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Health & Well-being
// Activities & Games

Context
Being outdoors is good for us in so many ways. Ideally, a connection to nature established at a young age will develop healthy, lifelong behaviours.

Evidence shows that being outside and connecting with nature can provide many health and well-being benefits including:

- opportunities to increase physical activity
- guarding against obesity and type 2 diabetes
- preventing Vitamin D deficiency
- reducing the symptoms of stress and ADHD
- contributing to dementia treatment
- minimising childhood short sightedness
- promoting academic attainment
- developing employability skills
- helping to prevent the loss of environmental knowledge and understanding

Please ensure that your activities are sustainably resourced and have minimal impact on the natural environment.

For example:
- Be aware of prickly, poisonous plants
- Guard any protected species on site
- Don’t over use one area
- Leave nothing but footprints

This booklet highlights the importance of sustainably managing our natural resources, focusing on exploring nature for health and well-being.

Natural Resources Wales’ purpose is to pursue the sustainable management of natural resources in all of its work. This means looking after air, land, water, wildlife, plants and soil to improve Wales’ well-being, and provide a better future for everyone.

Introduction
All the following activities and many more can be adapted for use in woodlands, coastal settings, local parks, school grounds, etc.

The activities have come from many different sources and have been altered and adapted over the years.

All the natural resources required to complete the activities listed are easily collectible from local nature spaces if your setting has none available.

Pick and choose from the following activities to explore the environment to further develop a sense of place, encourage physical activity and promote well-being.

AIM
To encourage everyone to spend time being in and connecting to nature through first-hand, positive experiences.

To aid the development of cross curricular knowledge and skills required to meet the four purposes of the Curriculum for Wales.
Health & Well-being

Activities & Games

Overview

These activities encourage direct skin contact with the surface of the Earth e.g. with bare hands and/or feet.

ACTIVITY 1

EARTHING

What to do...

Barefoot Walking

1. It is thought that walking barefoot on the Earth enhances health and provides feelings of well-being. This practice occurs in diverse cultures around the world.

2. Walking barefoot on uneven ground helps to strengthen core muscles and supports balance development.

3. Simply choose an appropriate spot, complete safety checks and encourage your learners to remove shoes and socks. Stand still on the grass, soil, sand, etc, and take a moment to check on how this feels.

4. What sensations are there? Now try walking around the chosen environment and repeat.

Root and Branch

1. Ideally, barefoot as per Barefoot Walking.

2. Ask learners to stand still and feel their feet planted on the Earth.

3. Ask them to close their eyes and imagine that they are a tree rooted to the ground.

4. Now describe the following journey in a slow paced and even tone.

   “Feel the roots coming out from the soles of your feet and pushing down into the soil. The roots plough through the soil/sand, through to 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/sand, 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”

5. This maybe enough or you can choose to continue a return journey to the heart of the tree.
Health & Well-being
// Activities & Games

Overview

These activities focus on grounding as a technique that helps us to stay connected to the present and reorient a person to the here and now.

Grounding skills can be helpful in managing overwhelming feelings or intense anxiety.

They help someone to regain their mental focus from an often intensely emotional state.

Grounding skills occur within two specific approaches: Sensory Awareness and Cognitive Awareness. Nature is a great space for this.

What to do...

ACTIVITY 2
GROUNDING

Special Spot

1. Ideally, do this activity on a dry day so learners can make direct contact with the ground if they choose to sit or lie down. However, you can supply sit mats if the floor is damp.

2. Invite learners to choose a special spot that captures their interest, away from everyone else.

3. Ask them to sit or lie quietly in any position they feel like. They can for example lie under or lean on a tree and stare up into its branches, sit on a beach looking out to sea or lie face down in a park.

4. Explain that they can choose to look around their spot, focussing on the smallest details or just zone out.

5. Choose the timeframe to suit the group and when finished allow time for everyone to gather together.

6. Discuss how the quiet time made them feel and what they observed during their time in the special spot.

7. This activity can be continued over any number of occasions with timeframes elongating as the group develops a relationship with their special spot.

Rock and Roll

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. Show them the route you will be expecting them to walk along for the activity.

4. Explain that they need to put the stones onto the back of each of their hands.

5. Then ask them to walk from A to B, turn around and return without dropping either of the stones.

6. If they do fall off, they need to stop, pick them up and replace before resuming the journey.

7. Discuss how everyone felt they did with the task.

MORE ABLE LEARNERS can be asked to travel up and down a more challenging space.
Health & Well-being

ACTIVITY 3

MUDDY MARVELLOUS

Overview

The following activities provide opportunities for playing with soil.

More than half your body is not human! Human cells make up only around 43% of the body’s total cell count. The rest are microscopic colonists. They are essential to your health.

Early exposure to dirt/germs helps to build up a more robust immune system.

‘Friendly bacteria’ or probiotics present in the soil, can naturally increase the levels of serotonin in the brain resulting in a similar effect to prescription antidepressants.

Getting your hands dirty can make you happier as well as healthier!

What to do...

MUD PIT

1. Encourage your learners to help you dig over a chosen area to create a mud pit for self-led play. Provide a range of equipment such as: water, buckets and digging implements. Cover with a pegged down tarp at night to prevent contamination from local animals.

MUD BALLS

1. Encourage your learners to roll a handful of mud into a ball.

2. Natural materials such as leaves, moss and sticks can be collected to coat the balls, which can be assembled together to create a natural sculpture.

MUD PAINTING

1. Sticks or hands can be used by learners to make marks in mud, daub on paper, tree trunks or rocks. Chalk can be added for highlighting.

2. An old bedsheet can be used for a group mud painting art attack. Leaves and other natural objects can be used for printing and providing an outline for splatter painting.

MUD CRACKS

1. Learners should spread mud all over a hard surface such as a rock and allow it to dry.

2. If the mud has a high clay content the mud will begin to show a complex pattern of cracks as it dries.

3. The pattern can be copied onto paper or photographed to replicate later.

MUD MONSTERS

1. To create a mud monster, learners will need a handful of mud each, which they should form into a ball.

2. The ball should be pressed it onto a suitable surface, e.g. wall or tree trunk, and the edges smoothed onto the surface to help it adhere.

3. Natural objects can be used to create facial features.

4. This activity can be developed into making mud sculptures and linked to many topics and stories including emotions, expressions and ourselves.

EXTEND THESE ACTIVITIES by asking each learner to bring in a small pot of mud from their garden or local area and compare colours and textures. Discuss what mud is made of.
Overview

Scientific data shows that trees can improve the symptoms of many health issues, including mental illness, ADHD, depression, the ability to alleviate headaches, improvements in reaction time and concentration levels. The act of hugging itself is believed to be beneficial as it can influence levels of ‘happiness’ hormones, oxytocin, serotonin and dopamine.

ACTIVITY 4

TREE HUGGING

What to do...

GROUP HUG

1. In an area with suitably sized trees, complete safety checks such as looking for low level branches.
2. Now choose a tree to hug.
3. Ask your learners to approach the tree one by one, holding hands with the next person until a complete circle has formed to hug the tree.
4. How many learners were needed to hug the tree? How many learners are left?
5. Find another tree and repeat. Continue to do this until the whole group are hugging a tree.
6. Ask the group to quietly rest their cheek on the trunk, listening to and smelling the tree at the same time.
7. How many trees have been hugged by your group? Are any trees not completely hugged? Estimate how many more learners would be needed to complete the circle of huggers.

MORE ABLE LEARNERS might want to use this method to measure the width and approximate age of the trees - see our Tree Measuring booklet.

TREE EXPLORER

1. Allow time for each learner to choose a tree to explore.
2. Using ID sheets and by looking at identifying features such as leaves and bark, can they identify their tree’s species?
3. Ask them to thoroughly explore their tree, examining it from the floor up.
4. Can they stretch their arms around it? Hug the tree while listening to and smelling it.
5. What is their favourite thing about the tree?

MORE ABLE LEARNERS can write down their findings, work together to complete a tree measuring exercise or draw their tree.
Overview

This activity encourages tactile exploration in an area with trees.

Supporting information & resources:

Blindfolds

What to do...

1. Depending on ability, ask learners to get into pairs or threes.
2. The pair or small group need to link arms firmly to ensure good support when moving around - you may want to give a demonstration.
3. Give out a blindfold to each pair or group and ask them to choose who will be the first to be blindfolded.
4. The guiding learners can now carefully take their blindfolded partner on a short journey to a tree of their choosing. They should consider their partner’s health and safety as they do so and warn them of any changes in terrain. Numerical instructions can be given, e.g. turn right and take five large steps.
5. Just before reaching the tree, they need to warn ‘hands out’ to guard against bumping into it.
6. The blindfolded learner can now explore the tree with their hands and arms, low down and as high as possible, looking for identifying characteristics.
7. When ready, the guide(s) can return them to the starting point.
8. When the blindfold is removed, can the learner work out which tree was the one that they ‘met’?
9. Continue until everyone has had a turn.
Health & Well-being
// Activities & Games

Overview
This activity introduces the many properties and uses of fungi/flora that can have both a positive or negative effect on our health.

Supporting information & resources:

RESOURCE CARDS: Edible deadible (fungi)
RESOURCE CARDS: Edible deadible (plant)

This activity can be delivered by focussing on either fungi or plants and in a variety of ways, depending on group ability or need, area and time allocated.

Introduce the subject of fungi or plants and their uses.

Can anyone think of a fungi or plant that humans use e.g. edible mushrooms for food, trees for wood, nettle for twine? Do they know of any harmful fungi/plants?

What to do...

Decision Line Format

1. Explain that to play the game learners need to vote on which plant/fungi they think is edible and which is deadible. They will vote by moving to location A or location B - you will need to allocate a clear and open space for each.

2. Ask the group to gather at a central point in front of you, where they can all see the cards when held up.

3. You can hold up one card at a time or hold up a safe fungi/plant resource card in one hand and a harmful fungi/plant resource card in the other.

4. The learners then decide which fungi or plant is safe to eat by moving to point A or point B.

5. Ask if anyone can identify the plant/fungi?

6. Tell the group whether or not the fungi/plant is edible or deadible and tell them a little about the habitat they grow in and a short fact about their useful/medicinal/poison properties.

7. Repeat with the next plant or fungi.

Knock Out Format

1. Learners can be deemed to be ‘out’ if they are ‘poisoned’ and then the ‘survivors’ progress through to the next round until you have a single or a couple of survivors.

2. If no one survives it only goes to reinforce the learning outcomes and message from the activity.

EXTEND THE ACTIVITY by giving points for correct answers.
What to do...

1. Set up before required by securely tying one end of the rope around a tree trunk/post, then wind around another and another, to create a zigzag rope path. Ensure that the rope is kept at a suitable height for the group’s use (chest height). Securely tie off the other end, ensuring the rope is as taut as possible along the path.

2. Gather the group to look at the rope path and explain that they will take turns to move from the start to the finish whilst wearing a blindfold.

3. Remind them that they must keep both hands on the rope throughout the activity, until an adult helper stops them at the end.

4. Ensure you give time between each learner, as each one needs to move at their own pace.

5. On completion repeat from the other end.

6. Discuss how they feel about their achievement in completing the rope walk.

7. How did it feel to not be able to see where they were going? What strategies did they use, e.g. using one foot to check for safe ground ahead before stepping.

Overview

This activity requires some sensory deprivation, leading to concentration on the task, helping to develop trusting relationships and can highlight issues with balance and coordination.

Supporting information & resources:

Long length of rope and trees or posts
What to do...

1. Divide into groups of between 6 and 8 learners, depending on the length of the bamboo/stick.
2. Ask your learners to form 2 lines facing each other, with each learner holding out their arm at shoulder level, palm up and with their index fingers extended, so that they are all level with each other.
3. Place the bamboo/stick so that it is laid across the group’s extended fingers.
4. The group must lower the stick to the floor without anyone losing contact with it.
5. This is harder than it looks! Everyone will be required to make small adjustments to their movements to keep the bamboo/stick horizontal.
6. Once this has been achieved, raise the bamboo/stick in the same way to its original starting point.
7. Ask each group to self-assess their performance and what they could do to make it work even better next time?

MORE ABLE LEARNERS can try this activity silently.

Overview
This activity encourages team work, nonverbal communication and trusting relationships.

Supporting information & resources:
Bamboo canes or long, straight sticks
Health & Well-being
// Activities & Games

ACTIVITY 9
HUMAN KNOT

Overview
This activity encourages team work, verbal communication, problem solving and trusting relationships.

What to do...
1. In groups of around 10, invite your learners to form a circle, facing inwards. Creep forward until shoulder to shoulder.
2. Ask each learner to put one arm into the centre of the circle and hold a random hand. Repeat with the remaining hand.
3. The task is to work together to unravel themselves without letting go of either hand.
4. This can take time and require patience.
5. Encourage communications within the groups as they problem solve and instruct each other on next steps.
6. Ensure that they give adequate care and consideration to others as they will have to stretch, climb over, under and through.
7. It doesn’t matter if they finish facing in different directions or as separate circles.
8. Ask each group to self-assess its performance.
ACTIVITY 10

SQUIRREL CACHE

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

Supporting information & resources:
Squirrel food – nuts, acorns, conkers

What to do...

1. Ask the group what they know about squirrels – what do they eat, where do they live, how can they climb trees, do they hibernate?

2. Explain that squirrels do not hibernate but struggle to find food in the winter, so they store food in different places during the autumn to eat during the cold season.

3. Ask each learner to act as a squirrel during the autumn.

4. Give out 3 pieces of squirrel food to each member of the group.

5. Ask them to find 3 different places to hide them for the winter. They must hide the food well because they don’t want other squirrels to find their stash.

6. Now leave the area for a suitable amount of time (according to the group’s ability), perhaps to do a different activity.

7. On returning to the area, ask your learners to find their squirrel food.

8. It is likely that only around 30 – 60% will be retrieved.

9. How many were successful? If you were a real squirrel or a Jay what would this mean? How would an animal feel if it couldn’t find sufficient food during winter? What happens to the items squirrels bury but don’t eat?

10. Discuss natural food choices for humans and how we would manage for food if we could only use what nature provides.

MORE ABLE LEARNERS can swap over to become Jays - birds that also cache acorns and follow squirrels to steal their food once they have hidden it - but only after they have completed the first part of the activity.

‘Jays’ can steal a ‘squirrel’s’ food and hide it, but if the ‘squirrel’ spots them they have to hand it back.
Overview
This discussion activity examines basic human needs and survival priorities required to exist in the natural environment.

What to do...
1. Divide learners into small groups of between 3 to 8.
2. Describe the following scenario:
   “You and your companions have just survived the crash of a small plane. You are somewhere in a forest in the mountains. The weather is unpredictable and its gets very cold at night time. There are lots of mountain streams nearby, but the nearest town is at least 100 miles away.

   Your group of survivors managed to salvage the following items:"
   - A small axe
   - A box of matches
   - Chocolate bars (one per person)
   - Extra clothing for each survivor
   - A compass
   - Cigarette lighter (without extra fluid)
   - £2,000 in twenty pound notes
   - A loaded pistol
   - Newspapers (one per person)
   - Long length of rope
   - 4m x 4m piece of tarpaulin
   - Bottle of water
   - Notebook and pen
   - Binoculars
3. Provide each group with a list of the salvaged items.
4. The challenge is to choose 10 of the items to keep, deciding on which 4 to do without.
5. Secondly, put the 10 items in order of importance for survival, thinking about the uses for each.
6. Each group must come to an agreement.
7. Discuss priorities for survival and the pros and cons of the salvaged items.

EXTEND THE ACTIVITY by working together to build a shelter for the group – see activity 14.
ACTIVITY 12
WILDERNESS WORKOUTS

Overview

These activities encourage increased physical activity and develop physical literacy including improved balance.

1. Locate a suitable fallen tree trunk/large branch that is big enough for your learners to walk along.
2. Discuss how canopy living animals such as squirrels are adapted to climb and move around for survival, e.g. they have claws for gripping and tails for balance.
3. Ask how humans balance and which parts of their body are utilised?
4. Invite your learners to try their balance skills by walking carefully from one end of the tree trunk/branch to the other without falling off.
5. Allow enough time for each learner to complete the challenge, encouraging them to get back on if they fall off.

Animal Yoga

1. With the whole group in a circle, facing inwards, ask each learner, one at a time, to say the name of an animal that they can relate to.
2. Ask the learner to make up their own pose that represents 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 that they are the animal. For example, if they were a bird they could imagine themselves flying over the tree tops.

What to do...

Fox and Rabbits

1. Explain to your learners that they are going to become ‘rabbits’ for the game.
2. Ask each learner in their head, silently choose another member of the group to become their ‘fox’ and one learner to be their ‘warren’ (a rabbit’s home). This information is kept secret, only the ‘rabbit’ knows who their fox and warren are.
3. The aim of the game is for the whole group to silently walk around whilst trying to keep their ‘warren’ between them and their ‘fox’ at all times.
4. There will be constant movement and flux as each learner is focussed on their own position in relation to others.
5. If learners start to run or move too fast, it will become complicated so walking (albeit speedily) is best.
6. There are no winners or losers - the game ends when everyone has had enough.
Health & Well-being
// Activities & Games

ACTIVITY 12
WILDERNESS WORKOUTS

What to do...

Nature Gym
1. Create a green gym trail or call out actions from a list of physical activities.
2. These could include:
   • X number of shuttle runs between trees, bushes or similar markers
   • X number of jumps over sticks or driftwood – star, straddle
   • X number of rotations around a fixed point, e.g. rock or tree
   • X number of stretch ups from floor to above head, holding a straight stick in both hands
   • X number of body twists with hands at either end of a suitable stick
   • X number of jumps off a log, tree stump or rock
   • X number of crawls under a branch or bush
   • X number of moves a stick/stone from point A to point B
   • X number of climbs over a stump, log, rock
3. Make sure you warm up first and cool down after!

Water Cycle Tai Chi
1. Ask the group where you might find water, e.g. the sea, ocean, rivers, lakes, from the tap, sewers, vegetables and in our bodies.
2. Explain that the earth has a limited amount of water. That water keeps going around and around continuously in what we call the ‘Water Cycle’. We are drinking the same water today that was on earth when the dinosaurs existed.
3. Ask your learners to name and describe the different parts of the water cycle and how it works.
4. Start by asking what happens to water in the sea when the sun heats it up?
5. The main parts of the cycle are:
   • Evaporation (and plant Transpiration)
   • Condensation
   • Precipitation
   • Collection/Storage
6. There are many more elements that can be added to the cycle to increase its complexity for learners requiring a higher level of information.
7. Ask your learners to spread out and stand in a spot at least 2 arm lengths away from nearest person, facing you.
8. Explain that they are going to silently act out the water cycle in synchronised Tai Chi movements.
   • **Evaporation** – ask your learners to crouch on the ground and then slowly release and uncurl. Make their hands look like they are pulling something up, stand up and stretch up as the water vapour evaporates from the sea up into the clouds.
   • **Clouds** – standing legs together and arms at their side, learners should slowly puff themselves out and make themselves as big as possible, move their legs slightly apart, arms making an ‘o’ shape with their cheeks puffed out. The cloud has reached it’s capacity and is as big and heavy as possible. The cloud can no longer contain it’s load so it starts to rain.
   • **Rain** – standing tall, arms straight up in the air, learners should wiggle their fingers like rain falling. Instruct your learners to bring their hands all the way down to the ground, just as the rain falls from the sky to the ground - its way into streams and rivers.
   • **River** – with their hands together out in front of them, ask your learners to move their arms from side to side as the river meanders through the valley on it’s way to the sea.
   • **Sea** – standing with their arms stretched out to the side, ask your learners to make Mexican wave movements back and forth to show the motion of the sea.
9. Repeat the cycle.

EXTEND THE ACTIVITY by asking your learners to get into pairs, with one teaching the other the movements for the cycle and then swapping over.
What to do...

Water Cycle Game

1. The game is played like a version of ‘tag’.
2. Choose one learner (or more depending on the size of the group) to play the part of the sun.
3. Ask two or more learners to hold hands in a circle to represent a cloud.
4. If you have a large group, you can have a couple of clouds.
5. The rest of the group represent water droplets.
6. It is useful if the learners wear markers to show what they are.
7. The sun runs around and tries to tag the water droplets.
8. When a water droplet is tagged it evaporates and runs to a cloud.
9. Once there it condenses by entering - standing in the middle of the circle formed by the cloud learners.
10. When enough learners have condensed into the cloud, the cloud becomes too heavy. The clouds can no longer hold them in and the cloud bursts - precipitation!
11. There is no winner or loser in this game - it’s just fun to get squished together in the cloud and see how many learners the sun can tag before precipitation happens.
Health & Well-being
// Activities & Games

ACTIVITY 13
CAMPFIRE COOKING

Overview
These activities encourage the exploration of using campfires to cook with different cooking methods and a healthy balanced diet.

Supporting information & resources:

INFORMATION NOTE: Campfire cooking
Suitable campfire cooking equipment
Experience and knowledge of safe fire lighting, group management around campfires, health and safety equipment, polices and procedures, and fire lighting permission, e.g. Level 3 Coastal or Forest School qualification.

INFORMATION NOTE: Installing a log circle

What to do...
1. The recipes within the campfire cooking information sheet are examples of meals and snacks that can be planned and cooked outside. Discuss with your learners whether the recipes are healthy or unhealthy. What kind of foods are provided by nature? What kind of foods might you find within the habitat you are in? What kind of recipes could you make from them?

EXTEND THE ACTIVITY by linking to survival skills, shelter building and the use of natural resources to build and maintain a campfire.
Health & Well-being
// Activities & Games

ACTIVITY 14
SHELTER BUILDING

Overview
This activity encourages collaboration and communication in planning, designing and building a suitable shelter for survival. A local woodland is the best environment for this activity.

LESS ABLE learners can work together to build a shelter for a soft toy.
MORE ABLE LEARNERS can create a retrospective plan with annotated drawings.

Supporting information & resources:
// INFORMATION NOTE: Shelters and dens
RESOURCE CARDS: Shelters challenge
String and scissors

What to do...
1. Divide your group into small groups of 3 to 6.
2. Ask them to consider what resources would need to survive for any length of time in the wilderness? Discuss the need for shelter from the elements and possibly from predators.
3. Task each group to find the best location for their build, e.g. facing away from the wind, not in a dip that could flood, etc.
4. Give the learners sufficient time to plan, resource and build a shelter that fits the whole of their group.
5. Can they think of any modifications that could make their shelter more comfortable?
6. Ask each group to evaluate their build and how well they worked as a group?