

Golf and Outdoor Education - Toolkit for Schools



Llywodraeth Cymru
Welsh Government



Cyfoeth Naturiol Cymru
Natural Resources Wales

Disclaimer

This toolkit has been developed by the GEO Sustainable Golf Foundation in collaboration with Wales Golf. It has been designed to support the use of golf courses as outdoor learning environments for primary-aged pupils and to provide practical guidance for golf clubs and schools working in partnership. The primary purpose of this resource is to offer a collection of outdoor learning activities and contextual guidance that can be used to enrich pupils' understanding of core skills alongside nature, place, sustainability and wellbeing.

The learning activities within this toolkit have been adapted, with acknowledgement, from original materials produced by Natural Resources Wales (NRW). Their work has provided a valuable foundation for shaping activities that reflect the landscapes, habitats and learning opportunities typically found on golf courses. All adaptations have been made to ensure relevance, accuracy and suitability for golf environments and primary-aged learners. Although the initial version of the toolkit has been developed with reference to the Curriculum for Wales (2022), the activities are also relevant and adaptable for schools, federations and facilities operating under other national curricula. Users are encouraged to adapt content thoughtfully to meet local educational needs, policies and conditions.

This resource is provided under a Creative Commons Attribution–NonCommercial 4.0 International (CC BY-NC 4.0) licence, unless otherwise stated. This means you are free to share, adapt and build upon the material for non-commercial purposes, provided that appropriate credit is given, any changes are indicated, and the material is distributed under the same licence. Full licence terms can be viewed at: <https://creativecommons.org/licenses/by-nc/4.0/>

This toolkit does not replace statutory requirements or school policies relating to safeguarding, educational visits, health and safety or curriculum design. Schools and golf clubs are responsible for ensuring that activities are planned and delivered in line with their own policies, risk assessments and professional responsibilities. Users should exercise appropriate judgement in adapting activities to their setting, pupil needs, seasonal conditions and available facilities. While every effort has been made to ensure accuracy at the time of publication, the GEO Sustainable Golf Foundation and Wales Golf accept no liability for any loss, injury or action arising from the use of this resource. Landscapes, habitats and facilities vary between courses; any examples or recommendations are provided for guidance and should be interpreted in context.

All intellectual property rights not covered under the Creative Commons licence remain with the GEO Sustainable Golf Foundation unless otherwise noted.

Golf and Outdoor Education

This information will likely have been shared with you by a local golf club interested in supporting outdoor learning for your pupils. We encourage you to read it with an open mind. Many schools are surprised by just how well a golf course can function as a safe, structured and curriculum-aligned learning environment.

Golf courses offer a unique blend of managed and natural spaces that are often unavailable within school grounds. They provide clear boundaries, varied habitats and calm, open landscapes that can enrich learning across a range of curriculum areas. For many pupils, particularly those with limited access to high-quality green space, a golf course may be the most biodiverse outdoor environment they encounter during the school year.

Why golf and outdoor education?

The materials in this section outline how the activities in the toolkit align with recognised curriculum requirements and support broad, holistic development. They are intended to help you feel confident in the educational value of an outdoor learning session hosted at a golf facility.

We hope you will take a moment to explore the possibilities. With the right preparation, a golf course can offer meaningful learning, safe access to nature, and a memorable experience for your pupils — without placing additional burdens on staff or resources.

Curriculum Alignment and Educational Value

The activities in this toolkit have been carefully developed to align with the six recognised Areas of Learning and Experience (AoLEs) from the Curriculum for Wales (2022). This framework brings together literacy, numeracy, science, creativity, wellbeing and social development in a highly practical, integrated way.

Activities such as exploring habitats, observing wildlife, creating art from natural materials or moving across different types of landscape connect directly to established learning objectives. This means outdoor sessions on a golf course support the same themes and skills pupils are already working towards in school.

Although rooted in the Welsh framework, the AoLEs reflect core priorities found across primary curricula in the UK and internationally. Schools can use the activities exactly as presented or adapt them to suit current topics, units of work or whole-school priorities. The six AoLEs cover broad educational themes:

SCIENCE AND TECHNOLOGY Habitats, life cycles, forces, materials, observation and simple investigation	HUMANITIES Place, nature, sustainability, community, communication and belonging	EXPRESSIVE ARTS Creativity, design, imagination, pattern, colour and sensory exploration
MATHEMATICS AND NUMERACY Counting, comparing measuring, and calculating patterns, distance, shape and sizes	LANGUAGE, LITERACY AND COMMUNICATION Speaking, listening, vocabulary development, descriptive writing and storytelling	HEALTH AND WELLBEING Movement, exercise, cooperation, resilience, mindfulness, emotional regulation and play

Using the Toolkit in School Planning

Schools can use this toolkit in whatever way best suits their context. It can support a one-off visit, form part of a recurring partnership, or slot into wider initiatives such as eco-schools, wellbeing programmes, transition activities or local curriculum development. The activities help by:

- providing clear learning intentions linked to recognised learning areas
- enabling teachers to evidence progression in skills, knowledge and competencies
- supporting cross-curricular planning through real-world experiences
- offering contexts that complement literacy, numeracy, science, expressive arts, humanities and wellbeing
- aligning with school priorities around outdoor learning, health, wellbeing and local curriculum design

Schools can adopt as much or as little as they wish, knowing the learning design is grounded in current curriculum thinking and established outdoor education practice. Activities can be adapted to suit specific units, long-term planning or whole-school themes.

The materials are designed to reduce workload rather than add to it.

- Activities are low-cost and require minimal specialist equipment.
- Sessions can be adapted for different group sizes, time slots and ability levels.
- Golf course staff are not expected to deliver formal lessons; their role is to facilitate safe access to the landscape and support learning through their existing knowledge of the site.

With the right preparation, a golf course can offer meaningful learning, safe access to nature and a memorable experience for pupils — without placing additional burdens on staff or resources.

Roles and responsibilities

The toolkit is built on a clear partnership model between school and golf facility. Schools are encouraged to carry out their usual risk assessment and visit planning processes.

Overall responsibility	Supervision and behaviour management	Safeguarding and welfare
School • Holds overall responsibility for pupil safety, supervision and behaviour. • Ensures compliance with the school’s policy and safeguarding procedures. • Provides appropriate staffing ratios and qualified first-aiders as required. Golf Club • Provides a safe, clearly identified area of the course for learning. • Ensures the site is suitable, accessible and free from foreseeable hazards. • Offers local knowledge of the landscape and course conditions and management	School • Leads all supervision of pupils, including movement between areas. • Manages behaviour and applies school behaviour expectations at all times. • Ensures pupils understand boundaries, instructions and safety guidance. Golf Club • Supports the school by outlining site-specific rules (e.g. conduct, emergency points). • Provides information on any temporary risks (e.g. ground conditions, play zones). • Assists with group orientation at the start of the visit.	School • Takes responsibility for safeguarding and pupil welfare. • Provides consent forms, medication and emergency contacts. • Ensures staff are trained in first aid as required by school policy. Golf Club • Ensures staff interacting with pupils are aware of appropriate conduct. • Provides access to facilities such as toilets and hydration points. • Alerts the school to any safeguarding concerns relating to the site.

Roles and responsibilities (continued)

Risk Assessment and Planning

School

- Completes an approved risk assessment covering travel, supervision and pupil needs.
- Reviews any information supplied by the golf club as part of the planning process.
- Confirms that the visit meets curriculum, wellbeing or learning objectives.

Golf Club

- Completes a landscape and safety assessment for the designated learning areas.
- Provides activity area descriptions and notes on seasonal conditions.
- Communicates any site changes in advance (e.g. maintenance, ground conditions)

Activity delivery

School

- Supports pupils during activities and ensures they engage safely.
- Adapts tasks or pacing as needed to meet individual or class needs.
- Ensures pupils follow instructions from both school and golf club staff.

Golf Club

- Facilitates activities by sharing knowledge of the course.
- Demonstrates or introduces tasks where appropriate.
- Provides natural materials or simple equipment if required.

Emergencies and incident report

School

- Leads first response to pupil injury or illness.
- Manages communication with parents or carers if required.
- Records incidents in accordance with school policy.

Golf Club

- Provides access to emergency routes and designated meeting points.
- Supports evacuation or shelter procedures if necessary.
- Reports any site-related incidents to the appropriate club lead.

Introducing the Activities

This section provides a full set of outdoor learning activities that can be delivered on a golf course. The toolkit includes 36 activities, organised to quickly match the school's curriculum with the available golf course's landscapes. Whether your local course includes underused turfgrass, grassland, woodland, wetlands, coastal areas or a mixture of habitats, there are activities that will fit naturally within the environment.

Each activity has been carefully adapted, with acknowledgement, from resources originally developed by Natural Resources Wales. They have been structured to support Foundation Phase learners (ages 3–7) and Key Stage 2 learners (ages 7–11), offering opportunities for both play-based exploration and more structured learning across a range of outdoor settings. All activities are simple to set up, require minimal equipment and are fully aligned with recognised Areas of Learning and Experience (AoLEs) from the Curriculum for Wales (2022).

You do not need to use every activity. Select the ones that match your available space, the time you have and the curricular priorities of the visiting school. Use the navigation pages overleaf to explore activities by curriculum area or landscape type, depending on what works best for your time, resources and planning.

What's included for each activity:

Each activity includes clear, practical information to support easy delivery:

- **Overview**, with a concise explanation of the learning opportunities
- **Resources**, with a list of materials needed
- **Potential location**, with suggested areas that suit the activity
- **Step-by-step instructions**, with a clear outline from start to finish

All activities are tailored to environments typically found on golf courses.

The resources needed to complete each activity can be easily collected from local nature spaces if unavailable at the school or golf course.

Please ensure that each activity is safely planned and sustainably resourced to minimise potential risks and impacts on the local environment!

Introducing the Activities (continued)

Science and Technology

1. Owl and Mouse
2. Animal Sniff
3. Food Chain Detectives
4. Habitat Explorers
5. Micro Minibeast Safari
6. Camouflage Caterpillars

Mathematics and Numeracy

19. Leaf Strings
20. Twig Towers
21. Animal Legs
22. Animal Home Auction
23. How Old is That Tree?
24. Am I Faster Than?

Humanities

7. Listening Hand
8. Feely Bags
9. Sound Maps
10. Tickly Prickly
11. Scavenger Hunt
12. Nature Fibs

Language, Literacy and Communication

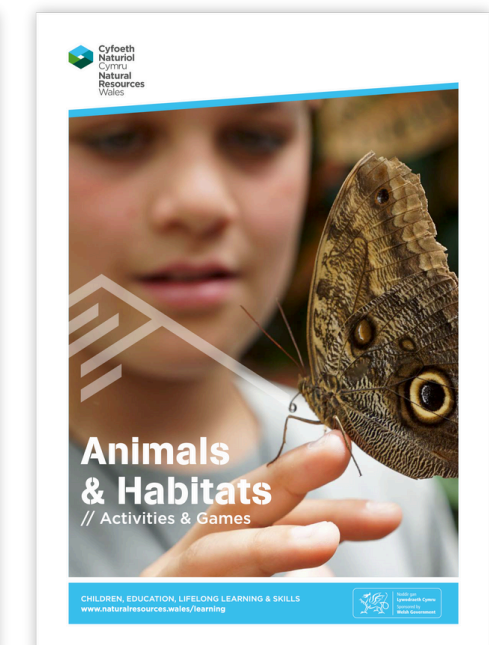
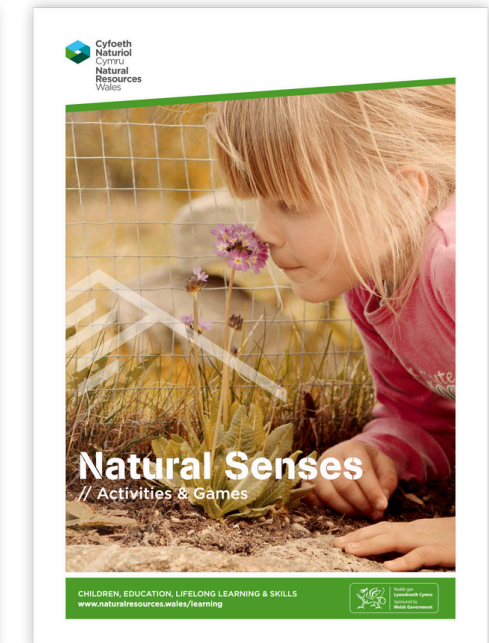
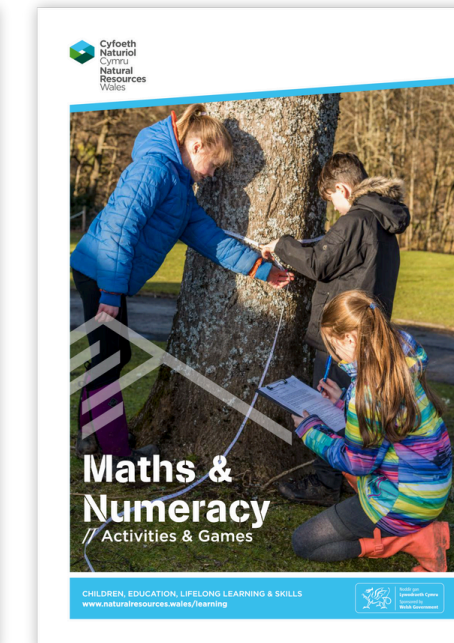
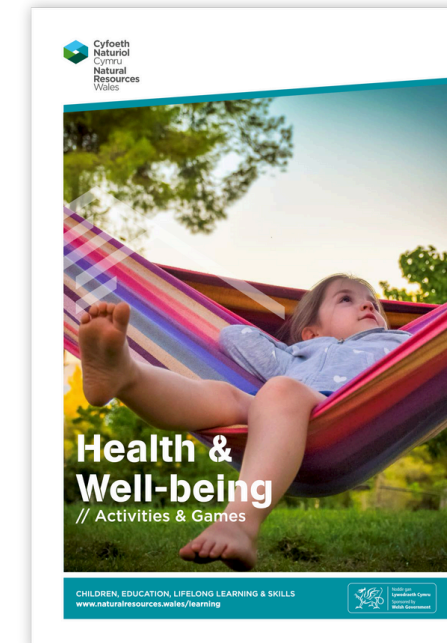
25. Treasure Trove
26. Animal Name Game
27. Nature's Gallery
28. Journey Sticks
29. Mini Safari
30. Storytelling Stones

Expressive Arts

13. Natural Art Attack
14. Nature Faces
15. Shelter Building
16. Collage
17. Leaf Shapes and People
18. Mandalas

Health and Wellbeing

31. Earthing
32. Grounding
33. Tree Hugging
34. Squirrel Cache
35. Nature Gym
36. Animal Yoga



Outdoor learning activities by habitat type

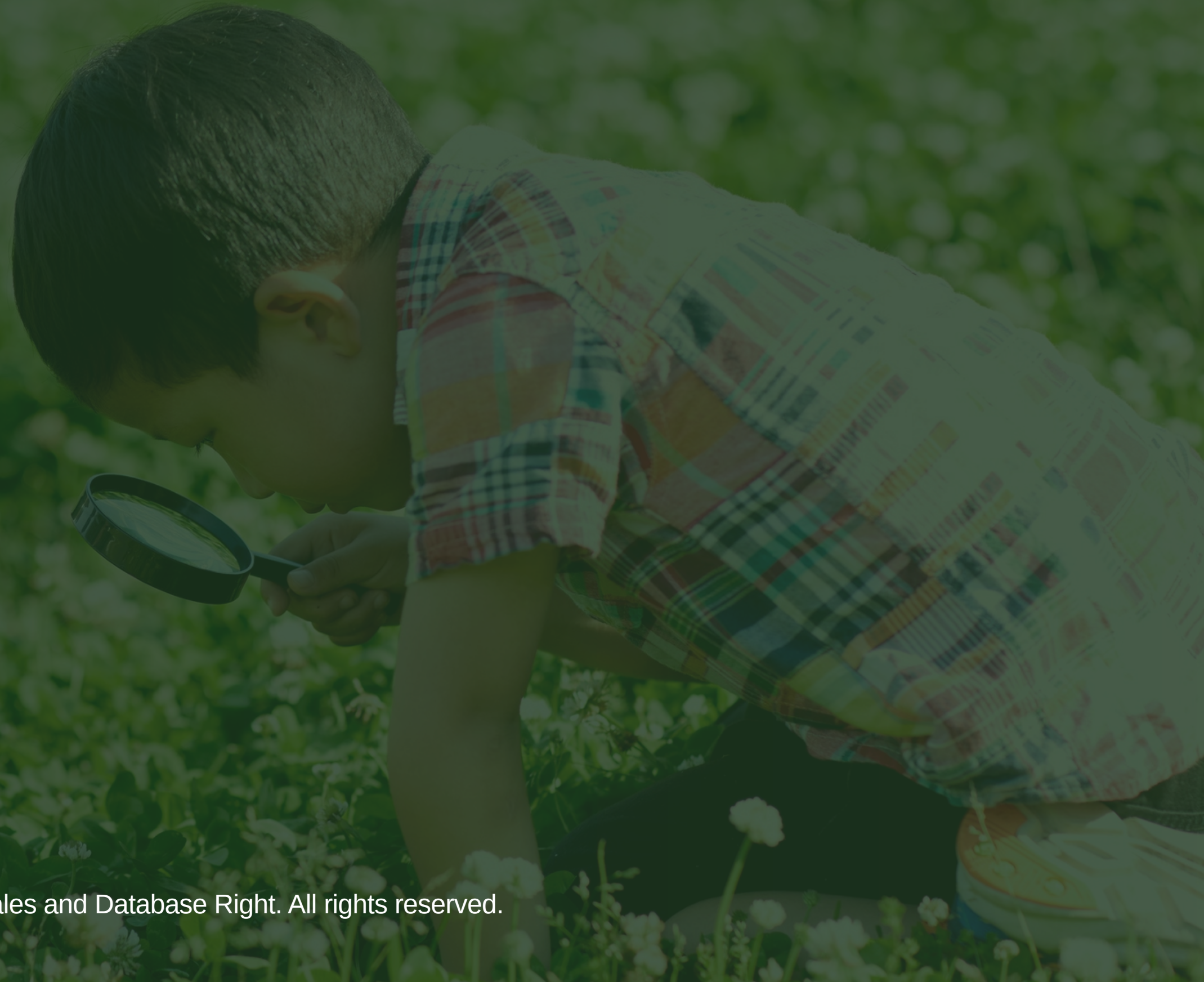
This table shows where each outdoor learning activity can be delivered across the main habitat types commonly found on golf courses.

It provides a quick reference for clubs to match activities to the landscapes available on site, while giving schools confidence that sessions will take place in appropriate, engaging and well-managed areas.

Activities can be adapted to other natural areas on the course, provided the location is safe, well-managed and suitable for the activity.

Category	Activity	Managed Turfgrass	Grassland	Woodland	Wetland	Coastal/Dunes
Science & Technology	1. Owl and Mouse	●	●	●	○	○
	2. Animal Sniff	●	●	●	○	○
	3. Food Chain Detectives	○	●	●	●	●
	4. Habitat Explorers	●	●	●	●	●
	5. Micro Minibeast Safari	○	●	●	●	●
	6. Shrinking Ice	●	●	○	○	○
Humanities	7. Camouflage Caterpillars	○	●	●	○	●
	8. Listening Hand	●	●	●	●	●
	9. Feely Bags	●	●	●	○	●
	10. Sound Maps	○	●	●	●	●
	11. Tickly Prickly	○	●	●	○	●
	12. Scavenger Hunt	○	●	●	●	●
Expressive Arts	13. Natural Art Attack	○	●	●	●	●
	14. Nature Faces	○	●	●	○	●
	15. Shelter Building	○	○	●	○	○
	16. Nature Collage	○	●	●	●	●
	17. Leaf Shapes and People	○	●	●	○	○
	18. Mandalas	○	●	●	○	●
Mathematics & Numeracy	19. Leaf Strings	○	●	●	○	●
	20. Twig Towers	○	●	●	○	●
	21. Animal Legs	●	●	●	○	●
	22. Animal Home Auction	○	●	●	●	●
	23. How Old Is That Tree?	○	●	●	○	○
	24. Am I Faster Than?	●	●	○	○	○
Language, Literacy & Communication	25. Treasure Trove	○	●	●	●	●
	26. Animal Name Game	●	●	●	●	●
	27. Nature's Gallery	●	●	●	●	●
	28. Nature Fibs	●	●	●	○	○
	29. Journey Sticks	●	●	●	●	●
	30. Mini Safari	○	●	●	●	●
Health & Wellbeing	31. Earthing	●	●	○	○	●
	32. Grounding	●	●	●	○	●
	33. Tree Hugging	○	●	●	○	○
	34. Squirrel Cache	○	●	●	○	○
	35. Nature Gym	○	●	●	○	●
	36. Animal Yoga	●	●	○	○	●

Science and Technology



Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights reserved.

Owl and Mouse

Overview: This activity looks at how animals use specialised tactics to hunt and avoid predators. In this case, how an owl uses acute hearing to locate food and how a mouse uses stealth to avoid being eaten.

Resources: Blindfold, or similar; seeds, nuts, or similar

Locations: Managed turfgrass, Grassland, Woodland

Notes: Needs a safe, fairly even area for a circle game with a blindfolded learner. Avoid wetland edges and dunes due to footing and water risk.

Lesson Plan

1. Ask your learners to stand silently in a circle, facing inward
2. Select an 'owl' to be blindfolded and invite them to sit or stand in the middle of the circle.
3. Scatter seeds or nuts around the 'owl' as 'food'
4. Point to a 'mouse' within the circle.
5. Explain that the 'mouse' must creep forward to pick up some of the 'food,' without being heard by the 'owl' and return to the circle.
6. Choose another 'mouse' and repeat.
7. If the 'owl' hears the 'mouse' moving around, the 'owl' needs to point in the direction of the sound
8. If correct, the caught 'mouse' becomes the 'owl'.

Animal Sniff

Overview: This activity develops awareness of how creatures use their sense of smell to survive.

Resources: Flavouring essences, ideally colourless; cotton wool balls

Locations: Managed turfgrass, Grassland, Woodland

Notes: Works anywhere you can hide cotton balls and move safely. No need to be near water or dunes.

Lesson Plan (Option 1)

1. Create a set number of small cotton wool balls, matching the number of learners.
2. Apply a different flavoured essence to each cotton wool ball, replicating as needed
3. Hide the cotton wool balls around your outdoor learning area
4. Ask the learners to look for the cotton wool balls, smelling each one without removing them from their location.
5. Return to a group discussion. How many different smells could they count? How difficult or easy was it to identify the different scents? Was one easier to recognise than another?
6. Describe the smells and explain how everyone has a different level of a sense of smell.

Lesson Plan (Option 2)

1. Create a set number of small cotton wool balls, matching the number of learners.
2. Divide the cotton wool balls into a set number of essences (i.e., 20 learners = 20 cotton wool balls divided into 4 groups of 5 essences)
3. Apply the different essences to a corresponding number of tree trunks, or similar feature, in the outdoor learning area (i.e., 5 different essences applied to 5 different tree trunks)
4. Hide the cotton wool balls around your outdoor learning area
5. Ask the learners to find and collect one cotton wool ball each.
6. Once each learner has collected a cotton wool ball, ask them to find others holding a cotton wool ball with the same scent. They should then link arms as a 'scent family'.
7. Ask each scent family to locate their home (i.e., the tree with the same scent as their cotton wool balls).
8. Return to a group discussion. Which animals and insects use their sense of smell and what for? For example, badgers use it to sniff out their prey in the dark and ants use scent trails to find their way home and to identify friend from foe.

Food Chain Detectives

Overview: This activity develops knowledge of insect and animal features, behaviours and habits.

Resources: Clipboards, paper and pencils

Locations: Grassland, Woodland, Wetland, Coastal/Dunes

Notes: Look for signs of feeding and different organisms. All “wilder” areas of the golf course can support this.

Lesson Plan

1. Explain that all living things need food to give them energy to move and grow. A food chain demonstrates how living things get their food by showing us what feeds on what in a habitat. It also shows how energy flows from one living thing to another.
2. How do your learners get their energy? Explain that every living thing needs energy to survive and grow
3. Explain that a food chain begins with the sun, which passes energy onto plants. Plants then change light energy into chemical energy, which they consume as food. Plants can be called primary producers or sun munchers.
4. Animals that only eat plants are called herbivores, primary consumers or plant munchers. These animals in turn will be eaten by carnivores, which are known as secondary consumers or animal munchers. Some animals eat both plants and animals. These are called omnivores.
5. Explain that your learners that they are going to be energy investigators and search for evidence of sun munchers, plant munchers and animal munchers.
6. Divide into four separate groups, with each investigating separate areas on a rotational basis.
7. Provide the groups with writing equipment to record their findings.
8. Total the number of different specimens each group found in each category. What does this show about energy transfer within a food chain?

Habitat Explorers

Overview: This activity compares habitats and the creatures that live in them.

Resources: Optional collecting trays, light meter and pH meter

Locations: Managed turfgrass, Grassland, Woodland, Wetland, Coastal/Dunes

Notes: The purpose is comparing habitats. It's useful to include a managed area (practice turf) alongside more natural ones.

Lesson Plan (Option 1)

1. Discuss the different types of habitats. What are they and who lives in them?
2. For the best outcome select 2 different types of habitat to investigate such as broadleaf woodland and conifer woodland; sand dunes and shrubland.
3. Discuss how most things can become a habitat, such as a, a tree stump, driftwood, rock pools or areas of moss.
4. Discuss what might affect a habitat e.g. light, wind, humans, temperature, the sea or rain.
5. Encourage your learners to investigate the habitats.

Lesson Plan (Option 2)

Look closely at the type of plants in the area How many different plants can they find?

Is it dark or light – optional use of a light meter.

Discuss what kind of creatures may live there, e.g. insects, mammals, birds etc?

Optional use of collecting trays.

Can you find any evidence of animal activity? For example, an eaten nut shells, leaves that have been chewed or footprints.

What kind of soil is there? Try out a pH kit.

Repeat in habitat 2 and then compare findings. What were the main differences between the two habitats?

Which habitat has the most biodiversity and why might that be?

Micro Minibeast Safari

Overview: This activity explores habitats through different perspectives and scales

Resources: Lengths of string up to a maximum of 1 metre, magnifying glasses

Locations: Grassland, Woodland, Wetland, Coastal/Dunes

Notes: Needs structure at ground level: plants, litter, soil, micro-shelters. Not worth doing on pure close-mown turf.

Lesson Plan

1. Give each learner a length of string and magnifying glass
2. Ask your learners to drape the string over the most interesting area they can find.
3. Ask your learners to imagine they have shrunk to the size of ant
4. Encourage them to move the magnifying glass very slowly along the string, as though they were an ant travelling along a 'safari road'
5. Use prompt questions to stimulate imaginations. What can they see? Where might they go? What might they encounter? How does it feel to be an ant and have a new perspective of the area?
6. Consider extending the activity by using the experience as inspiration for creative writing, poetry or art.

Shrinking Ice

Overview: This activity explores the effects of global warming on frozen habitats.

Resources: Small tarpaulin

Locations: Managed turfgrass, Grassland

Notes: Needs a flat, open grassed area for running and jumping on a tarp. Woodland, wetlands and dunes introduce unnecessary trip or water hazards

Lesson Plan

1. Lay the tarp on a grassed area
2. Explain that this represents a sheet of ice, which is a habitat that some creatures live on
3. Discuss what these creatures might be. How do they stay warm?
4. Choose a learner to act as the predator i.e., 'polar bear',
5. Explain that the rest of the group are going to act as penguins who swim in the sea around the ice (tarp) looking for food to eat. Ask the group to run around the designated area.
6. Explain that when the 'polar bear' shouts 'hunting for food', every penguin must jump quickly onto the ice (tarp) to escape.
7. Unfortunately, due to global warming the ice keeps shrinking. Fold the tarp in half and then repeat the swimming, hunting and shrinking step
8. Eventually the 'penguins' will need to use teamwork to get as many of themselves as possible onto the tarp as the ice decreases in surface area.
9. 'Penguins' that can't get on are 'eaten' by the predator and can form their own group to one side

Humanities



Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights reserved.

Camouflage Caterpillars

Overview: This activity supports the development of observational skills and resilience, and introduces the topic of animal adaptations, particularly camouflage

Resources: Small pieces of coloured pipe cleaners, wool or similar

Locations: Grassland, Woodland, Coastal/Dunes

Notes: Needs colour/texture variation for hiding 'caterpillars'.

Lesson Plan

1. Place a set number of finger length pieces of differently coloured pipe cleaners, wool or similar, around your natural space – these are the caterpillars.
2. Keep back one each of the most naturally coloured pieces that suit the area in use, e.g. green, brown, black, seasonal colours.
3. Place each caterpillar in plain sight in different locations, at varying heights within learners reach e.g. ground level, mid-level, high level
4. Make a note of where you place the more natural-coloured pieces e.g. a brown 'caterpillar' on leaf litter
5. Explain that the caterpillars need to be found
6. Tell your learners that every time a 'caterpillar' is found, it should be brought back and wrapped around a small stick
7. Usually, the less natural, brighter colours will be found first. Provide some clues to help pinpoint the location of the natural colours.
8. Look at the sequence of the caterpillars on the stick and discuss why the brighter, less natural colours were found first. Explain that camouflage is a disguise that makes a person or animal look like what is around them.
9. Consider how camouflage is used by many creatures to hide from predators.

Listening Hand

Overview: This activity focusses on active listening skills to develop an understanding of natural and man-made activity in the area

Resources: None required

Locations: Managed turfgrass, Grassland, Woodland, Wetland, Coastal/Dunes

Notes: A quiet, reflective listening task. Any safe, relatively still spot in the landscape works.

Lesson Plan

1. Standing in a circle, ask everyone to hold up their hands in a clenched fist
2. Learners should close their eyes and listen for a set length of time, raising one finger every time a different sound is heard.
3. Discuss sounds heard. Were they natural or manmade?
4. Replicate the activity in a range of different habitats and create a sound bank to tally the most frequently heard sounds within each area. Why were certain sounds heard more frequently in different areas?

Feely Bags

Overview: This activity encourages learners to explore natural resources through a range of senses.

Resources: Collection bag or box

Locations: Managed turfgrass, Grassland, Woodland, Coastal/Dunes

Notes: You can collect textures from natural areas, then run the main activity anywhere with space to sit or stand in a group.

Lesson Plan

1. Collect different natural objects from around your nature area
2. Place them in the bag or box
3. With closed eyes or using a blindfold, ask one learner at a time to choose an object to pull out
4. Explore the object through as many senses as possible except sight, describing how it feels, smells, sounds etc. Try to work out what the object is.

Sound Maps

Overview: This activity focusses on developing directional hearing.

Resources: Clipboards, pieces of paper or card, pencils

Locations: Grassland, Woodland, Wetland, Coastal/Dunes

Notes: Best where there's a mix of natural and ambient sounds.

Lesson Plan

1. Give each learner a clipboard with card/paper and a pencil and ask them to locate themselves in a comfortable position e.g., leaning on a tree, sitting on the grass, away from everyone else.
2. Ask them to draw a dot or a picture of themselves in the centre of their piece of paper. This represents their current location on a 'map'.
3. Ask them to close their eyes and listen to the sounds surrounding them for a set amount of time.
4. On hearing a sound, they should think of a symbol or picture to represent it. For example, wavy lines for the wind. Instruct them to draw the symbol / picture on the 'map', according to where the sounds came from in relation to them,
5. Replicate the activity in other habitat areas. Consider working together to sound map the wider area. Which sounds are the most common?

Tickly Prickly

Overview: This activity focusses on discovering textures within the natural environment.

Resources: Collection containers

Locations: Grassland, Woodland, Coastal/Dunes

Notes: Focuses on plant textures and forms; suits roughs, shrubs, dune vegetation and woodland edges.
No real need to be near water.

Lesson Plan

1. Divide your learners into pairs or small groups
2. Give each pair or small group a set of adjectives e.g., rough and smooth, crunchy and soft etc.
3. Ask each pair or small group to work together and find three natural objects that demonstrate the textures or adjectives
4. When ready, ask each pair or small group to find another pair or small group and work out their adjectives from the objects they have collected
5. The aim is to try and guess the other pair or group's two words

Scavenger Hunt

Overview: This activity explores the natural environment through colour, sound, texture etc.

Resources: Paper; pencils

Locations: Grassland, Woodland, Wetland, Coastal/Dunes

Notes: Works across most semi-natural areas; just keep clear of steep banks and open water.

Lesson Plan

1. Give a list of natural resources or objects to individuals, pairs or small groups
2. Ask your learners to collect as many of the items on the list as possible
3. If the items are not moveable, take a picture or note of the location
4. When each individual, pair or group has completed their scavenge, ask them to bring their collection to the starting point
5. Sort through the items, potentially awarding points for each that has been correctly collected
6. Potentially use the items to create an artistic picture or story

Expressive Arts

A group of children are playing with hula hoops in a grassy field. The image is overlaid with a dark green filter. Several hula hoops are visible, some held by the children and others on the ground. The children are in various poses, some standing and some crouching, engaged in their play.

Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights reserved.

Natural Art Attack

Overview: This activity involves imagination and collaborative working to plan, resource and create a bespoke art piece (as part of a topic or free style).

Resources: None required

Locations: Grassland, Woodland, Wetland, Coastal/Dunes

Notes: Needs loose natural materials. Any area with leaves, sticks, stones, shells or seed heads is suitable.

Lesson Plan

1. Discuss the theme of the art piece e.g., animal, habitat, person etc.
2. In pairs or small groups, ask your learners to find a flat, open space for their 'canvas' and brush away any leaves or debris
3. Give them time to collect interesting resources from the site and arrange together to create a picture or sculpture that suits the agreed theme
4. Learners can use sticks, stones or an outline in the sand to provide a frame for their art

Nature Faces

Overview: This activity involves learners searching the environment for facial features in natural resources.

Resources: None required

Locations: Grassland, Woodland, Coastal/Dunes

Notes: Requires loose, varied natural objects

Lesson Plan

1. Task your learners, individually or in pairs, to seek out facial and bodily features in tree bark, knobbly branches, shrub outlines etc.
2. Water, mud and / or chalk could be used to highlight the faces and provide further detail.
3. Ask your learners to give each 'face' a name and backstory. Take a photograph and use it as a memory aid to build a creative writing piece.

Shelter Building

Overview: This activity encourages collaboration and communication in planning, designing and building a suitable shelter.

Resources: None required

Locations: Woodland

Notes: Realistically needs branches, trunks and a sheltered space. Best to keep it to woodland / tree belts for safety and materials.

Lesson Plan

1. Ask your learners to work in small groups to plan and draw a small shelter for an animal of their choice.
2. In their groups, learners should work together to build the shelter from suitable natural materials in the area.
3. Consider asking your learners to review the finished product. A retrospective plan could be drawn and annotated to demonstrate an understanding of the construction process.

Natural Collage

Overview: This activity uses a wide range of natural objects to explore composition and texture to inform a creative process

Resources: Camera, natural materials such as leaves, sticks, stones; paper and glue

Locations: Grassland, Woodland, Wetland, Coastal/Dunes

Notes: Materials can be collected in these habitats and assembled back at a safe base.

Lesson Plan

1. ask each learner to take a photo of a natural scene that they find interesting
2. Using the photograph as a guide, task them to recreate the picture using natural materials and other media such as chalk or mud
3. Alternatively, give your learners freedom to draw their own pictures and create an imaginative piece, such as a nature monster
4. A giant group collage can also be very effective and great fun to make!

Leaf Shapes and People

Overview: This activity explores shape and form.

Resources: Paper and glue

Locations: Grassland, Woodland

Notes: Needs good access to different leaves. Parkland trees and woodland are ideal.

Lesson Plan

1. Ask you learners to collect a range of different leaves
2. Ask your learners to select a leaf that they want to be the body of their person and glue it onto a piece of paper
3. Now, choose other leaves that can be added for body parts or draw them on until your learners are happy with their leaf person
4. Another option is to ask learners to cut leaves into different shapes and use them to create different figures, collages etc.

Mandalas

Overview: This activity explores how to use nature to create geometric mandalas. The activity can be delivered very quietly, with gentle handling of materials, to provide a meditative element.

Resources: None required

Locations: Grassland, Woodland, Coastal/Dunes

Notes: Works wherever you can collect enough contrasting natural objects and have a flat surface to lay them out.

Lesson Plan

1. Discuss the meaning of mandalas and their origins. A mandala is a spiritual symbol in Hinduism and Buddhism, representing the universe. They are now used as a generic term for any pattern, diagram or chart that represents the cosmos.
2. Collect natural materials to create a circular, sequential design. This can be as simple or as complicated as required. Try to match or contrast colours and create repeating patterns.
3. These mandalas can be created individually, in pairs or as a small or whole group.

Mathematics and numeracy

Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights reserved.

Leaf Strings

Overview: This threading activity provides opportunities for collecting, sorting and sequencing leaves, as well as exploring their various shapes, sizes and textures.

Resources: Lengths of string (shoelace size); knot one end and wrap sticky tape around the other for easy threading

Locations: Grassland, Woodland, Coastal/Dunes

Notes: Needs leaves or similar objects to thread and compare.

Lesson Plan

1. Give each learner a length of string
2. Encourage your learners to collect interesting leaves to thread onto the string
3. This can be completed by pushing the tapered end through the mid-point of the leaf
4. Ask your learners to rethread the leaves in order of size, shape or colour
5. You could also count how many leaves are on each string to determine who has collected the most
6. In pairs or small groups, ask your learners to find a flat, open space for their 'canvas' and brush away any leaves or debris
7. Give them time to collect interesting resources from the site and arrange together to create a picture or sculpture that suits the agreed theme
8. Learners can use sticks, stones or an outline in the ground to provide a frame for the piece

Twig Towers

Overview: This activity explores non-standard measurement, height, weight, mass capacity and 3D shape.

Resources: Sticks or twigs, tape measure

Locations: Woodland, Grassland, Coastal/Dunes

Notes: Uses sticks and small branches; woodland is best, but dune areas often have enough material too.

Lesson Plan

1. Divide your learners into small groups
2. Ask them to collect a range of straight sticks from around the area
3. Ask them to sort the sticks according to length, from the longest to the shortest
4. The task is for each group to build the tallest tower, starting with the longest twigs
5. Ask the groups to place two twigs on the ground and then another two on top in the opposite direction
6. Keep laying two twigs at a time, moving them a little closer to the centre for each row
7. Continue until all the twigs have been used to create a tower
8. Measure the towers to determine who has built the tallest
9. Consider which tower is the most stable, and why
10. Consider setting a time limit to increase the challenge

Animal Legs

Overview: This activity uses animal classification to promote mental calculation skills.

Resources: None required

Locations: Managed turfgrass, Grassland, Woodland, Coastal/Dunes

Notes: Can be done as a movement or card-based task anywhere with space to move and some visible wildlife/imagined animals.

Lesson Plan

1. Tell your learners about a variety of different animals and the number of legs they have e.g. woodlouse, spider, flea, badger
2. Using their own two legs as a reference, ask your learners to organise themselves into smaller groups that have the same number of legs as the creature you call out
3. For instance, when you shout flea (an insect with six legs), the learners should organise themselves into groups of three ($3 \text{ learners} \times 2 \text{ legs} = 6\text{-legged flea}$)
4. Continue this for each animal. For instance, a woodlouse has 14 legs so there should be seven learners in each group
5. Once this concept is grasped, ask your learners to combine the calculations. Can they get into groups of badgers with a flea on its back? For instance, a badger (4 legs) with a flea (6 legs) on its back would require 5 learners (10 legs).

Animal Home Auction

Overview: This activity supports mental calculation development through role play to explore selling and buying.

Resources: Natural materials, tape measure

Locations: Grassland, Woodland, Wetland, Coastal/Dunes

Notes: Needs a variety of materials (logs, tufted grass, stones, dune hummocks, reed edges).

Lesson Plan

1. Divide the group into small teams. Each team needs to construct a small shelter to house a small animal toy
2. This shelter should be built from natural materials to include three 'special features' that will stand out amongst the competition
3. Once the shelter is complete, each teams should take turns as estate agents to 'sell' their property to the rest of the group. They should focus on the special features that could be attractive to potential customers
4. Provide each team with a specified amount of money, which is not disclosed to the rest of the group
5. Each team should decide whether to bid on all or some of the properties up for sale
6. Each team should then develop a strategy for bidding to purchase the properties they have selected. This could include starting with a high opening bid or withholding a bid until the last minute
7. The auctioneer (yourself or a nominated learner) should then give a summary of the first property for sale. For instance, 'We have for sale a dome shaped property with a water-tight, moss-covered roof and natural leaf flooring to provide a cosy interior.'
8. The auctioneer will then commence the bidding using specific multiples. For instance, 'In this bidding round, we're going to be using multiples of 6. Do I see 12 pounds? I've got 12 pounds over here! Do I see 18 pounds, 18 pounds over here! etc. 144 pounds, going once, going twice, going three times. SOLD to the team on my left. Congratulations!'
9. Bidding should then commence on the next property using multiples of a different number.

How Old Is That Tree?

Overview: This activity uses estimation, counting, measuring and calculations to approximate for a real purpose.

Resources: Tree stumps or slices; tape measure over 2m; pencils and paper

Locations: Woodland; Grassland

Notes: Requires access to trees and / or stumps.

Lesson Plan (Option 1):

1. Look at a tree stump or slice. Discuss how each ring represents 1 year of tree growth.
2. The light rings represent spring growth, and the dark rings represent summer growth. A tree acquires one light and one dark ring annually. Count only the dark rings.
3. The tree's rings vary in thickness because the weather each year is different, either hotter, colder, wetter or drier. What would make a good growing year for a tree?
4. Ask your learners to estimate the age of the tree. They can split into smaller groups depending on how many stumps or slices are available. Count the rings and compare their estimate with the true age of the tree.

Lesson Plan (Option 2):

1. It is possible to estimate the age of a tree by measuring the circumference at chest height (~1.3 metres) and using a simple equation.
2. Two types of trees grow in the UK – softwoods and hardwoods. These both grow at different rates.
3. A softwood tree is usually conical in shape and referred to as evergreen i.e., those trees that do not lose their leaves or needles during the winter.
4. A hardwood tree is more spherical in shape and usually has no leaves during the winter.
5. Divide your learners into groups and ask them to find a suitable tree. Is it softwood or hardwood?
6. Ask each group to use a tape measure and wrap it around the trunk of the tree at chest height (~1.3 metres)
7. Record the circumference in centimetres.

Use the following equation to determine the age of the tree.

Softwood - Circumference in cm divided by 3 = age

Hardwood - Circumference in cm divided by 3 = age

Am I Faster Than?

Overview: This activity compares speeds and times of travel across a set distance.

Resources: Stop watches, metre marks, paper and pencils

Locations: Managed turfgrass, Grassland

Notes: Needs open running space for timed sprints. Woodland and wetlands add avoidable risk.

Lesson Plan:

1. Ask your learners to work in pairs and measure the time taken to travel across a set distance. Use the three movement types within the table.
2. Ask them to use the below equation to work out their approximate speed

Speed = Distance / Time

3. Ask them to compare themselves against some members of the animal world:

Buzzards fly at 26 meters per second
Foxes move at 15 meters per second
Badgers move at 8 meters per second
Mice move at 5 meters per second
Frogs hop at 2 meters per second

Hedgehogs move at 1 meter per second
Beetles move at 0.5 meters per second
Woodlice move at 0.01 meters per second
Snails move at 0.001 meters per second

	Jog	Walk	Hop
Distance (Metres)			
Time (Seconds)			
Speed (Metres per second)			

Language, Literacy and Communication

Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights reserved.

Treasure Trove

Overview: This activity combines number and word play.

Resources: Collecting containers; optional clipboards, paper and pencils

Locations: Grassland, Woodland, Coastal/Dunes, Wetland

Notes: About gathering and describing interesting finds; best in more varied natural areas

Lesson Plan:

1. Divide your learners into small groups and provide each with a collecting tub
2. Ask them to collect natural materials (treasure) from around the area, working in descending multiples e.g., 10 of one thing, 9 of another and so on.
3. Place the items into the collecting tub.
4. When collection is complete, ask each group to count and sort their objects into sets on the floor
5. Ask them to consider adjectives and alliteration words that match the nouns
6. Each group should develop their words in the same format as the example table

Number	Adjectives		Nouns
Five	Soft	Floating	Feathers
Four	Crunchy	Little	Leaves
Three	Round	Soilid	Stones
Two	Straight	Tiny	Twigs
One	Bumpy	Pointy	Cone

Animal Name Game

Overview: This group activity plays with alliteration.

Resources: None required

Locations: Managed turfgrass, Grassland, Woodland, Coastal/Dunes, Wetland

Notes: A circle/movement and language task; can be run safely anywhere you can form a group.

Lesson Plan

1. Ask the group to stand in a circle facing inwards
2. Choose a learner to go first and explain that they need to think of an animal that begins with the same letter as their first name.
3. They should then make an action that represents that animal. For instance, a learner called Susan could be a seagull that flaps her wings.
4. The next person in the circle then repeats the name and animal action before adding their own.
5. Continue around the circle until the whole group are listed.

Natures Gallery

Overview: This activity uses the natural environment as a focus for the use of descriptive and factual language.

Resources: Cardboard frames

Locations: Managed turfgrass, Grassland, Woodland, Coastal/Dunes, Wetland

Notes: Framing and describing scenes; any landscape with a view or focal features is suitable.

Lesson Plan

1. Working in pairs or small groups, instruct your learners to take turns to hold up a cardboard frame
2. Ask them to focus on something in the natural environment that they think looks interesting
3. Ask your learners to describe what they see and why it is interesting
4. Consider taking a photo to replicate the picture through a collage or painting

Nature Fibs

Overview: This activity applies imagination and descriptive language to repurpose natural objects.

Resources: None required

Locations: Managed turfgrass, Grassland, Woodland

Notes: A storytelling/discussion activity using found objects. Safe open spaces or woodland edges are ideal

Lesson Plan

- 1.Task learners with finding an interesting natural object
- 2.Ask them to reimagine what the object is used for. For example, a stick could become the wand of a wizard or the oar of a pirate boat
- 3.Ask your learners to take turns sharing their ideas for their item with the rest of the group
- 4.Consider asking your learners to write a creative story about their item

Journey Sticks

Overview: This activity supports the retelling of a journey.

Resources: Wool or string

Locations: Managed turfgrass, Grassland, Woodland, Wetland, Coastal/Dunes,

Notes: You can move through the course collecting small items; it's designed to cross multiple habitats.

Lesson Plan

1. Ask your learners to find stick that is roughly the same length as their arm
2. Provide each learner with lengths of wool or string. These will be used to tie items to their stick.
3. Take your learners on a nature walk, asking them to look for interesting items like flowers, leaves or seeds. Ask them to make a mental note of where each item was found.
4. Ask your learners to describe or write the story of their journey, using the items on their stick as a source of inspiration
5. Consider explaining the historical use of journey sticks by native peoples, such as Aborigines etc.

Mini Safari

Overview: This activity encourages exploring a different perspective for story building.

Resources: Arm length pieces of wool or string; magnifying glasses

Locations: Grassland, Woodland, Wetland, Coastal/Dunes

Notes: Works best where there's visible biodiversity. No real benefit from pure managed turf.

Lesson Plan

1. Give each learner a piece of wool or string
2. Ask them to lay the wool or string along an interesting, natural place
3. Ask your learners to imagine that they have been shrunk to the size of an ant and the wool / string is a pathway for them to follow
4. Using the magnifying glass, learners should examine the miniscule detail of the landscape along their string
5. Discuss what tiny creatures an ant might meet when moving over the landscape.
6. What would a human feel like if they could shrink to the size of an ant? What challenges could they encounter on a journey at this scale? Ask each learner to draft a story of their mini adventure

Health and wellbeing

Contains Natural Resources Wales information © Natural Resources Wales and Database Right. All rights reserved.

Earthing

Overview: These activities encourage direct skin contact with the surface of the Earth e.g., with bare hands or feet

Resources: None required

Locations: Managed turfgrass, Grassland, Coastal/Dunes

Notes: Usually barefoot or close contact with the ground, so you want soft, even surfaces.

Lesson Plan (Option 1):

1. It is thought that walking barefoot on the Earth enhances health and provides feelings of wellbeing. This practice occurs in diverse cultures around the world
2. Walking barefoot on uneven ground can also help to strengthen core muscles and support balance development
3. Choose an appropriate spot, complete safety checks and encourage learners to remove shoes and socks.
4. Stand still on the grass, soil, sand etc and ask your learners to observe how this feels
5. What sensations are there? Now try walking around the chosen environment and repeat

Lesson Plan (Option 2)

1. Ask learners to stand still with their feet planted on the Earth
2. Ask them to close their eyes and imagine that they are a tree rooted to the ground
3. Describe the below journey in a slow paced and even tone
4. How do your learners feel after the exercise?

“Feel the roots coming out from the soles of your feet and pushing down into the soil. The roots travel through the soil, and into the rocks beneath. They continue through the fissures of the rocks, down into the centre of the earth and into the energy of the molten magma. Imagine that the energy of the magma now passes back up through the rock, through the soil, up through the roots of the tree, up through the trunk and into the branches and out into the furthest points of your twigs and leaves. Now release the energy out of the top of the tree and let it reach up into the sky as a white light, up into the blackness of space and allow the light to touch the energy of the sun”

Grounding

Overview: These activities focus on grounding as a technique that helps learners to stay connected with the 'here and now'.

Resources: None required

Locations: Managed turfgrass, Grassland, Woodland, Coastal/Dunes

Notes: Simple, sensory presence activities can run in most calm, safe areas.

Lesson Plan (Option 1):

1. Ask learners to choose a special spot that captures their interest, ideally away from other members of the group
2. Ask them to sit or lie quietly in a comfortable position.
3. Ask them to look around and reflect on what they can see, hear and feel e.g., the wind rustling the branches of a tree
4. Ask your learners to return to the group and reflect on the experience.

Lesson Plan (Option 2)

1. This activity allows learners to concentrate on a simple task, providing focus and developing mindfulness
2. Ask your learners to find two small stones
3. Explain that they need to put the stones on the back of each of their hands and walk to a certain location, and back
4. The aim is to travel there and back without dropping the stones
5. If the stones fall, they need to stop, pick them up and continue on their journey
6. Ask your learners to return to the group and reflect on the experience.

Tree Hugging

Overview: This activity explores how interacting with the natural world can help to improve physical and mental health

Resources: None required

Locations: Woodland, Grassland

Notes: Anywhere with safe access to trees. Woodland first, plus parkland trees in grassland areas.

Lesson Plan:

1. Scientific research shows that trees can improve the symptoms of many health issues
2. The act of cuddling itself is believed to be beneficial as it can influence levels of 'happiness' hormones like oxytocin, serotonin and dopamine
3. Identify an area with a number of suitably sized trees. Complete safety checks, such as looking for low lying branches.
4. Choose a tree to hug.
5. Ask your learners to approach the tree one by one, holding hands with the next person until a complete circle has formed around the tree.
6. Find another tree and repeat until the whole group are hugging a tree.
7. Ask the group to quietly rest their cheek on the trunk, listening to and smelling the tree at the same time.

Squirrel Cache

Overview: This activity explores empathy with other creatures, considers survival strategies and links to healthy eating.

Resources: Squirrel food, such as nuts, conkers, acorns etc.

Locations: Woodland, Grassland

Notes: Hiding and finding “caches” works well where there are natural hidey-holes: bases of trees, roughs, shrubs.

Lesson Plan:

1. Ask the group what they know about squirrels. Where do they live? What do they eat? How can they climb trees?
2. Explain that squirrels struggle to find food in the winter, so they store it in different places during the autumn to eat during the cold season.
3. Give each learner 3 pieces of food and them to act as a squirrel during the autumn.
4. Ask them to find 3 different places to hide their food for the winter. They must hide the food well because they don't want other learners to find it!
5. Now leave the area for a set amount of time, perhaps to do another activity.
6. On returning, ask your learners to find their squirrel food. It is likely that only 30-60% will be successful!
7. How many were successful? If you were a real squirrel what would this mean? How would an animal feel if it couldn't find sufficient food for the winter? What happens to the items squirrels bury but don't eat?
8. Discuss natural food choices for humans and how we would manage for food if we could only use what a nature area provides.

Nature Gym

Overview: This activity encourages increased physical activity, balance and literacy

Resources: None required

Locations: Woodland, Grassland, Coastal/Dunes

Notes: Uses natural features as “equipment”: logs, slopes, banks, hummocks. Not suited to wetlands or tightly managed turf.

Lesson Plan:

1. Create a ‘green’ gym and call out actions from a list of physical activities
2. Depending on physical ability, these could include:

X number of runs between trees, bushes etc.

X number of rotations around a fixed point

X number of stretches to above head, holding a stick in both hands

X number of body twists with hands at either side of a stick etc.

Remember to warm up and cool down!

Animal Yoga

Overview: This activity encourages increased physical activity, balance and literacy

Resources: None required

Locations: Managed turfgrass, Grassland, Coastal/Dunes

Notes: Needs a reasonably even, comfortable surface for poses and floor work. Woodland only if you have a very clear patch, but on most courses turf and open grass are the practical choices.

Lesson Plan:

1. Ask the group to form a circle, facing inwards. Ask each learner, one at a time, to say the name of an animal they can relate to.
2. Ask the learner to make up a pose to represent the animal they chose.
3. Invite the rest of the group to try the pose with their eyes closed.
4. While your learners hold their pose, ask them to imagine they are the animal. For example, if they were a bird, they could imagine themselves flying over the treetops.