big, bright petals and can be many different colours, but the most common one is red-orange.

In the past they grew in farmer's fields but now grow mainly on road verges and waste ground. The number of poppies in the wild is decreasing because farmers are using more herbicides (chemicals that kill plants) on their fields. Poppies used to grow in between crops like wheat but now they have less space to grow. At Memorial Park some of the grass is being left long so that wildflowers like poppies can grow. This will also help the insects that feed from the poppy's nectar, and the birds that eat the insects.

After the First World War poppies grew in the upturned ground of the battlefields. Since then they have been used as a symbol of Remembrance. Each year wreathes of poppies are laid at the War Memorial in the Memorial Park to show respect for the soldiers who died in the First World War and wars since then.

War memorial at Memorial Park

Poppies in a wheat field

Did you know?

Poppy seeds can stay dormant for a long time. Seeds can still grow even if they've been in the ground for 50 years!

Snowdrop

Snowdrops are small plants with white, bell shaped flowers. They grow in clumps with narrow, grey-green leaves. Snowdrops grow from bulbs and are found in valleys, woodlands and meadows across the UK.

Snowdrop bulbs use the soil temperature to know when to start growing and flowering. They usually flower in January and February however, due to climate change, there are increasing records of December, and even November, flowerings. Recording their flowering times helps scientists understand the impact of climate change on wildlife.

Snowdrops mainly replicate by splitting their bulbs but also produce pollen and nectar. They are used by pollinating insects as early nectar sources, especially for bumblebee queens when they emerge from hibernation.

In 2009 the Friends of Memorial Park group planted 11,000 snowdrop bulbs in the corner to the east of the park.

Did you know?
A chemical in the snowdrop bulb has been used to develop a dementia treatment. However, the bulbs are poisonous if eaten.

Dividing snowdrop bulbs in Memorial Park (FoMP)

Beech tree

Beech trees have smooth, grey bark. Their leaves are smooth and oval-shaped with a pointed tip and wavy edges. In autumn the leaves turn bright orange.

Beech trees provide food and habitat for lots of species. Fungi, mosses, lichens grow on the bark. Moth caterpillars eat the leaves in spring. In autumn mice, voles, squirrels and birds eat the beech nuts. Beech trees can grow to be 400 years old. As they get older beech trees become gnarled and develop nooks and crevices in their bark. Bats, birds and insects shelter in these.

Beech leaves shade out other plants under the trees during summer and create a thick carpet during the winter when they fall on the forest floor. Only specially adapted plants can survive this. Bluebells are one of these as they grow and flower early in the year, in May before the beech leaves grow. This means that they can use the sunlight to photosynthesise before they are shaded by the leaf canopy.

Spiky beech nut shells, shiny beech nuts, and leaves

A copper beech!

Did you know?

Some beech trees have purple leaves because of natural changes in their genes. They are called Copper Beeches.
See if you can pot some dotted around Memorial Park!

Treecreeper

Treecreepers are tiny, secretive birds which spend almost their entire life in trees. They are actually very common and are active during the day; they're just hard to spot.

Treecreepers are sometimes called tree mice. This is because they look like mice (they have a brown back and white underparts), and have fast, twitchy movements like mice.

Their mottled brown wings and back help them camouflage onto the bark that they live on. Their long sharp beaks help them pick insects such as earwigs out of crevices in the bark. They work their way up the tree and once they've reached the top of the trunk, they fly down to the base of another tree and repeat.

For treecreepers to thrive, they need mature trees with fissured bark where insects live. Memorial Park is perfect habitat for treecreepers as some of the trees, especially those in Round Wood are over 170 years old.

Did you know?

- The collective noun for treecreepers is a 'spiral'. This is because they spiral up trees looking for food.
- Adult treecreepers weigh 8.8g, which is almost the same as a £1 coin!
- Treecreepers always move up trees, never down!

Nettle

Nettles are tall plants with pointed leaves that have deeply serrated edges (like a steak knife). The stems and underside of the leaves are covered in hollow hairs which can sting you. The top of the leaf is safe to touch!

Nettles are incredibly important for wildlife and support over 40 species of insect. One of these insects are aphids. Aphids are eaten by ladybirds which are eaten by birds. Some butterfly caterpillars eat nettles, such as the Red Admiral butterfly. The females lay single eggs on the upper leaves of nettles, usually in the middle of large swathes of plants. Therefore some nettle patches are being kept in Memorial Park to make sure that these butterflies can feed and grow.

Nettles can be used to make baskets, rope and cloth. Nettle cloth has been made and used for thousands of years, since the Bronze Age.

Red Admiral butterfly

Did you know?

- In World War II nettles were used to dye camouflage nets.
- Nettles are edible for humans and people collect them in spring to make nettle soup and tea, and to replace spinach in cooking. They have a very high iron content and are very healthy!

Great Spotted Woodpecker

The great spotted woodpecker is one of two types of woodpeckers in Lancashire. They are quite big (about the size of a blackbird) and mainly live in woodland, parks and gardens. They are black and white with a long black beak and a red patch on their rump. Males also have a red patch on the back of their neck. Woodpeckers mostly live on the sides of tree trunks.

Great spotted woodpeckers hunt by hammering holes into tree trunks with their beak and collect insects from under the tree bark. They use their long, flexible tongue to help with this. In the spring and summer woodpeckers also eat chicks from other birds. They hammer into nest boxes and steal the young birds and eggs. In Memorial Park all of the bird boxes have metal rings round them to protect the birds inside from woodpeckers.

Bird box with woodpecker protection in Memorial Park

Woodpeckers love standing deadwood (trees that have died but haven't fallen yet). The soft dead wood makes it easier for them to make holes to hunt, and to excavate nesting holes. In Round Wood some dead trees are left standing. however they are carefully checked to make sure that they will not fall on anyone in the wood!

Did you know?

- A great spotted woodpecker's tongue is so long that it has to wrap around the bird's skull when not in use.
- Great spotted woodpeckers can hammer trees at up to 40 strikes per second!

Woodlouse

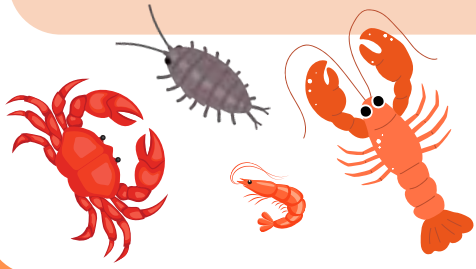
Woodlice are oval shaped and generally grey or brown coloured. Their skeleton is on the outside of their bodies; this is called an exoskeleton. Their bodies are made of seven segments, with one pair of legs per segment. There are 30 species of woodlouse in the UK. They are different colours including brown, grey and pink!

Woodlice are very common but are nocturnal. They look for food at night and hide in damp spaces like rotting wood and under rocks during the day.

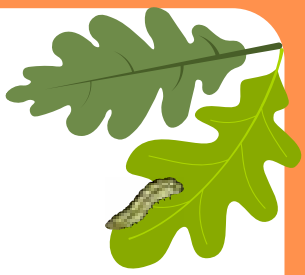
Woodlice eat dead plant and animal matter (mainly wood and leaves) and break them down into soil. They have a key role in cleaning the planet. Dead and decaying wood and leaves is the main microhabitat for woodlice and insects. It is important not to be too tidy, even in parks and gardens, and leave some space for nature.

Did you know?

- Woodlice are closely related to crabs, shrimp and lobsters! They have gills and are actually terrestrial crustaceans, not insects.
- Woodlice don't wee, they release ammonia gas instead.



Oak tree



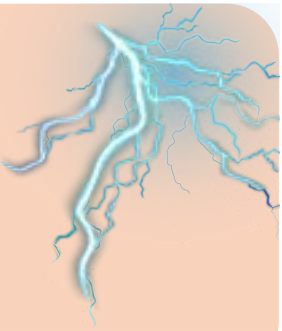
Oak trees have sprawling twisty branches and deeply ridged bark. Their leaves are smooth with deep lobes (waves). Oak trees are deciduous, meaning that they drop their leaves in the winter.

An oak tree take 300 years to grow, 300 years an adult, and 300 years dying. Over their lifetime they provide food and habitat for over 2,300 species. This is more than any other species in the UK!

Hundreds of insects live under the oak trees' bark and in rotting leaves under the trees. Birds and bats nest and roost in holes and crevices in the bark. In May, caterpillars of the purple hairstreak butterfly feed on the fresh oak leaves. In September oak trees drop acorns which sprout into new tree saplings the following year. Most never get the chance to germinate though as they are eaten by jays, mice, squirrels, badgers and deer.

Oak trees are brilliant at removing carbon from the environment which helps fight climate change.

Did you know?
Oaks are more likely to be struck by lightning than other trees, possibly as they are often the tallest feature in a landscape.



Purple hairstreak butterfly (NHM)

Stream

Long grass

Woodland

Flowers

Appendix 2 – Example of Velcro hook board

PROSPECTS
BUG SCAVENGER HUNT


spider ☐


snail ☐


moth ☐


caterpillar ☐


beetle ☐


fly ☐


ant ☐


butterfly ☐


bee ☐

MAKE A NOTE OF ANYTHING ELSE YOU FIND!

PROSPECTS
BUG SCAVENGER HUNT


spider ☐


snail ☐


moth ☐


caterpillar ☐


beetle ☐


fly ☐


ant ☐


butterfly ☐


bee ☐

MAKE A NOTE OF ANYTHING ELSE YOU FIND!

Map of nature rubbing trail KS1 starter activity: Memorial Park

Visit the posts closest to the shelter, take a rubbing and answer the questions on the sheet to find out about some of the species in the park!

Key

- Rubbing post on trail
- Other rubbing posts
- Flagpole
- Shelter
- War Memorial
- Grassland
- Woodland
- Houses
- Path

Memorial Park Nature Trail

Find 5 of the wildlife rubbing posts around the park. Place this paper over the image and use your crayon to take a rubbing!

Line your worksheet up to make your rubbing in here!

Woodlouse

Did you know that woodlice are related to lobsters so have gills, even though they live on land? They also don't wee, they produce ammonia gas instead! What do you think woodlice eat?

Treecreeper

Treecreepers creep up the bark of trees looking for insects in the bark. When they get to the top they fly to the bottom of another tree and spiral up that one! Try creeping to the next post like a treecreeper.

PROSPECTS

Nettles

Some people pick young nettles in Spring to eat in nettle tea and soup. Nettles are also important for some butterflies and moths who eat the nettles when they are caterpillars.

Pipistrelle Bat

Bats sleep during the day and hunt at night. They can eat up to 300 midges a night! Where do you think they sleep?

Oak Leaf

Oak trees spend 300 years growing, 300 years as an adult and 300 years in old age. They can support 2,500 other plants and animals in their lifetime!

Look around. Can you see an oak tree? Try to compare the leaves to the rubbing.

PROSPECTS

Appendix 5 – KS1 Nature rubbing trail worksheet

Memorial Park wildlife Orienteering map

Find each of the posts in the park, take the rubbing and answer the question on the worksheet.

Key

- Rubbing post
- Flagpole
- Shelter
- War Memorial
- Grassland
- Woodland
- Houses
- Path

Memorial Park Nature Trail

Find the 10 wildlife rubbing posts around the park. Place this paper over the image and use your crayon to take a rubbing!

1. Poppy

Poppies used to grow in farmers fields. Where might they grow in the park?

2. Nettle

Nettles are important for some butterfly caterpillars who eat the leaves. Can you spot any?

3. Fungi

Fungi can be found worldwide, including in the Arctic, deserts, and freshwater!

4. Beech

Beech trees can grow up to 400 years old. look up. How old do you think this beech tree is? was it here 100 years ago when the park was made?

5. Woodpecker

Woodpeckers can hammer wood up to 40 times a second with their beak. It's so fast the noise blurs into one sound! Try to make a sound like a woodpecker.

PROSPECTS

6. Snowdrop

Snowdrops flower in January and February. what shape are their flowers? Can you guess what colour they are?

7. Oak

Look around. Can you see an oak tree? Compare the leaves to the rubbing.

8. Pipistrelle Bat

Bats sleep during the day and hunt at night. They can eat up to 300 midges a night! Where do you think they sleep?

9. Treecreeper

Treecreepers creep up the trunk of trees looking for insects in the bark. What do you think they eat?

10. Woodlouse

Did you know that woodlice are related to lobsters so have gills, even though they live on land? Where do you think woodlice live?

PROSPECTS

Star Orienteering tracker sheet

Group name	Rubbing post marker									
	1 – Poppy	2 – Nettle	3 – Fungi	4 – Beech	5 - Woodpecker	6 - Snowdrop	7- Oak	8 – Bat	9 - Treecreeper	10 - Woodlouse

Group sent to rubbing post

Group returned from rubbing post

Appendix 8 – Star orienteering tracker sheet

Appendix 9 – Site Specific Risk Assessments

Memorial Park Site Risk Assessment

Event Name:

Date of Event:

Numbers of participants:

Age range:

Forecast:

Meeting Place: Memorial Park, 2 Hillside Cl, Great Harwood, Blackburn BB6 7PR

Event First Aider(s):

Landowner's Permission: Permission for the site-use has been given by Hyndburn Borough Council.

Welfare Issues (E.g., toilets): No toilets or running water on site.

Overhead/Underground Services: N/A

Emergency Details:

Nearest Minor Injuries Unit:

Acorn Primary Health Care Centre - 421 Blackburn Road, Accrington, Lancashire, BB5 1RT

Nearest Major Injuries A&E:

Blackburn Royal Hospital - Haslingden Rd, Blackburn BB2 3HH

Emergency Vehicle Access Point

Designated Meeting Place: Church Lane Entrance

What3Words: ///pardon.unfair.escalated| Grid Reference: 53.791869,-2.404902

Memorial Park, 2 Hillside Close, Great Harwood, Blackburn, BB6 7PR

Nearest Defibrillator:

The Philip Maher Foundation (MEMORIAL PARK PLAYING FIELDS, BRANTFELL ROAD, GREAT HARWOOD, BLACKBURN, BB6 7PT)

In an emergency ring 999 or 112.

For medical or police advice during a non-emergency, ring 111 or 101 respectively.

Memorial Park School Visit Generic Risk Assessment

Activities: Bug hunting, orienteering, nature brass rubbing trail, drawing, scavenger hunt, nature art, nature connection activities

Potential Hazard What could cause harm or damage?	**Who/what will be affected?**	**Risk from Hazard** How it will cause harm or damage	**Likelihood rating** How likely the hazard is to occur	**Severity rating** How much damage the hazard could do	**Risk rating** (likelihood x severity)	**Risk Rating level** (low, moderate, substantial, high)	**Control measures** Precautions to be put in place to minimise potential risk
Uneven ground, steep banking, slippery mud, wet grass	All	Slips, trips and falls – injury, twisted ankles	3	2	6	Low	Warn group to be careful of wet and uneven ground conditions on arrival at the park. If too wet to enter Round Wood, stick to the tarmacked paths. Sturdy footwear with good grip to be worn by all. Consider an alternative route if the conditions change. Children to be supervised at all times. First aider to accompany group.
Students becoming lost or separated from the group	Students	Safeguarding Distress to students	3	1	3	Low	Students split into groups, with one adult per group. Headcounts to be done frequently. Clear boundaries defined and communicated on arrival at the site. High vis worn if deemed necessary. The parkland area is open so students can be easily supervised from a distance. While walking as a large group, have an adult at the front and back of the group.
Exposure to weather conditions	All	Hypothermia, heat stroke, illness	3	2	6	Low	Check weather forecast before the event remind students on what to bring. Check for appropriate clothing on the day. Staff know signs of exposure and how to avoid and treat it. Cancel or postpone activity if weather makes conditions unsuitable for the activity. Be prepared to cut the session short if conditions change. Do not go into the park if wind is forecast to be above 30pmh as the trees may pose a risk. First aider to accompany group. First aid kit with foil blanket available.
Animal faeces	All	Illness, Worms, Toxocara canis	1	3	3	Low	Hand sanitiser available for use after bug hunting and other activities with soil contact. Participants warned the animal faeces may be present, and not to touch it.

Appendix 9 – Activity Risk Assessment

Hostile confrontation from the public	All	Distress to participants Safeguarding concern	2	3	6	Low	Any verbal/physical attack from passerby or volunteer to be ignored/managed by the event leader by calling the police or calling off the event if the situation becomes dangerous.
Hazardous Flora e.g. Nettles	All	Stings, Injury, Illness, Allergies, Anaphylactic shock	1	2	2	Low	Students made aware of hazardous vegetation on site, including bramble and nettle. Any larger pricks to be cleaned and covered, especially if from blackthorn.
Hazardous Fauna (dogs, wasps, etc.)	All	Stings, Injury, Illness, Allergies, Anaphylactic shock	2	3	6	Low	Dogs not to be approached. Students briefed on this at the start of the session. Area is frequently used by the public so any wasp nests, etc. will be dealt with by the council.
Toileting facilities	All	Toilet accidents	2	1	2	Low	No toilets on site. Students advised to go before leaving. Younger students may need to return to the school for a toilet break in the middle of the visit.
Litter	Students	Cuts, tetanus	2	2	4	Low	Students advised not to pick up any litter as part of their nature art. They should tell an adult if they find any broken glass or other sharp objects. Bug hunting area swept for litter before group use it, to remove the larger pieces.
Harm to invertebrates during bug hunting	Environment	Injury to, or death of invertebrates	4	3	12	Moderate	Brief students that they are working with live animals, and to look after them. Demonstrate how to pick up an invertebrate (with paint brushes, not fingers), and ensure participants follow this. Brief participants to put logs back how they found them to conserve habitat. Keep one pot for slimy things and one pot for crawly things to avoid predation of invertebrates once captured. Brief students not to shake pots with creatures inside.
Logs rolling onto toes during bug hunting	All	Crushed toes and hands Sore backs from poor manual handling	4	1	1	Low	Brief students to roll logs away from them with hands, not feet and not to roll logs bigger than themselves. Remind them to follow this rule if they do it differently.

Likelihood How likely is the accident to happen?	**Severity** How much damage the accident could do	**Risk Rating**
1 = Improbable	1 = Trivial Injury(ies)	1 - 9 = Low
2 = Possible	2 = Minor Injury(ies)	10-18 = Moderate
3 = Vocational	3 = Major Injury(ies)	19-27 = Substantial
4 = Frequent	4 = Major injury to several people	28-36 = High
5 = Regular	5 = Death to one person	
6 = Common	6 = Multiple Deaths	