

Addysg bywiol yn yr awyr agored yn eich Parc Cenedlaethol Bannau Brycheiniog Blynnyddoedd 1-6
Active outdoor learning in the Brecon Beacons National Park Years 1-6

Welcome to National Park Ambassador Schools

We are delighted that you are interested in the Brecon Beacons National Park Ambassador Schools programme.

It was designed in collaboration with three very experienced local teachers and aims to increase confidence in teaching and learning outdoors.

The six units of work for years 1- 6 was originally delivered in partnership with Physical Education and School Sport, local schools and the Brecon Beacons National Park Authority.

At their core is outdoor learning, with strong links to physical activity. The units fully incorporate the Literacy and Numeracy Frameworks (LNF) and offers ample opportunities to develop the four core purposes of the new Curriculum for Wales: ambitious and capable learners, healthy, confident individuals, ethical informed citizens and enterprising, creative contributors.

This resource has lesson plans, Welsh prompt cards, diagrammatic resource cards and web links.

We have included questionnaires in the pack to undertake at the beginning and the end of the National Park Ambassador Schools journey to help you and your pupils evaluate the benefits of teaching and learning outdoors.

The potential impact on teaching and learning standards include:

- High quality physical outdoor learning experiences helping children develop a range of skills related to the activities;
- Clearly defined skills in literacy and numeracy within the curriculum area of PE and outdoor learning which will improve literacy and numeracy standards;
- Well being curriculum will be enhanced with improvement in confidence social skills, healthy living and lifelong love of exercise and the outdoor environment;
- Knowledge and understanding of sustainability can be increased leading to a positive social impact on individuals, local communities and the wider world.

The outdoors has huge potential for learning and there is evidence to say that learning occurs best while outdoors. The critical age of influence for engaging children with the outdoors is before the age of 12 years old. A child's experience and confidence in the outdoors directly impacts on their ability to engage with the outdoors as an adult. We hope that all of our children and young people will become the future ambassadors for our National Park and the world.

Our National Park is a protected landscape which is here for all of us.

We hope this resource helps teachers and pupils to have the confidence to discover, enjoy, understand and conserve their local area and the National Park now and in the future.

To find out more please contact: educationemail@beacons-npa.gov.uk

With special thanks to Alison Weaver, Deborah Antony (Crickhowell Primary School), Nick Griffiths (Mount Street Junior School), Hayley Sharp and Eleri Thomas (Brecon Beacons National Park Authority).



National Park Ambassador Schools Courses Overview

Unit Title:	Year group:	Main Curriculum Links:	Brecon Beacons National Park Authority Visit/Support:
Homes and Habitats	Y1/2	<p>PD - Parachute games, shelter building, building and testing shelters for small world figures.</p> <p>KU - Investigating skills - building and testing shelters for small world figures (e.g lego).</p> <p>LLC- Persuasive writing 'Home for sale' - animal homes.</p> <p>MD - Data skills - shelter properties, spider graph.</p>	Craig-y-Nos Country Park or local woodland with Brecon Beacons National Park Authority support.
Wriggle, Wiggle and Crawl	Y1/2	<p>CD - Dance (indoors/outdoors).</p> <p>KU - Minibeast investigation - 'What habitats do Woodlice prefer?'</p> <p>MD - Woodlice habitat investigation, data handling.</p>	Craig-y-Nos Country Park visit.
Sink or Swim	Y3/4	<p>PE - River/Canal walk, Kayaking/Canoeing, Water relay race.</p> <p>Sci - Pond/river dipping - classification, food chains.</p> <p>MD - Data handling (species).</p> <p>LLC- Text purposes (information).</p>	River/canal walk and/or kayaking/canoeing. National Park Visitor Centre visit.
Expedition Challenge	Y3/4	<p>PD - Outdoor/adventurous (OAA) activities. Problem solving, obstacle relay, tent challenge. Maps/directions, route planning/expedition planning.</p> <p>MD - Angles/compass bearings, estimating and measuring distances - time events.</p> <p>LLC- Text purpose (instructions) - putting up a tent, letter writing.</p> <p>Sci - Habitats/Classification - 'Mammals of the wood'.</p>	YHA Danywenallt National Park Study Centre - 1 night residential including evening activity, Route Planning. Walk in local area or wider National Park.
Wonderful Woodlands	Y5/6	<p>Sci - Woodland, conservation, sustainability and habitat Management, healthy lifestyles. Humans effect on environment.</p> <p>MD - Measuring/Calculating/applying formulae - tree height, circumference, to calculate age and carbon store. Heart rate measurements.</p> <p>PE - health related exercise - importance of healthy lifestyle.</p>	Local woodland / community links / Craig-Y-Nos Country Park visit.
Lost and Found	Y5/6	<p>PE - OAA - Orienteering, Geo-caching.</p> <p>MD - Reading maps and scales, using directions, using measuring instruments (GPS Units).</p> <p>LLC- Instructional writing. Explanation writing. Orienteering.</p>	Craig-y-Nos Country Park visit. Orienteering. Geo-caching.



National Park Ambassador Schools Pupil Questionnaire

Before:			
	Y	N	N/S
Would you like to have more lessons outside?			
Does your school do a lot of outdoor education?			
Do you think you would enjoy working outdoors more often?			
Will you be able to learn new and interesting things outdoors?			
Do you like to go outside and enjoy nature, when you're feeling sad?			
Do you feel peaceful when in the natural environment?			
Would you feel happier and more confident working outdoors?			
Do you think working outdoors makes you feel fitter, healthier and stronger?			
Can you develop your literacy and numeracy skills by working outdoors?			
Is being outdoors good for you?			
Will your actions make the natural world different?			
Do people have the right to change the natural environment?			
Is taking care of animals important to you?			
Can people live without plants or animals?			

After:			
	Y	N	N/S
Have you enjoyed working outdoors this term?			
Are you proud that your school is now an 'Ambassador School?'			
Has working in the outdoors made you feel happier and more confident?			
Have you learnt new things outdoors?			
Do you feel happier when you're outside?			
Do you feel peaceful when in the natural environment?			
Are you happier and more confident working outside?			
Has working in the outdoors made you feel fitter, stronger and healthier?			
Have you developed your literacy and numeracy skills by working outdoors?			
Is being outdoors good for you?			
Do your actions make the natural world different?			
Do people have the right to change the natural environment?			
Is taking care of animals important to you?			
Can people live without plants or animals?			

Cardiau Cymraeg

Gorchmynion Corfforol Physical Commands

Stopiwch	Stop
Symudwch	Move
Cerddwch	Walk
Rhedwch	Run
Ewch yn ôl	Go back
Sgipwch	Skip
Hopiwch / Herciwch	Hop
Neidiwch	Jump
Trowch	Turn
Dringwch	Climb
Taflwch	Throw
Daliwch	Catch
Dawnsiwch	Dance

ar y	on the
yn y	in the
wrth y	by the
o dan y	under the
o flaen y	in front of the
tu ôl i'r	behind the
uwchben y	above the

yn araf	slowly
yn gyflym	quickly
yn dawel	quietly

Cyfarchion a'r Tywydd Greetings and the Weather

Bore da blant/bawb	Good morning children/everyone
Prynhawn da	Good afternoon
Sut ydych chi?	How are you?
Gwrandewch (arna i)	Listen (to me)
Edrychwch (arna i)	Look (at me)
Dewch yma	Come here
Dim siarad!	No talking!
Bant â ni	Off we go
Bant â chi	Off you go
Byddwch yn ofalus	Be careful
Yn ofalus	Carefully

Sut mae'r tywydd heddiw?	What's the weather like today?
Mae hi'n	It's
Ydy hi'n?	Is it?
Ydy/ Nag ydy	Yes / No
heulog	sunny
braf	fine
sych	dry
boeth	hot
bwrw glaw	raining
wlyb	wet
oer	cold
gymylog	cloudy
niwlog	foggy
stormus	stormy
bwrw eira	snowing
rhewi	freezing
wyntog	windy



Cardiau Cymraeg

Defnyddiau naturiol

Natural materials

cerrig	stones
briciau	bricks
pren	wood
canghennau	branches
brigau	twigs
dail	leaves
gwellt	straw
gwair	grass
mwsogl	moss
rhisgl	bark

trychfilod / bwystfilod bach	minibeasts
gwesty	minibeasts hotel
cysgod	shelter

Ydy e'n dal dŵr?	Is it waterproof?
Ydy e'n gryf?	Is it strong?
Ydy e'n gyffyrddus?	Is it comfortable?
Ydy e'n ddeniadol?	Is it attractive?
Ydy / Nag ydy	Yes / No

Rhifo, mesur a chyfeiriad

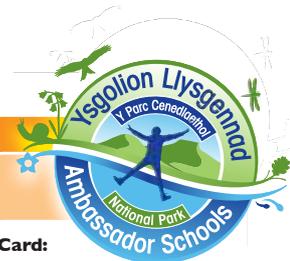
Counting, measuring and directions

Rhifwch	Count
Sawl un?	How many?
Sawl un sy yma?	How many are here?
Sawl centimetr?	How many centimetres?
Sawl metr?	How many metres?
Sawl munud?	How many minutes?

Rhifwch y camau	Count the (number of) steps
Mesurwch eich pwls	Measure your pulse
Sawl curiad mewn munud?	How many beats per minute?
Sut wyt ti?	How are you?
Sut wyt ti'n teimlo?	How are you feeling?
Wyt ti wedi blino?	Are you tired?
Wyt ti'n boeth?	Are you hot?
Ydw / Nag ydw	Yes / No

Cwmpawd	Compass
gogledd	north
de	south
dwyrain	east
gorllewin	west

National Park Ambassador Schools



Year Group 1/2	Theme: Homes and Habitats		
Curriculum PE/PD: Adventurous Activities Link/PD link:	Numeracy Framework/ Literacy Framework:	Suggested Activities/ Key Questions:	Resources:
<p>Knowledge & Understanding: Describe the natural and human features of different localities. Recognises simple comparisons and offers some reasons for the natural and human features of different localities.</p>	<p>Data Skills (Y1): Sort and classify objects using more than one criterion. Collect information by voting or sorting and represent it in pictures, objects or drawings. Make lists and tables based on data collected.</p> <p>Data Skills (Y2): Extract and interpret information from lists, tables, diagrams and graphs.</p> <p>Oracy (Y1): Talk about things they have made or done, explaining the process. Express an opinion on familiar subjects</p>	<p>1. Use outside environment to investigate possible shelters - where can you find shelter within the school grounds? Move in a variety of ways between places.</p> <p>Discussion questions: What is a shelter? What does a shelter need to do? What makes a good shelter? Why would you need a shelter? Link to weather conditions. Use spider-graph to compare and contrast shelters, e.g. water-proof, wind-proof, comfortable, strong, attractive...</p>	<p>Resource Card: Spider Graph, Photos of shelter building materials.</p>
<p>Physical Development: Develop gross motor skills.</p>	<p>Oracy (Y1): Include some detail and some relevant vocabulary to extend their ideas or accounts. Speak audibly, conveying meaning to listeners beyond their friendship group.</p>	<p>2. Ask pupils to list materials/ items which could be used for shelter building. Discuss what qualities they have e.g. warm, waterproof, flexible, strong, lightweight...</p> <p>Select and test qualities of a variety of materials</p> <p>Experiment and discuss: What is suitable/unsuitable? Compare materials.</p>	<p>www.beacons-npa.gov.uk/learning</p>
<p>Physical Development: Develop fine manipulative skills.</p>	<p>Oracy (Y1): Take part in activities with others and talk about what they are doing.</p> <p>Oracy (Y2): Share activities and information to complete a task.</p> <p>Writing (Y1/Y2):</p>	<p>3. Introduce some animals of the National Park and talk about where they shelter and what they need to survive e.g. Shelter, food and water. Share an appropriate story or watch mini nocturnal homes video. Create nocturnal animals from play-dough or natural materials. Create mini gardens or habitats for your play-dough creatures in the playground using tuff spots/ corners. Opportunity for writing from animals point of view. Use senses as a base: I can hear... I can see... I feel... etc.</p>	<p>Story as a stimulus for creating shelters for tiny creatures/characters e.g. The Borrowers, Bear Snores On.</p> <p>See link below for National Park Young Ambassador mini Nocturnal homes video resource, Nocturnal animals fact files, Venn diagram Night and Day sorting.</p> <p>https://www.beacons-npa.gov.uk/learning/brecon-beacons-national-park-young-ambassador-award/young-ambassador-resources/</p>

Year Group 1/2		Theme: Homes and Habitats	
Curriculum PE/PD: Adventurous Activities Link/PD link:	Numeracy Framework/ Literacy Framework:	Suggested Activities/ Key Questions:	Resources:
<p>Physical Development: Develop gross motor skills. Begin to understand how important it is to lift, carry, place and use equipment safely.</p> <p>Personal and Social Development: Solve simple problems with a partner/group.</p>	<p>Oracy (Y1): Take part in activities with others and talk about what they are doing.</p> <p>Oracy (Y2): Share activities and information to complete a task.</p>	<p>4. Use local woodland or visit Craig-y-Nos Country Park to take part in shelter building activities. Provide criteria e.g. shelter must fit all pupils inside, be able to stay dry, warm, move around etc. Evaluate and present to the rest of class about your shelter - what went well, even better if...</p> <p>Opportunity to create poetry or writing as part of visit.</p> <p>Create spider-graph to compare with initial investigation.</p>	<p>Contact: Brecon Beacons National Park Authority Tel: 01874 62 4437 or educationemail@beacons-npa.gov.uk</p>
<p>Personal and Social Development: Enjoy caring for the environment.</p>	<p>Oracy (Y1): Listen to others, with growing attention, usually responding appropriately e.g. carrying out instructions.</p> <p>Take part in activities with others and talk about what they are doing.</p>	<p>5. Create a home for nature.</p> <p>Discussion about species in decline and the need to help protect them and their homes.</p> <p>Use school grounds or local woodland to build habitat shelters and highways for animals under threat e.g. hedgehogs</p>	<p>See RSPB Making Homes for Nature https://www.rspb.org.uk/fun-and-learning/for-teachers/lesson-plans-and-supporting-resources/homes-for-nature/</p>
<p>Physical Development: Uses the basic actions of travel, jump and land, balance and stillness in play and gymnastic activities.</p>	<p>Oracy (Y1): Talk about what they are doing.</p> <p>Writing (Y2): Use different types of writing appropriate to purpose and reader.</p>	<p>6. Team building/problem solving activities: Use large and small apparatus to represent shelters. Children to take on personae of a National Park animal and travel to various shelters. Use levels and prepositions.</p> <p>7. Write 'For Sale' adverts for the animal shelter they created. What makes it fit for purpose? Use labelling, adjectives as required.</p>	

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Year Group 1/2	Theme: Wriggle, Wiggle and Crawl		
Curriculum PE/PD: Adventurous Activities Link/PD link:	Numeracy Framework/ Literacy Framework	Suggested Activities/ Key Questions:	Resources:
<p>Physical Development: Understand, appreciate and enjoy the differences between running, walking, skipping, jumping, climbing and hopping.</p>	<p>Developing Numerical Reasoning: Identify steps to complete the task or reach a solution.</p> <p>Data Skills (Y1): Sort and classify objects using more than one criterion.</p> <p>Collect information by voting or sorting and represent it in pictures, objects or drawings. Make lists and tables based on data collected.</p> <p>Data Skills (Y2): Extract and interpret information from lists, tables, diagrams and graphs.</p> <p>Oracy (Y1): Listen to others, with growing attention, usually responding appropriately e.g. carrying out instructions.</p>	<p>1. Class visit to Craig-y-Nos Country Park or local woodland with support from National Park staff if required.</p> <p>Sensational Stroll (Woodland exploration, Mini-beast habitats, Mini-beast identification, Mini-beast games, Mini-beast hop, making mini-beasts from natural materials). How do mini-beasts move? Do they crawl, scuttle, fly, slither, wriggle, jump or wiggle?</p> <p>Opportunity to create poetry as part of visit.</p>	<p>Contact: Brecon Beacons National Park Authority Tel: 01874 62 4437 or educationemail@beacons-npa.gov.uk</p> <p>See Resource card: Mini-beast tally</p>
<p>Physical Development: Understand, appreciate and enjoy the differences between running, walking, skipping, jumping, climbing and hopping.</p>	<p>See above</p>	<p>2a. Using school grounds, revisit mini-beast games from previous activity.</p> <p>2b. Undertake a mini-beast hunt in the school grounds and collect data to compare different sites/ compare with trip data.</p>	<p>https://www.rspb.org.uk/fun-and-learning/for-teachers/lesson-plans-and-supporting-resources/spot-it/</p>
<p>Creative Development: Link the basic actions in sequence and gradually improve their control and use of different shapes, levels and direction of travel.</p>	<p>Oracy (Y2): Adopt a specific role using appropriate language in structural situations.</p> <p>Listen to others with concentration, understanding the main points and asking for clarification if needed.</p> <p>Share activities and information to complete a task.</p>	<p>3 & 4. Moving like mini-beasts - dance</p>	<p>James and the Giant Peach - Roald Dahl 'The Early Years' CD, Chris Benstead or gentle, instrumental music.</p> <p>https://www.youtube.com/watch?v=sFj16Zda248</p>

Year Group 1/2		Theme: Wriggle, Wiggle and Crawl	
Curriculum PE/PD: Adventurous Activities Link/PD link:	Numeracy Framework/ Literacy Framework:	Suggested Activities/ Key Questions:	Resources:
<p>Knowledge & Understanding: Make and record observations. Use simple equipment to make enough observations to be able to sort, group and compare living things.</p>	<p>Developing Numerical Reasoning: Present work orally, pictorially and in written form, and use a variety of ways to represent collected data.</p> <p>Data Skills (Y1): Collect information by voting or sorting and represent it in pictures, objects or drawings. Make lists and tables based on data collected.</p> <p>Numeracy (Y1): Count reliably up to 20 objects.</p> <p>Data Skills (Y2): Gather and record data from; list and tables, diagrams, block graphs, pictograms where the symbol represents one unit. Extract and interpret information from lists, tables, diagrams and graphs.</p> <p>Numeracy (Y2): Count sets of objects by grouping in 2s, 5s or 10s.</p> <p>Oracy (Y1): Contribute to conversations and respond to others, taking turns when prompted. Take part in activities with others and talk about what they are doing.</p> <p>Oracy (Y2): Contribute to discussion, keeping a focus on the topic and taking turns to speak. Share activities and information to complete a task.</p>	<p>5. Woodlice investigation Explore school grounds in small groups and collect woodlice (at least 20 needed). Prepare tray for differing habitats for woodlice. Dry/dark, dry/light, damp/dark, damp/light. Place woodlice in middle of tray and cover with cling film to prevent them escaping. Put small holes into the cling film to allow fresh air for woodlice. Count woodlice in different areas 3 times each day. Collect and record data, produce and compare graphs.</p> <p>Use I.T. to film movements of woodlice. Play back - fast forward, add music, write poetry or a story to read over the film and report/reflect on your findings.</p>	<p>Resource Card: Woodlice Investigation</p>
<p>Knowledge & Understanding: Describe how to group living things using simple differences between them.</p>	<p>Writing (Y1): Sequence content correctly e.g. instructions, recipes. Use specific words which relate to the topic of their writing.</p> <p>Writing (Y2): Follow a structure in their writing with support e.g. reports and lists. Use simple subject-related words appropriately.</p>	<p>6. Insect Hotels In pairs or small groups, pairs or as individuals create tiny tin can insect hotels.</p> <p>As a class work together to make a big insect hotel. Use pallets (5 or 6) to create a tower. Progressively fill each level with a variety of natural materials (stones, bricks, logs, branches, twigs, leaves, straw, broken pots etc.) heavier items towards bottom of tower, softer items towards middle. Explore other examples of making mini-beast habitats e.g. woodpile, rockery etc.</p>	<p>Resource Card: Homes and Habitats mini-beast hotel</p> <p>Tiny tin can insect hotel instructions: www.beacons-npa.gov.uk/learning/brecon-beacons-national-park-young-ambassador-award/young-ambassador-resources</p> <p>https://www.rspb.org.uk/fun-and-learning/for-teachers/lesson-plans-and-supporting-resources/homes-for-nature/</p>

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Year Group 3/4	Theme: Expedition Challenge		
Curriculum PE/PD: Adventurous Activities Link/PD link:	Numeracy Framework/ Literacy Framework:	Suggested Activities/ Key Questions:	Resources:
<p>PE: Acquire the skills necessary for the activities undertaken.</p>	<p>Developing numerical reasoning: Estimate and visualise size when measuring and use the correct units. Select and use suitable instruments and units of measurement.</p> <p>Using measuring skills (Y3): Use the four compass points to describe directions.</p> <p>Writing: Write for different purposes and readers and include relevant details.</p> <p>Oracy (Y4): Contribute to group discussion sharing ideas and information.</p> <p>Literacy/Writing organising ideas and information (Y4): Use specific structures in writing</p> <p>Oracy (Y4): Contribute to group discussion and help everyone take part.</p>	<p>1. Warm up: Crossing the bog - in small teams move themselves and their apparatus from one side of the playground/hall to the other without touching the 'bog' using only a few pieces of apparatus. Introduce theme.</p> <p>Create mind map: Planning an expedition - what do you need to survive (food, water, shelter, air...)? Undertake a relay and/or an obstacle race to collect necessary items to survive.</p> <p>Include a few red herrings (e.g. a teddy, a hair dryer) and a few to promote discussion (toilet paper, a bundle of money, a bottle of water, a knife, a novel...).</p> <p>Discuss and evaluate lesson.</p>	
		<p>2. Warm up: Introduce points of a compass and fun mnemonic (Naughty Elephants Squirt Water). Mark out the 4 directions. Play 'Simon Says' type game to get pupils moving around. "Simon says - go North, skip on the spot, hop South, star jumps, rest..." etc.. How many paces do you take in 100m?</p> <p>Estimate, measure and count pacing (2 steps = 1 pace) taken over a 100m. Use these to calculate steps over other given distances, e.g. 200m, 500m, 1km. Discuss fair testing - does activity need to be repeated? Estimate, then measure time taken to walk 100m.</p> <p>Extension: jog/hop/skip over distances.</p>	

Year Group 3/4	Theme: Expedition Challenge		
Curriculum PE/PD Adventurous Activities Link/PD link	Numeracy Framework/ Literacy Framework:	Suggested Activities/ Key Questions:	Resources:
<p>PE: Overcome challenges of a physical and problem-solving nature. Acquire the skills necessary for the activities undertaken. Identify why they should be mindful of their own and others' safety and how to respect the environment. Apply their skills in familiar and unfamiliar environments.</p>	<p>Oracy (Y4): Contribute to group discussion sharing ideas and information.</p> <p>Oracy (Y4): Contribute to group discussion and help everyone take part.</p>	<p>3. Challenge:</p> <ol style="list-style-type: none"> 1. Teams are challenged to organise themselves into height/age/alphabetical order along a bench/line with/without speaking. 2. Introduce tent instructions and component parts of a tent. 3. In teams put up tent(s) in school grounds. 4. Review tent challenge. <p>Writing opportunity: Write basic tent putting up instructions.</p>	<p>Check community contacts to borrow tents e.g. Scouts association.</p>
<p>PE: Overcome challenges of a physical and problem-solving nature. Acquire the skills necessary for the activities undertaken. Identify why they should be mindful of their own and others' safety and how to respect the environment. Apply their skills in familiar and unfamiliar environments.</p>	<p>Using measuring skills (Y3): Use the four compass points to describe directions.</p> <p>Using measuring skills (Y4): Use the eight compass points to describe directions.</p>	<p>4. Residential visit to YHA Danywenallt National Park Study Centre, Talybont-On-Usk LD3 7YS</p> <p>Activities could include: Hill walk, compass work, geocaching, den building and team challenges.</p>	<p>Brecon Beacons National Park Authority Tel: 01874 624437 or educationemail@beacons-npa.gov.uk</p>
<p>Overcome challenges of a physical and problem-solving nature.</p>	<p>Oracy (Y4): Contribute to group discussion sharing ideas and information.</p> <p>Literacy/Writing organising ideas and information (Y4): Use specific structures in writing.</p> <p>Oracy (Y4): Contribute to group discussion and help everyone take part.</p>	<p>5. Following on from previous lesson/residential visit.</p> <p>Plan a route to a local outdoor area (park, woodland, high school grounds, sports field etc) - discuss necessary considerations.</p> <p>Opportunity to write: Letter to land owner for permission to visit/camp, list of what to take on the trip, write menu of what they could eat, discuss what is necessary to take with them - safety, food, water etc..</p>	
<p>Overcome challenges of a physical and problem-solving nature. Acquire the skills necessary for the activities undertaken. Identify why they should be mindful of their own and others' safety and how to respect the environment. Apply their skills in familiar and unfamiliar environments.</p>	<p>Oracy (Y4): Contribute to group discussion sharing ideas and information.</p>	<p>6. Undertake the expedition. Opportunity to revisit skills and games played in previous lessons.</p> <p>Extension opportunity: Write a recount of the expedition, plan and undertake another expedition.</p>	

National Park Ambassador Schools



Year Group 3/4	Theme: Sink or Swim		
Curriculum PE/PD: Adventurous Activities Link/PD link:	Numeracy Framework/ Literacy Framework:	Suggested Activities/ Key Questions:	Resources:
<p>PE: Identify why they should be mindful of their own and others' safety and how to respect the environment</p> <p>Acquire the skills necessary for the activities undertaken</p> <p>PE: Identify why they should be mindful of their own and others' safety and how to respect the environment</p> <p>Acquire the skills necessary for the activities undertaken</p>	<p>Reading (Y4): Scan for specific information using a variety of features in texts.</p> <p>Reading (Y5): Scan to find specific details using graphic and textual organisers.</p> <p>Data skills (Y4): Represent data using: - lists, tally charts, tables and diagrams.</p> <p>Data skills (Y4): Represent data using: - bar charts and bar line graphs.</p> <p>Extract and interpret information from charts, timetables, diagrams and graphs.</p> <p>Writing (Y3): Identify different purposes of texts. Include relevant details, information or observations in their writing. Use information from texts in their discussion or writing.</p>	<p>1. Pond dipping using pond/stream/created water feature. Collect data.</p> <p>2. River/canal walk. Compare natural and man-made features. River/canal dipping/sweep netting. Collect data on types and frequency of creatures found.</p> <p>3. Compare and contrast information from previous sessions. Use the data collected in the previous sessions to produce graphs, charts, tallies, etc., and analyse results.</p> <p>4. Food chain activities and animal adaptations. Collect natural materials to create creatures and food chains.</p>	<p>Pond dip session at National Park Visitor Centre or Craig-y-nos Country Park.</p> <p>ID charts available at: www.field-studies-council.org/shop/publications/whats-in-your-pond/ www.rspb.org.uk/fun-and-learning/for-families/family-wild-challenge/activities/pond-dipping/</p> <p>With support from National Park if required.</p> <p>canalrivertrust.org.uk resources</p> <p>For adaptations lesson see: www.wyeuskfoundation.org/leap-into-learning-main</p>

Year Group 3/4		Theme: Sink or Swim	
Curriculum PE/PD Adventurous Activities Link/PD link	Numeracy Framework/ Literacy Framework:	Suggested Activities/ Key Questions:	Resources:
<p>Overcome challenges of a physical and problem-solving nature.</p> <p>Acquire the skills necessary for the activities undertaken.</p> <p>Identify why they should be mindful of their own and others' safety and how to respect the environment.</p>	<p>Oracy (Y3): Use talk purposefully to complete a task in a group.</p> <p>Oracy (Y4): Contribute to group discussion and help everyone take part.</p>	<p>5. Canoeing, kayaking or SUP along canal.</p>	<p>Outdoor Education Activity provider.</p>
<p>Overcome challenges of a physical and problem-solving nature.</p> <p>Acquire the skills necessary for the activities undertaken.</p> <p>Identify why they should be mindful of their own and others' safety and how to respect the environment.</p>	<p>Oracy (Y3): Listen carefully and make connections between what they are learning and what they already know.</p>	<p>6. Swimming session at local pool, following LEA/school guidelines.</p> <p>Ask pupils to bring in swim items from home to adapt themselves e.g. snorkels, noodles, shark fins, flippers, armbands, goggles, floats.</p> <p>Play food chain games - collect 'food' from floats in relay games.</p> <p>Play water polo - get food over net and into baskets.</p> <p>Organise a water assault course.</p> <p>Opportunity for team competitive games.</p>	<p>Local pool/leisure centre.</p>
<p>Overcome challenges of a physical and problem-solving nature.</p> <p>Identify why they should be mindful of their own and others' safety and how to respect the environment.</p>	<p>Oracy (Y3): Use talk purposefully to complete a task in a group.</p>	<p>7. Water Relay race challenge.</p> <p>In teams to move water from the 'well' to their 'homes' using jugs which have to be carried on their heads supported by only one hand.</p> <p>Relay can include basic obstacles to tackle, and variety of vessels in which to carry water - with or without holes!</p> <p>Link with understanding about the Water Cycle and need for water.</p> <p>Follow up: make a poster about saving water/ discussion.</p>	

National Park Ambassador Schools



Year Group 5/6	Theme: Wonderful Woodlands		
Curriculum PE/PD: Adventurous Activities Link/PD link:	Numeracy Framework/ Literacy Framework:	Suggested Activities/ Key Questions:	Resources:
<p>PE:</p> <ol style="list-style-type: none"> Overcome challenges of a physical and problem-solving nature with a partner or in a small group. Acquire the skills necessary for the activities undertaken. 	<p>Measuring Skills (Y6): Read and interpret scales or divisions on a range of measuring instruments. Record measurements in different ways.</p> <p>Oracy (Y6): Respond to others with questions and comments which focus on reasons, implications and next steps.</p> <p>Measuring Skills (Y6): Read and interpret scales or divisions on a range of measuring instruments. Record measurements in different ways.</p> <p>Data Skills (Y6): Represent data using: - lists, tally charts, tables, diagrams and frequency tables - bar charts, grouped data charts, line graphs and conversion graphs. Use mean, median, mode and range to describe a data set.</p> <p>Oracy (Y6): Contribute purposefully to group discussions to achieve agreed outcomes.</p> <p>Oracy (Y6): Contribute purposefully to group discussions to achieve agreed outcomes.</p>	<p>1. Visit to Craig-y-nos Country Park or undertake activities in school grounds or local woodland. Identify trees, work out height, age and carbon store.</p> <p>Discuss, trial and compare e.g. estimate, using the pencil method, looking through legs, clinometer. Use apps to measure height</p> <p>2. Tree Age Challenge: Discuss how to estimate the age of a tree without cutting it down to count the rings. Make estimations. Investigate how to measure circumference (at approx. 1 metre from ground) in cm.</p> <p>Age of hardwood tree e.g. oak, ash, is circumference divided by 2. Softwood e.g. conifer, pine, is circumference divided by 3.</p> <p>Provide children with variety of measuring tools for them to select and use, e.g. metre sticks, tape measures or string - vary resources given as a problem solving activity. Carry out a census of the trees in your local area and order from youngest to oldest. Link with events in history on a timeline.</p> <p>3. Meet a Tree Challenge: Choose a safe wooded area. In pairs guide a blindfolded partner to a tree. Encourage them to use their senses to describe and get to know the tree. Can they find and identify it without the blindfold? Swap.</p> <p>In small groups use Post-Its/whiteboards to record adjectives to describe a tree.</p> <p>Opportunity to write poetry - possibly link with timeline activity: I have seen... I have heard... I felt... I remember...</p>	<p>Resource Card: Calculating Tree Height</p> <p>See NRW tree pack: https://naturalresources.wales/guidance-and-advice/business-sectors/education-learning-and-skills/looking-for-learning-resources/learning-resources-search-by-topic/trees-and-woodlands/?lang=en</p>

Year Group 5/6		Theme: Wonderful Woodlands	
Curriculum PE/PD Adventurous Activities Link/PD link	Numeracy Framework/ Literacy Framework:	Suggested Activities/ Key Questions:	Resources:
	<p>Developing Numerical Reasoning: Transfer mathematical skills to a variety of contexts and everyday situations.</p> <p>Data Skills: Extract and interpret information...</p> <p>Oracy: Contribute purposefully to group discussions to achieve agreed outcomes.</p>	<p>3. Calculate the Carbon store of a tree. How is this linked to energy usage? Use data from previous sessions or measure a tree circumference. Use conversion table provided to find out the tree's dry weight and calculate the carbon stored/energy. Compare with carbon usage of everyday activities. Calculate the carbon store of a section of woodland e.g. 10m x 10m.</p> <p>Other possibilities: Calculate how many trees you would need to plant to offset the school's carbon footprint, a journey to school, a journey to Cardiff etc.</p> <p>Initiate a 'Cut the car'/walk/bike to school/ walking bus/shop local week or campaign. Calculate miles saved and carbon saved. Recreate the miles saved with a bike-athon over lunchtime/the lesson.</p>	<p>Resource Card: Carbon Calculator and NRW tree resource pack https://naturalresources.wales/guidance-and-advice/business-sectors/education-learning-and-skills/looking-for-learning-resources/learning-resources-search-by-topic/trees-and-woodlands/?lang=en</p>
<p>PE: Identify why they should be mindful of their own and others' safety and how to respect the environment.</p>	<p>Developing Numerical Reasoning: Transfer mathematical skills to a variety of contexts and everyday situations.</p> <p>Oracy: Respond to others with questions and comments which focus on reasons, implications and next steps.</p>	<p>4. How can we improve the carbon store within an area close to school? Discuss term 'sustainability'.</p> <p>Suggestions for activities: plant trees; improve the woodland area e.g. coppicing, planting. Please note tree planting should be undertaken in the winter months.</p>	<p>Support from Brecon Beacons National Park Authority, local Wildlife Trust, advice from Outdoor Learning Wales local groups etc.,</p>
<p>PE: Acquire the skills necessary for the activities undertaken.</p>	<p>Developing Numerical Reasoning: Explain results and procedures clearly using mathematical language.</p>	<p>5. The energy store of the human body. Physical exercise to increase heart and pulse rate - measure.</p> <p>Provide a 'circuits' type activity class. Question and answer at the end - energy usage.</p>	

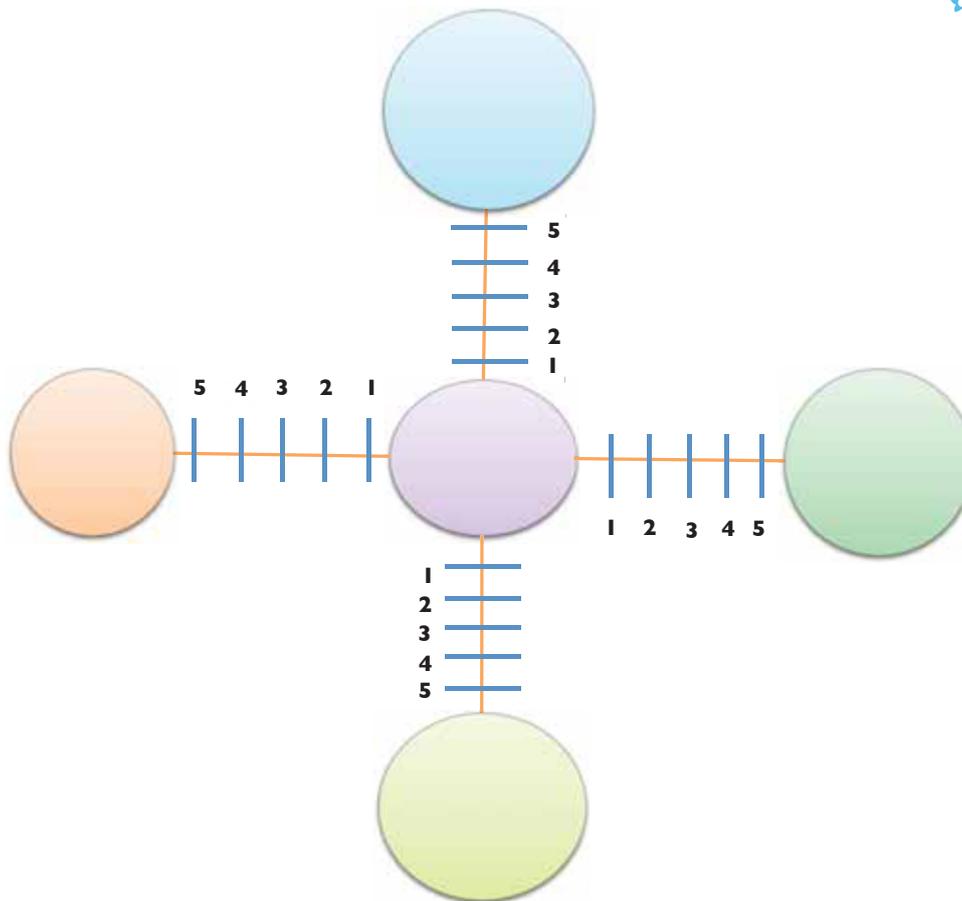
National Park Ambassador Schools



Year Group 5/6	Theme: Lost and Found		
Curriculum PE/PD: Adventurous Activities Link/PD link:	Numeracy Framework/ Literacy Framework:	Suggested Activities/ Key Questions:	Resources:
<p>Overcome challenges of a physical and problem-solving nature with a partner or in a small group.</p> <p>Acquire the skills necessary for the activities undertaken.</p> <p>Plan and evaluate their individual or group responses to challenges using key words related to their activity.</p> <p>Apply their skills in familiar and unfamiliar environments.</p>	<p>Developing Numerical Reasoning: Transfer mathematical skills to a variety of contexts.</p>	<p>Using simple P.E. equipment set out apparatus according to simple birds-eye map displayed prominently. Teacher walks the route and pupils follow route with fingers.</p> <p>Teacher stops at various points and asks pupils to point to location on map.</p> <p>Teacher to point to location(s) on the map and pupils to move to the physical spaces.</p> <p>In small groups use the equipment and experiment with ways to move in, around, through, under or over it. Then working in small groups pupils to move around apparatus following the routes given.</p> <p>In small groups pupils then design own routes/ apparatus plans and arrange equipment.</p> <p>Mark route(s) on map with triangle start and double circle finish.</p> <p>Swap to practise following a route and understanding the map.</p>	
<p>Overcome challenges of a physical and problem-solving nature with a partner or in a small group.</p> <p>Acquire the skills necessary for the activities undertaken.</p> <p>Plan and evaluate their individual or group responses to challenges using key words related to their activity.</p> <p>Apply their skills in familiar and unfamiliar environments.</p>	<p>Developing Numerical Reasoning: Use appropriate notation, symbols and units of measurement.</p> <p>Oracy: Express issues and ideas clearly, using specialist vocabulary and examples.</p> <p>Contribute to group discussion, taking some responsibility for completing the task well e.g. Introducing relevant ideas, summing up.</p>	<ol style="list-style-type: none"> 1. Create a simple map of an area of the school grounds, using natural materials to represent specific features e.g. twigs for fence line. Make sure you orientate the map correctly – this means that the features which are in front of you on the ground are in front of you on the map. Make a key to label the areas in English and Welsh and understand what is unique about your school grounds. 2. Photograph or draw a map of the school grounds labelling the key. <p>Easier: Keep to a small obviously marked area.</p> <p>Extension: Use a larger area.</p> <p>Extra: Add a wishlist and plan what you would like to see in your school grounds.</p>	

Year Group 5/6	Theme: Lost and Found		
Curriculum PE/PD Adventurous Activities Link/PD link	Numeracy Framework/ Literacy Framework:	Suggested Activities/ Key Questions:	Resources:
<p>Overcome challenges of a physical and problem-solving nature with a partner or in a small group.</p> <p>Acquire the skills necessary for the activities undertaken.</p> <p>Plan and evaluate their individual or group responses to challenges using key words related to their activity.</p> <p>Apply their skills in familiar and unfamiliar environments.</p>	<p>Developing Numerical Reasoning: Use appropriate notation, symbols and units of measurement.</p> <p>Oracy: Express issues and ideas clearly, using specialist vocabulary and examples.</p> <p>Contribute to group discussion, taking some responsibility for completing the task well e.g. introducing relevant ideas, summing up.</p>	<p>Orienteering, mapping skills, geocaching courses at Craig-y-nos Country Park or National Park Visitor Centre.</p> <p>Pupils undertake a series of orienteering challenges in the safe environment of the Country Park. Can also use GPS Units the pupils work in small teams to locate features or caches.</p>	<p>Class visit to Craig y nos Country Park or National Park Visitor Centre.</p>
<p>Overcome challenges of a physical and problem-solving nature with a partner or in a small group.</p> <p>Acquire the skills necessary for the activities undertaken.</p> <p>Plan and evaluate their individual or group responses to challenges using key words related to their activity.</p> <p>Apply their skills in familiar and unfamiliar environments.</p>	<p>Developing Numerical Reasoning: Identify the appropriate steps and information needed to complete the task or reach a solution.</p> <p>Using Measuring Skills: Time events in minutes and seconds and order the results. Estimate how long a journey takes</p>	<p>1. In school grounds, reinforce setting their maps correctly. Orienteering Challenge: One group places markers (e.g. coloured cones) in school grounds and marks their locations on the map.</p> <p>2. The following group follows the map to locate the markers.</p> <p>3. Swap. Discussion: Is there a best order in which to visit all controls. You could estimate and measure distance and it will take to visit all the controls. Use a trundle wheel and stopwatch. Pupils could design problems or questions for each control to enhance the cross-curricular enjoyment/ challenge.</p> <p>Evaluate: what went well, even better if...</p>	
<p>Acquire the skills necessary for the activities undertaken.</p> <p>Apply their skills in familiar and unfamiliar environments.</p>	<p>Developing Numerical Reasoning: Identify the appropriate steps and information needed to complete the task or reach a solution.</p> <p>Using Measuring Skills: Time events in minutes and seconds and order the results. Estimate how long a journey takes</p>	<p>1. Using OS map of local area study main features using key e.g. natural and man-made features. Look for links to Welsh language names and history of features or locations e.g. Craig y nos = Rock of the night - depicting the grey rock of the area</p> <p>2. Plan a route to visit features in the local area. Estimate the distance and time the route would take. 3. Prepare what to pack and wear.</p> <p>4. Discuss how to behave and use the Countryside code.</p>	<p>Resource card: Orienteering guidelines</p> <p>Countryside code</p> <p>Brecon Beacons National Park Young Ambassador Award booklet</p>

Year Group 5/6		Theme: Lost and Found	
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<p>Overcome challenges of a physical and problem-solving nature with a partner or in a small group.</p> <p>Acquire the skills necessary for the activities undertaken.</p> <p>Plan and evaluate their individual or group responses to challenges using key words related to their activity.</p> <p>Apply their skills in familiar and unfamiliar environments.</p> <p>Identify why they should be mindful of their own and others' safety and how to respect the environment.</p>	<p>Developing Numerical Reasoning: Use appropriate notation, symbols and units of measurement.</p> <p>Oracy: Express issues and ideas clearly, using specialist vocabulary and examples. Contribute to group discussion, taking some responsibility for completing the task well e.g. Introducing relevant ideas, summing up.</p> <p>Writing: Write with a clear purpose, showing consideration for the reader. Use features which show the structure of the writing. Use images, graphs and illustrations which are clear, relevant and appropriate.</p>	<p>Undertake a class walk to a special place in their local area. Use the skills learnt from previous lessons to use maps to locate where they are. They can collect data en route, analyse and interpret what they see on the map and on the ground helping to deepen their understanding of their local area. Discussion could include history of the area as well as planning for the future e.g. climate change issues, renewable resources.</p> <p>Literacy session: Produce instruction or explanation writing/ safety leaflet on either orienteering/ geocaching/ walking in the countryside.</p> <p>Use a variety of media to remember the special day, e.g. Annotate a photograph or field sketch of a local feature/s. Do a recount/ ICT presentation/ Blog/ Teams call/ / Newsletter/ Assembly Thank you letter...</p> <p>Digital Competency link. Presentation skills.</p>	<p>digimapforschools.edina.ac.uk</p>





Make a....

mini-beast mansion

The different habitats offered by a mini-beast mansion will attract a real variety of creatures to your garden.

In return they might even keep the pests away.

Start by getting up to 5 used pallets. Put the bottom one upside down to make larger openings for hedgehogs. Make sure they're on firm ground in slightly damp semi-shade close to overgrown plants or a pond.

Put the largest ones at the bottom and secure them to each other if necessary. Then create the different habitats by filling the pallets with...

straw, hay, dead wood & sticks
for insects



nectar rich potted plants
for bees and butterflies

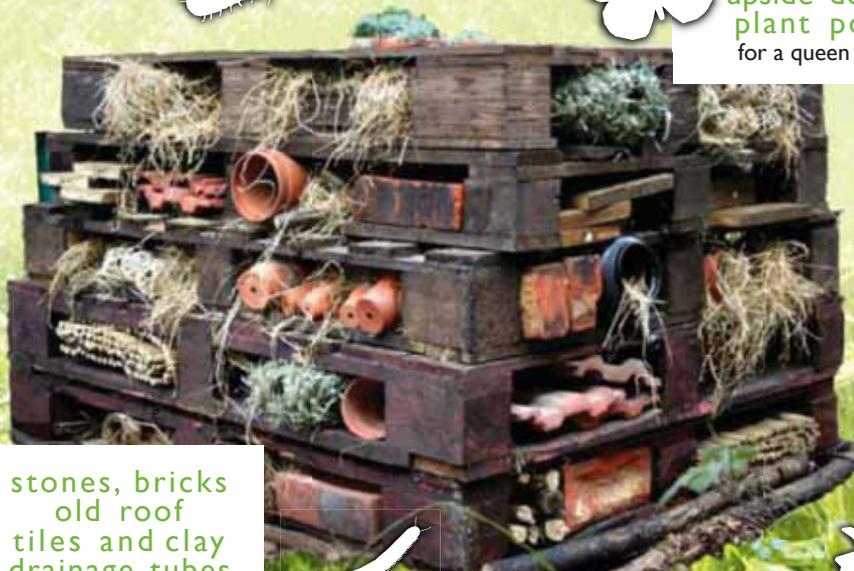


upside down plant pots
for a queen bee

stones, bricks old roof tiles and clay drainage tubes
for amphibians

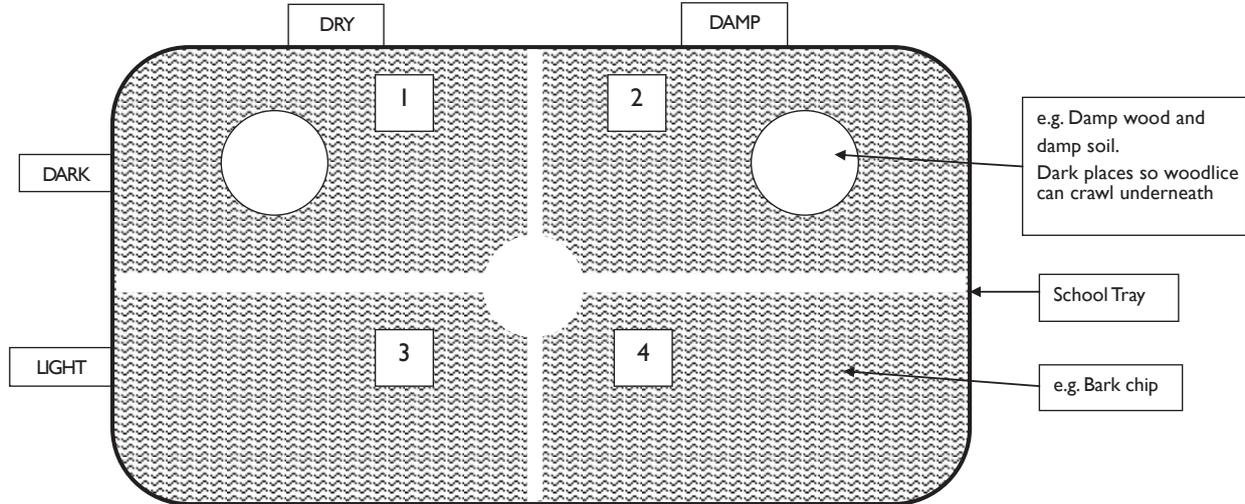
fir cones, dry leaves and bits of bark
for insects

bundles of garden canes
for solitary bees





Lesson 5: Which environments do woodlice prefer?



1. Collect a variety of natural resources.
2. Position natural resources into 4 distinct areas in the tray
Area 1 - Dark & Dry, Area 2 - Dark & Damp, Area 3 - Light & Dry, Area 4 Light and Damp.
3. Place the woodlice (at least 20) in the centre of the tray and cover the tray with cling film to prevent the woodlice escaping.
4. Count woodlice in each of the areas over a specific time period (e.g. every 3 hours, daily)
5. Collect the data and record the results.
6. Return the woodlice to their original home.

Learning objective:	Recap:	Explore:	Create:	Intervene:	Perform:	Evaluate:
<p>Link the basic actions in sequence and gradually improve their control and use of different shapes, levels and direction of travel.</p>	<p>Recap minibeasts we have discovered during unit so far. Discuss their movements, e.g. creeping, jumping, slithering.</p> <p>Read chapter 11 of Roald Dahl's 'James and the Giant Peach.'</p> <p>Warm up: Class sit in circle, legs out in front. Imagine your fingers are spiders, wriggle and crawl them along your body, floor. Stand up and walk them down and up your body. [Gesture] With hands and feet on the floor can you scurry along like a spider. Scurry and stop.</p> <p>Tell children they are going to create a dance based on the minibeasts inside the peach.</p> <p>We want to use a variety of body parts to represent movements e.g. creeping, jumping, slithering.</p>	<p>Music - Example: Chris Benstead 'The Early Years' CD . You're going to travel to it and imagine the tunnel James crawled along is very small and narrow. How would your body react?</p> <p>Encourage use of different body parts at varying levels. Look for children producing imaginative ideas and use demonstrations [show me] to share these ideas.</p> <p>How would your body react if the tunnel was large and wide? Explore travelling along a tunnel. Show the shape and dimensions of the tunnel by the shape and way you travel.</p>	<p>Remind children of minibeasts inside the peach. Explore movement ideas to represent each minibeast.</p> <p>Reminder of Learning Objective.</p>	<p>Encourage children to practise, link and repeat movements with good control and with an awareness of space.</p> <p>Practise and refine.</p> <p>Stress the importance of controlled movements.</p> <p>Encourage directions, levels, speed and pathways to interpret their ideas.</p>	<p>Demonstrations.</p>	<p>Cool down: [Gesture]. Rubbing body parts to get the sticky peach juice off.</p> <p>Refer back to Learning Objective.</p> <p>Thumbs up if they think they achieved it, thumbs down if not. Sideways if they feel they need further practice.</p>



Learning objective:	Recap:	Explore:	Create:	Intervene:	Perform:	Evaluate:
<p>Link the basic actions in sequence and gradually improve their control and use of different shapes, levels and direction of travel.</p>	<p>Discuss previous learning. Re-read chapter 11 of Roald Dahl's 'James and the Giant Peach', if necessary.</p> <p>Warm up: Travel to music as teacher calls out the different minibeasts.</p> <p>Tell children they are going to continue to create a dance based on the minibeasts inside the peach.</p>	<p>Work with a partner. Choose 3 of the minibeasts explored last session to create a sequence.</p> <p>Encourage use of different body parts at varying levels, speed and direction. Look for children producing imaginative ideas and use demonstrations [Show Me] to share these ideas.</p>	<p>Remind children of how James travelled into the peach. This will be the start of their dance.</p> <p>Link travelling through the tunnel with minibeast movements.</p> <p>Hold final minibeast shape for ending.</p> <p>Reminder of Learning Objective.</p> <p>Music - Example: Chris Benstead 'The Early Years' cd, 2003.</p>	<p>Encourage children to practise, link and repeat movements with good control and with an awareness of space.</p> <p>Practise and refine.</p> <p>Stress the importance of controlled movements.</p> <p>Encourage directions, levels, speed and pathways to interpret their ideas. Order of movements to represent clear beginning, middle and end. Emphasise final minibeast move will be the shape they hold for stillness.</p> <p>Contrasting actions between 3 chosen movements. Dance should clarify whether the tunnel is big or small, e.g. wide stretching movements of crawling, wriggling.</p>	<p>Demonstrations e.g. ½ class observe; ½ perform and swap over.</p>	<p>Children state what they enjoyed about each others dances.</p> <p>How they could be made better?</p> <p>Cool down: [Gesture]. Centipede putting on his boots.</p> <p>Refer back to Learning Objective. AfL strategy to assess learning.</p>





Estimate, measure or calculate the height of a tree.

The simplest method is to estimate the height of the tree by using known heights of structures around them. The children can work placing trees in order of magnitude before moving on to more sophisticated methods.

The Pencil method:

Work in pairs. Both stand at the base of their chosen tree. One child holds a pencil with a straight arm in front of them and walks away from the chosen tree until the pencil appears to be the same height as the tree (i.e. bottom of pencil is in line with base of tree, top of tree is in line with point of pencil). Holding the pencil in line with the base of the tree, the child then turns the pencil 90 degrees horizontally. The other child is then guided to walk from the base of the tree and instructed to stop when they appear to be at the point of the pencil (i.e. they appear to have walked from the base of the tree/ bottom of the pencil to the point of the pencil). Child with the pencil can then measure the distance from their partner to the base of the tree. This will give you the approximate height of the tree.

Through The Legs method:

Ask each child to choose a tree and ask them to walk away from the tree, but every so often bend forward and look through their legs back to the tree. When they can just see the top of the tree, the child stops and marks it or gets a friend to stand there. Then measure the distance along the ground from the tree to the marker. This is roughly equal to the tree's height. This works because maths says that if you view a tree's top at a 45 degree angle then the height of the tree is equivalent to the distance that you are from that tree.

The Metre Stick method:

Work in pairs. Both children stand up against the trunk of their chosen tree. One child walks 30 steps away from the tree, lies down on the ground and looks up at the top of the tree. The other child walks 27 steps from the tree and holds up a metre stick, with zero resting on the ground. The standing child should move their finger up and down the stick until the child lying down can see it is in line with the tree top. The height of the tree is ten times the height marked on the stick.

The Clinometer method:

Work in a small group using a tape measure and a clinometer. A pupil walks backwards away from tree and look through the clinometer to the top of the tree until it reads an angle of 45 degrees on the clinometer. When the pupil reads 45 degrees they must stay still. Another pupil measures the distance from the tree to the pupil (T). Then another pupil measures from the floor to the eye level of the pupil with the clinometer (E). The height of the tree is (T) + (E). So, if the distance from the tree is 4m and the height to eye level of the pupil is 1m, the tree height is 5m.

For more detail see: Trees and woodlands - Natural Resources Wales

Compare and discuss your answers. Which ones are most reliable?



Trees take in carbon dioxide from the atmosphere and store it as carbon in their trunk, roots and leaves. Approximately half of the dry weight of a tree is carbon. This means that trees are a carbon store, and can therefore help us to reduce climate change.

This activity requires children to use a calculator and tape measure to calculate the amount of carbon stored inside trees. They should follow the steps on the student worksheet as follows:

1. First of all use the tape measure to measure the circumference of the tree.
2. Look at the conversion table below to convert the circumference into the dry weight of the tree. Use the nearest value in the table to the one you have calculated.
3. Because half of the dry weight of the tree is carbon, you then need to divide your answer for the dry weight by two. This tells you how much carbon is stored in the tree.

Example - The circumference of a tree is 150cm. Looking at the table this means its dry weight is about 1964kg. Dividing this by two tells us that the tree is storing 982kg of carbon. Circumference converted into Dry weight $\div 2 =$ Carbon stored

4. Use the carbon equivalent table below to find out how we create this amount of carbon. For example, running a dishwasher for a year creates 41kg carbon.

Carbon calculator conversion table

Circumference (cm)	Dry Weight (kg)
2	0.009
55	0.041
40	82
50	106
100	668
150	1964
200	4221
225	5771
250	7641

Carbon equivalent table

Activity	Carbon (kg)
Boiling a mug of water	0.0045
Watching TV for just under an hour	0.021
Running a dishwasher for 1 year	41
Driving an articulated HGV lorry from Cardiff to London	53
Electricity to cook for a household for 1 year	334
One petrol car being driven for 11,000 miles	982
Four petrol cars being driven 11,000 miles	3928



Guidelines for setting orienteering courses

Orienteering is a timed, competitive activity which originated in Scandinavia. It develops self-confidence, problem-solving physical activity and fun.

Have a map of the school grounds. Contact a local orienteering club for help.

Types of orienteering:

Star - Pupils take 1 point at a time and return to the teacher to collect another each time. **Line** - Pupils have a number of points which they must collect in a designated order. **Scatter** - Pupils have a number of points to which they can choose their own route.

Ideas to vary your orienteering lessons:

- Set pupils off at different times, with a 1 or 2 minute gap between
- Give pupils different pre-set courses on their maps, perhaps colour-coded
- Plot points individually on each map before giving to pupils
- Give pupils a 'master' map from which they plot their own points. You can differentiate your lesson by giving more able pupils more points
- Use each collection point to collect a letter to spell a word or anagram to be solved, or using line orienteering you could collect parts of a mathematical sum.
- Set pupils off individually, in pairs or for a team challenge.
- Give a set time limit to complete to visit as many controls as possible.
- Set teams off head-to-head to see who can complete the course in the fastest time.

For more information:

www.britishorienteering.org.uk

www.bsoa.org (British Schools Orienteering Association)



Choose 2 locations to collect and tally your mini-beasts.
Make sure you return the mini-beasts to their homes!

Location 1

Tally of Mini-beasts		
Worms		
Slugs and Snails		
Insects 6 legs		
Arachnids 8 legs		
Woodlice 14 legs		
Centipede 15 legs		
Millipede 2 pairs of legs to each body segment		

Location 2

Tally of Mini-beasts		
Worms		
Slugs and Snails		
Insects 6 legs		
Arachnids 8 legs		
Woodlice 14 legs		
Centipede 15 legs		
Millipede 2 pairs of legs to each body segment		

Produced and funded by:



PE & School Sport/AG a Chwaraeon Ysgol
South West and Mid Wales Region/Rhanbarth De Orllewin a Chanolbath Cymru