

Puzzlewood

A Magical Woodland in the Forest of Dean

Mini Beasts and Their Habitats

KS1 + LOWER KS2

Puzzlewood is an ideal environment for the study of minibeasts in their habitats and is suitable for a range of ages.

Below are some suggestions for your visit that could be adapted to suit your class.

We strongly recommend that you visit the site before your visit, as there are so many varied opportunities for creative curriculum development.



National Curriculum Programs of Study:

SCIENCE:

Year 1

- To name, observe, describe and compare the structure of a variety of common animals.
- To use the local environment throughout the year to explore and answer questions about animals in their habitat.
- To understand how to care for animals taken from their local environment and the need to return them safely after study.

Year 2

- To identify that most living things live in habitats to which they are suited.
- To describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other.

Year 3

- To introduce the idea that all living things have certain characteristics that are essential for keeping them alive and healthy.
- To raise and answer questions which help pupils become familiar with the life processes that are common to all living things.
- To be introduced to the terms 'habitat' and 'micro-habitat'.

ART:

KS1

- To use a range of materials creatively to design and make products.
- To use drawing, painting and sculpture to develop and share ideas, experiences and imagination.
- To develop a wide range of art and design techniques in using colour, pattern, texture, line, shape, form and space.

KS2

- To create sketch books to record observations and use these to review and revisit ideas.
- To improve pupils' mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]

Suggested Activities: Prior to visit:

| Activity | Resources |
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| <p>Look at photos of minibeasts and possible habitats</p> <p>Collect vocabulary associated with topic and make a glossary with definitions</p> <p>Make predictions about which creatures might be found where</p> <p>Investigate how to collect and take care of creatures they may find e.g. make up rules on how to behave with minibeasts and the environment</p> <p>Experience using a magnifying glass and bug box etc.</p> <p>Make lists of questions they might find the answers to</p> | <p>photos of minibeasts and possible habitats</p> <p>There are some photos of possible habitats on the Puzzlewood website</p> <p>magnifying glasses and bug boxes</p> |
| <p>On Site:</p> | |
| <p>Using the map of site, follow trail to the <i>house in the woods</i> for bug hunting where you will find many habitats e.g. leaf mould, stones, moss, logs.</p> <p>Make predictions about where you might find minibeasts as you walk along trail. Please do not disturb the area along the trail as there is plenty of opportunity for closer study in the area surrounding the house in the woods and story circle.</p> | <p>Site map – Puzzlewood can provide</p> <p>The house in the Wood provides shelter and seating. Beside it a 'cauldron' surrounded by a circle of logs.</p> <p>The area surrounding the hut is suitable for studying minibeasts, but please check the risk assessment</p> |

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| <p>Causing as little disturbance as possible, look for minibeasts using their equipment. Identify then observe in habitat – movement, food sources, behaviour etc.</p> <p>Discuss with adults why the minibeast was in a particular environment and how it is suited/adapted. Discuss why other minibeasts aren't there. Discuss camouflage.</p> <p>Photograph, record e.g. using Ipads to aid observational recordings (video and voice to record thoughts)</p> <p>Collect samples/photos of different habitats to describe and compare after visit.</p> <p>Identify how the habitat provides shelter as well as food.</p> <p>Older children can classify minibeasts using keys</p> <p>Discuss food chain – think about minibeast predators; how animals in an environment depend on each other</p> | <p>Bug boxes and magnifying glasses</p> <p>ipads and cameras</p> <p>Classification keys</p> |
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Suggestions for creative work onsite

| Activity | Resources |
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| <p>Children, on site, given two halves of an animal to find a suitable habitat for in Puzzlewood. Photograph and record. This could lead to a newspaper report of an unusual sighting.</p> | <p>Laminated 'half minibeasts' / Ipads</p> |

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| <p>Imagine you have shrunk to the size of a minibeast and found yourself in Puzzlewood. Which habitat would you choose to live in and why? What would you eat? How would you move? Who would you be afraid of? What would you do all day? This could lead to a diary, an adventure story etc. Younger children could describe a journey using prepositions</p> <p>Around the area of the story circle and along the trail, the children can imagine the unusually shaped trunks and rocks as living creatures. This could lead to observational drawing, imaginative photo alteration or creative writing.</p> <p>Teamwork – using the Puzzlewood map, children search for pictures or plastic models of minibeasts and mark where they found them on the map.</p> <p>This could be developed by leaving riddles in various places and children have to identify creature from the collection in their bag.</p> | <p>Magnifying glasses might be useful</p> <p>Ipad or digital camera Drawing materials</p> <p>Plastic minibeasts hidden during visit Paper Puzzlewood map – please ask for paper copies in advance</p> <p>Laminated riddles hidden prior to arrival – prearranged with Puzzlewood. Bag of 10 minibeasts per team</p> |
| <p><u>After visit:</u></p> <p>Match photo cards of minibeasts and environments and make 'Top Trump' cards</p> <p>Make observational drawings and label (including adaptations for older ones)</p> | <p>Photo cards of minibeasts and environments - downloadable see: www.naturedetectives.org.uk, www.mylearning.org www.tes.co.uk, www.teachingideas.co.uk www.enchantedlearning.com</p> |

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| <p>Find a contrasting minibeast in the school environment – discuss and make a suitable habitat for it and keep for a few days to make comparisons</p> | |
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Creative Work During or After the Visit

| Activity | Resources |
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| <p>Write a report about chosen minibeast, describing how it lives successfully in its habitat. Encourage use of technical words and their definitions e.g. carnivore, antennae etc.</p> | <p>Glossary made prior to trip</p> |
| <p>Make up own minibeast e.g. using ‘tops and tails’ cards or own drawings photocopied, cut in half and swapped with a friend. (Possible ideas ladybird + caterpillar = ladypillar or caterbird) Then invent a report telling people everything they would need to know about this creature – habitat, food, movement, predator, position in food chain. Look at writings of Charles Darwin who found undiscovered creatures on his travels and wrote scientific studies of his observations.</p> | <p>Tops and tails cards - downloadable</p> |
| <p>Make a small storybook featuring some of the ‘new’ creatures in their settings.</p> | |
| <p>Imagine you are one of the minibeasts you have observed, write a diary of a day in your life....</p> | |

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| <p>Imagine you are a minibeast. Write a poem beginning <i>'If I were a instead of a child I would</i> (this would illustrate their understanding of the minibeast's life) To end the poem <i>'but if a(predator) ever came I'd quickly turn back to a child again!'</i></p> | |
| <p>Alliterative poetry</p> | |
| <p>Imagine you are a minibeast. Write a riddle which leaves your most obvious clue to last.</p> | |
| <p>Make a 'Wanted' poster for either a real or imaginary minibeast. Include information about appearance, habits and where it was last seen. Don't forget the reward!</p> | |
| <p>Older children could consider the pros and cons of minibeasts and either write an argument or persuasive piece of writing. Alternatively you could hold a debate.</p> | |
| <p>From observational drawings –</p> <ul style="list-style-type: none"> • make monoprints or press prints or string prints • paint the creature in a camouflaged habitat • make accurate clay models of either a real minibeast or an imaginary one for display in a museum – write a caption using scientific language for museum visitors • textiles – make a stitched design of a minibeast | <p>Art materials</p> |
| <p>Prior to visit, make a huge minibeast using 2 flowerpots stuck together as a body and papiermache. Bring minibeast to Puzzlewood unpainted, decide on its habitat and paint it in situ so it is camouflaged. Don't forget to take a photo to use back in school.</p> | <p>Flowerpot beasts Paints from school Digital camera</p> |

Risk Assessment for Educational Visits

It is assumed the trip leader and preferably at least one other accompanying staff member will have visited the site and be familiar with the facilities, the layout, the location of phones, toilets, first aid equipment etc. and that all adults accompanying the trip will be briefed before the visit. The party will include a qualified first aider, and carry at least one first aid kit during the visit.

Recommended staff/ pupil ratios: - early years/reception: 1 adult to 4 pupils, KS1: 1 adult to 5 pupils, KS2 : 1 adult to 6 pupils, KS3 1 adult to 8-10 pupils.

| Hazard | Risk level | Action to reduce/prevent risk |
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| Transportation to/from school | Low | <ul style="list-style-type: none"> • Use of reputable coach company. • Children to remain seated at <i>all</i> times • Seat belts to be worn at <i>all</i> times |
| Uneven paths – slippery when wet | High | <ul style="list-style-type: none"> • Appropriate footwear – trainers or shoes with good grip • Children to walk at all times • Danger of tripping |
| Steep drops | Moderate | <ul style="list-style-type: none"> • Reiterate the importance of walking (not running) • Keep to the designated paths |
| Unforeseen incident with children | Low | <ul style="list-style-type: none"> • Activities managed in accordance with abilities of staff and children • Medical conditions and behavioural details of children known to staff • SEND children and those with medical conditions assigned to individual staff. Staff member to keep and administer medication if needed as per parents' instructions |
| Major accident | Low | <ul style="list-style-type: none"> • Ensure mobile signal, or know location of nearest landline phone |
| Separation from group | Low | <ul style="list-style-type: none"> • Regular head counts. Establish procedure to follow if a child goes missing. • Children briefed on what to do if they become separated |
| Adverse weather conditions | High | <ul style="list-style-type: none"> • Children and adults all wear suitable protective clothing • Sun protection – hat and sunscreen, adequate drinking water in hot weather • In strong winds – beware of windfall (branches) |
| Child safety | Low | <ul style="list-style-type: none"> • Reminder of expected behaviour around unfamiliar adults and terrain • Regular headcounts in public places |

General rules to minimize risks

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| Car Park | <ul style="list-style-type: none"> • Coaches to park on the gravelled area. • Beware of moving traffic in the car park area. |
| Wood | <ul style="list-style-type: none"> • Everyone MUST stay on the paths at ALL times. • No running. • Children must stay with adults and adults must ensure this. • Some steps and paths are uneven so care should be taken at all times. • Use hand rails on the steps (where available). Some of the steps are steep. Take care. • Some plants in the wood are prickly e.g. holly, or sting (nettles) • In wet weather the paths and steps can become slippery; take additional care. • Be aware of low branches. • Walk slowly over the bridges. Be aware that some people can be apprehensive about heights. |
| Wood Puzzle | <ul style="list-style-type: none"> • No running. • Look out for some uneven surfaces, low ceilings and steps. • Children under 7 years should be accompanied by an adult. |
| Animals | <ul style="list-style-type: none"> • Read all the signs about the animals. • Animals can bite. • Do not enter fields or pens. • Always wash hands after touching the animals. Washing facilities are available in the toilet block. • Some children may be allergic to animals/hay/straw etc. |
| Play Area | <ul style="list-style-type: none"> • The equipment can get slippery in wet weather. • Ensure adult supervision of children in your care. • Check the suitability of the equipment for the children in your specific group. |