

Dandelion Honey

Have a go at being the bee, converting the dandelion flowers into sweet goodness. Thinner consistency, but surprisingly similar in flavour to honey.

Dandelions are commonly found in gardens and parks. Make sure they haven't been sprayed with weed killer first before you pick your ingredient. They have been used as food by humans for centuries and every part of the dandelion is edible. The young leaves can be used in salads or dried for tea. Dried tap root can be roasted.

Be careful, some people can have an allergic reaction to dandelion pollen.

Steps to making Dandelion Honey

1. Collect some dandelions, ideally when it's sunny so they are in full bloom! They close up overnight. The more the merrier.
2. Pick the petals from the flowers.
3. Place the petals in a pan with water (a cup of water for every cup of petals).
4. Add the lemon slices (1 slice for every cup of petals) and boil for 30 mins.
5. Take off the heat and leave to stew for 6 hours.
6. Drain the liquid through a cheesecloth (or any cloth) in another pan.
7. Bring to boil and slower simmer while adding the sugar (half a cup for every cup of petals).
Don't overheat as the sugar will caramelise!
8. Once it starts to thicken slightly, decant into jars.

Environmental Awareness

*Appreciate and draw inspiration from the environment.
Experience 'awe and wonder'.*

Time:

30 min prep, 4 hrs cook

Space:

Garden, Park

Equipment:

Dandelions, Sugar, Lemon, Water



Notes:

Store in the fridge.

Leaving any green parts can add a bitter note.

The boiling water will clean any lingering bacteria.

Referenced from thespruceeats.com

Pattern Search

Natural patterns have been studied since Darwin proposed studying them in 1859. They have been used in science, technology and art.

Look around outside in the garden, park or woodland and see what patterns you can tick off. Nothing in nature happens without reason.

Activity:

- Using the list below, look at many different natural objects and see if you can identify any shapes or patterns.
- Try and draw the shape and pattern that you see.
- Do you know what objects and items that we use that mimic nature?

Star



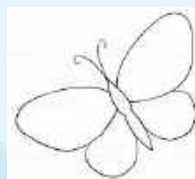
Spiral



Circle



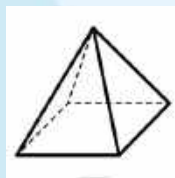
Symmetry



Cracks



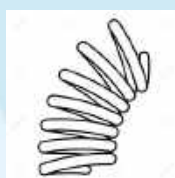
Pyramid



Fractals



Coils



Environmental Awareness

Appreciate and draw inspiration from the environment. Experience a range of different environments in different conditions.

Time:
20 min plus

Space:
Any outdoor space

Equipment:
Paper and Pen



Written by www.natureswork.co.uk

Thought provoking exercise to think about what is important to you or the environment, and why.

Sort through the images, finding out more about them. Then decide whether you think they are cool or not cool...

Find out about what is going on in each picture. Is it cool for the environment, for you family and friends, for you? Why do you think that?

If you need help understanding what a picture is, ask a friend, family member or teacher. Print out the pictures or make name cards and place them on your cool wall.

Example:

Cool



Mountain – Mountains are cool, they can give a great feeling of achievement when you climb one.

Uncool



Litter – I think litter is Uncool as it damages natural spaces and can harm wildlife.

Notes:

Cut out the images on sheet 2 and stick them on to your homemade cool wall.

Think about whether these things are good for you (Physical and mental health) and they're good for the environment!

Extension: Add some of your own ideas to the cool wall.

Environmental Awareness

Understand the impact of human activities on the environment. Experience a range of different environments in different conditions.

Time:

30 mins plus

Space:

Indoors

Equipment:

Pen and paper, Scissors, Glue / Tape / BluTac, Printer (optional)

Cool Wall-Page 2

Cut each Image out, find out about them and decide where they come on your cool wall.



Foil Rubbings

Explore texture patterns and structure through making rubbings.

Take rubbings of any natural object from bark to leaves, flowers to grass or stones and twigs.

Activity:

1. Take a square of kitchen foil and find your first object to take a rubbing from.
2. Using your fingers press on the foil until you see the markings and textures show through.
3. Have a look at the pattern and find words to describe it.
4. Explore and find as many different patterns and textures.
5. Fold the corner of the foil square onto a washing line to create a rubbing gallery.

Review:

Ask how hard they found it.

Which materials produced the best rubbings?

Can you identify any mathematical shapes or patterns?

Environmental Awareness

*Experience awe and wonder
Experience a range of different
environments in different conditions.*

Time:

15 min plus

Space:

Garden or Park

Equipment:

Kitchen Foil



Notes:

Strong images or softer blurry pictures can be created through how hard you press.

This is a spin on tradition rubbings with crayons and paper. Both could be used and different effects compared.

Written by www.natureswork.co.uk

Try as many of these challenges as you can whilst out on a walk:

It's a Sign: Everyone should stop whenever they see a sign that uses symbols instead of words. What does it mean?

Try drawing the sign, so you have a record of what you've spotted. You can check whether you have got the meaning right when you get home.

Wild Art: Spend a few minutes gathering natural materials (Don't use anything that's alive, including living plants).

Now make a piece of art. It could be a picture or a sculpture.

Who lives here? Find a creature that's living nearby. Are there any cows in a field, birds in a tree, or bugs under a log? How many different animals can you find?

Wilderness care: Take three minutes to pick up as many pieces of litter as you can and put them in a bin. If there's not a bin nearby, carry it in a rubbish bag until you find one. Don't forget to use gloves, or sanitising hand gel. Don't pick up anything sharp or that you don't know what it is.

Animal tracks: Have a look for any prints or tracks left by an animal. Can you tell what type of animal it was?

Follow me: Leave a trail for a friend or family member by lying sticks and stones out to show your direction. See if they can follow you!

Notes:

To make these activities more challenging, try planning your walk with a map and use it to navigate whilst you are out.

Plan a walk that covers as many different terrains as possible and remember walking is a great way to exercise whilst enjoying nature too.

Environmental Awareness

Understand the impact of human activities on the environment. Experience a range of different environments in different conditions.

Time:

1 Hour plus

Space:

Park, Woodland or Countryside.

Equipment:

Comfortable clothes, Shoes, Small backpack.



Spider Webs

Take a moment to appreciate the intricate detail of a spider's web and the time and skill involved in creating it.

Take some time outside looking at spiders' webs, their varying sizes shapes and structures. Look at where the spider has created the web and how it is held together. Do you know why spiders weave webs?

It's important not to damage any webs, they are a spider's home!

- How many different webs have you found? Did you see any spiders? If so how did they vary?
- Try drawing a web you have found, or try making a web pattern out of sticks and other natural items.
- Go outside in the morning, can you find a spider's web with morning dew on it? They're beautiful.

Make your own Spider's web

Now that you've spent some time exploring and learning about spider webs try making your own web.

Use string or rope to weave a web, similar to one you've found, it can be any size you want. Try different knots and techniques, find out what works best for you.

How does your finished web compare to a real spider's web?

Notes:

Did you know, given its size, spiders' silk is five times as strong as steel?

It can take a spider around 30-60 minutes to spin a small dinner plate sized web. Have a look at our knot sheets to help with making your webs.

Environmental Awareness

*Appreciate and draw inspiration from the environment.
Experience 'awe and wonder'.*

Time:

1 hour

Space:

Garden, Park

Equipment:

Pencil, Paper, String or Rope



Amongst the Clouds

Take some time out to look at the clouds, their shape, how they move and what they look like. Mindfulness is great for calming your busy mind and body.

Being mindful is about paying more attention to the present moment. A few simple steps can help you to relax and feel more present:

1. Lie on your back, with your arms by your side. Take a moment to look at the clouds and explore their range of shapes.
2. Feel the ground underneath you, how does it feel on your back? Can you feel your bodyweight pulling closer to the ground?
3. Be aware of your senses, can you feel a breeze on your skin? Listen for different noises and smell different scents around you.
4. Take some deep breaths, holding each one for a few seconds, feel the air moving through your body.

Enjoy the unique cloud formations

All clouds are different, created in different ways and different places. They can move fast or slow, be big or small.

The main aim is to enjoy looking at them and being mindful, but if you want to, see if you can spot some of the common cloud formations on the right.

Notes:

Never look directly at the sun, it can damage your eyes. You may want to wear sunglasses if it's a bright day.

This activity is done best when there are no distractions around.

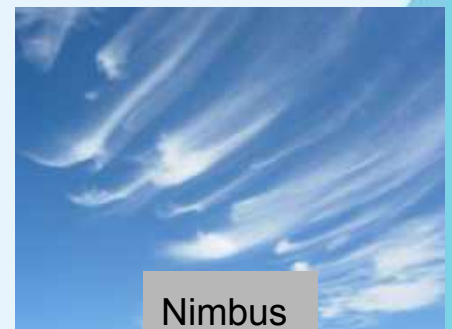
Health and Wellbeing

Understand the link between physical and emotional wellbeing. Have a positive self image.

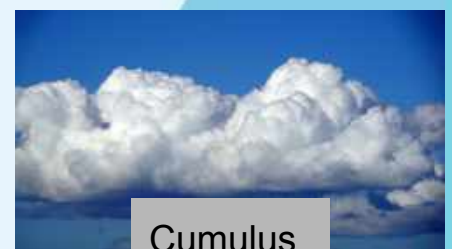
Time:
20 mins

Space:
Garden, Park

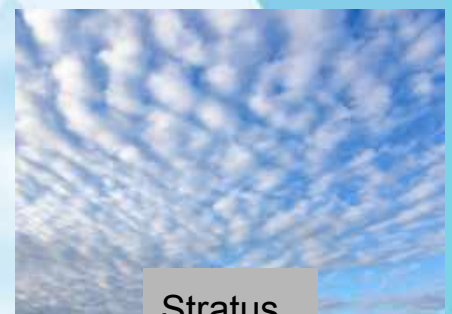
Equipment:
Just you.



Nimbus



Cumulus



Stratus

Hug a Tree

Playing in the woods for all ages. Through trust in your partner, this helps develop emotional wellbeing and empathy. Guide carefully. Family interaction.

Find an area where there is a good selection of trees close together. Maybe walk to a local park, there may even be somewhere on the way.

Activity:

1. One person is blindfolded, you can use a hat, scarf or hooded top back to front.
2. Their partner is to lead them towards a tree, unknown to them.
3. Upon meeting the tree the blindfolded participant needs to memorise size, shape, texture, location and any other features.
4. They are then returned to the starting point, still blindfolded.
5. The challenge is to relocate the tree they just met, and hugged.
6. Take turns to swap roles and hug other trees.

Notes:

Make it more challenging by taking a more convoluted route before arriving at the tree to hug.

Adapt to identify trees with bare feet, instead of hands.

Referenced from www.getoutwiththekids.co.uk

Health and Wellbeing

Understand link between physical and emotional well-being.

Time:

30 min plus

Space:

Park / Forest

Equipment:

Improvised Blindfold



Walking barefoot is a sensory experience for all. Greater feedback helps with balance. Foot strength increases and the development of arches. Relaxation is needed as you become mindful of the new sensations.

Course:

Identify a mixture of outdoor surfaces that can be linked together to create a route. This could be grass, mud, gravel, woodland or paths. Add in extra surfaces such as leaves, sticks, sand, pebbles, water. Natural items could be supplemented by household items of your imagination. Check for any sections that may have sharp items or hazards.

Activity:

Time to give it a go and follow the route in bare feet. Describe the sensations as you move from one surface to the next, be as descriptive as possible. What is loud, quiet, smooth, squishy, rough, soft, hard, warm, cold, relaxing, painful?

Now try the course blindfolded, while guided by a helper. You can use a hat over the eyes, hooded top back to front or a scarf to make the blindfold. Can you still recognise the different surfaces? Would you trust your helper enough to be guided on to new untouched surfaces, whilst still blindfolded? Don't forget to swap around.

Notes:

Make a path from certain surfaces and feel your way along with your feet whilst blindfolded. Don't get lost!

Have a seeing helper nearby to make sure you don't stray anywhere hazardous.

Referenced from www.ltl.co.uk

Enjoyment and Appetite for Learning

Enjoy being outdoors.

Time:
30 min plus

Space:
Garden / Yard

Equipment:
Different Outdoor Surfaces - stones, grass etc, Improvised blindfold



Build a Bridge

Use your ingenuity and lateral thinking to cross the gap. Build a bridge strong enough for a person.

A great hands-on activity that has full involvement from the design process to testing and then reviewing.

Activity:

1. Identify a gap to span with your bridge. This could be a puddle, a hole in the path, or just a distance marked by twigs.
2. Collect a range of objects you think would be useful in building a bridge. Anything will work! This could be old boxes and card, planks or sticks, rolled up newspaper etc. Be imaginative with what you see around you.
3. Build the bridge over your gap. It must be strong enough to hold your weight when you walk across!

Can it be made stronger?

Research can be added, looking into real life designs. See if your design can be adapted to be in the style of a arch, beam, suspension or cantilever bridge.

Notes:

If you only have small building items available, adapt it to support the weight of a toy or similar figure.

Enjoyment and Appetite for Learning

Motivated to participate and persevere showing resilience with new challenges Adapt and change related to situations.

Time:
30 min plus

Space:
Any outdoor space

Equipment:
Cardboard, Sticks, Newspaper, or Other household items



Things with String

String - useful for tying, binding, hanging other objects or weaving to make textiles. Known to have been developed tens of thousands of years ago in prehistoric times. Uses would include fishing nets, clothing making shelter and bow drills for fire.

Take a length of string and count how many things you can do with it.

10 examples to start with.

1. Make a friendship bracelet.
2. Make a bow and arrow with string & sticks.
3. Measure your neck circumference and see how many times bigger your waist is.
4. Create a tin can telephone. Two empty cans connected by taught string, speak away!
5. Measure how far you can jump compared to a hop.
6. Use it to lift something heavy. How can you make this easier?
7. Make a fishing rod. A magnet and paperclips can be used to create a fishing game.
8. Make a cat's cradle and see how many shapes you can make.
9. Can you create a spiders web? Make it life size between trees or posts. Can you squeeze through the gaps without touching the string?
10. Can you pick up a floating ice cube with the string? Try covering the ice cube and string with a layer of salt.

Notes:

The learning outcomes are far reached. Personal qualities of determination to succeed, initiative, perseverance to complete. Numeracy, measuring and comparing sizes or amounts of complex shapes. Science of materials and selecting the best for the job. Technology, come up with solutions with everyday materials. Have a look at our sheet on knot tying.

Referenced from www.ltl.co.uk

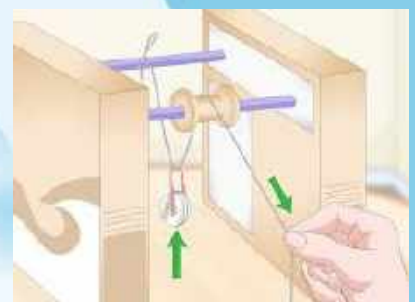
Physical Skill

*Develop physical skills that they can adapt and apply.
Develop and acquire technical knowledge and skills.*

Time:
30 min plus

Space:
Any

Equipment:
String 1m or longer



Peeler Whittling

Use your kitchen peeler for a safe and simple method to whittle your own imaginative figures. Fun way to develop fine motor skills and hand eye coordination while being creative and an appreciation of managing risk.

Whittling Ideas:

Stick people - to create your own story with
 Animals - to play or decorate
 Toasting sticks - for our fire cooking
 Skittles - make your own game
 Tent pegs - see our shelter building

1. Firstly a range of sticks need to be found that are thumb thickness and length of the lower arm. Softer green wood is easier to work with, such as Willow. Avoid knots within the stick due to difficulty of using the peeler on them.
2. The participant needs to be seated and stable. Hold the top of the stick, which is pointing downwards and away from the body.
3. The peeling / whittling needs to be overseen by an adult. Peeler is to be issued once participant understands the sharpness of the blade and the need to hold it by the handle.
4. Push the peeler away from the body when being used against the stick to whittle. Carve off small amounts of wood at a time. Keep concentrating and watching what is being whittled.
5. Decorate the finished product with pens or paint.

Notes:

Be careful with sharp peelers, easier to use but can cause accidents.

Please see our other sheets on Fire Cooking for using the toasting sticks and Shelter Building for using the tent pegs.

Referenced from www.ltl.co.uk

Physical Skill

*Develop and acquire technical knowledge and skills.
 Develop physical skills that they can adapt and apply.*

Time:

30 min plus

Space:

Garden / Trees

Equipment:

Potato Peeler, Sticks



Shelter Building 1

Everyone loves building a den or hideaway. Part 1 uses simple household items to shelter from sun or rain.

Use simple items and any outdoor space to create your shelter. Promotes problem solving combined with fun and play. Challenge is to create a shelter outdoors that can 1. Be a hideaway 2. Shade from the sun 3. Keep dry from rain.

One possible solution:

1. Take a large bed sheet, blanket or if possible groundsheet or tarpaulin.
2. Identify two trees the sheet, or similar, could be tightly stretched between. Instead of trees then items such as fence posts, washing line or gate could be used.
3. Wrap each corner of the sheet around a separate stone and secure it by tightly wrapping and tying a length of 2m string around the top two corners, 1m length for the bottom two corners.
4. Tightly pull apart the top two corners holding the 2m strings and tie to the trees, about 1.5m off the ground.
5. Pull the bottom corners out and peg out using the 1m string. If you don't have pegs try whittling wood (see Peeler Whittling sheet), nails, or even kitchen cutlery. No grass? Use heavy weights like bricks, full paint pots or large buckets of water.

Time to test. Hideaway test, can you be seen? Sun test, is it shady? Water test, pour on water do you stay dry?

Notes:

YouTube video <https://youtu.be/PDYbZ9tnAug> on Shelter Building 1, Arete Outdoor Centre youtube channel.

Please see our 'Shelter Building 2' activity sheet for building entirely natural shelters.

Physical Skill

*Develop and acquire technical knowledge and skills.
Develop physical skills that they can adapt and apply.*

Time:

30 min

Space:

Garden or Park

Equipment:

Bedsheet or tarpaulin, 2m string x2, 1m string x2, 4 stones, 2 pegs



Shelter Building 2

Take your shelter building to the next level. Part 2 uses natural materials to keep you 1. Hidden away 2. Shaded 3. Dry, with a simple lean to design. Promotes problem solving combined with fun and play.

Location:

1. Find two trees about 2m apart that each have branches that create a 'Y' shape about 1.5m off the floor.
2. Put in place a spine, a strong branch (arm diameter) or trunk, that is suspended between the 'Y' in each found tree.
3. Add the ribs using 4 or more branches that are wrist to arm diameter. These run from the floor to rest on the spine, roughly at a 45 degree angle to the floor. Space them out along the spine.
4. Secure the foot of each rib from sliding out by either burying in the ground or adding stone weights.
5. Use thinner bendy sticks in a horizontal orientation to weave between the ribs and create thatching. Fill the gaps between the ribs from floor to spine.
6. Cover your shelter with evergreen branches with leaves on. Like roof tiles, start at the bottom and work up pointing the branches downwards. Poke the end of the branch through your thatching.

Time to test. Hideaway test, can you be seen? Sun test, is it shady? Water test, pour on some water, do you stay dry?

Notes:

YouTube video about to Shelter Building 2, <https://youtu.be/LR5oudQEw3M> Arete Outdoor Centre youtube channel.

Please see our 'Shelter Building 1' activity sheet for building shelters with household items.

Physical Skill

*Develop and acquire technical knowledge and skills.
Develop physical skills that they can adapt and apply.*

Time:

30 min

Space:

Garden or Park

Equipment:

Bedsheet or tarpaulin, 2m string x2, 1m string x2, 4 stones, 2 pegs



Make a Map

Detailed maps require time and skill to produce. In this challenge you will have a go at creating a small map of somewhere like your house, garden or a local park.

Creating a simple map:

1. First draw out the outline of the area you are mapping on to a sheet of paper. For a room in your house, an outline of the room shape; for a garden the shape of the grass, path etc
2. Separately draw any objects that are in that space, colour them in and cut them out. For a room cut out the chairs, table, TV or for a garden flower beds, shed, BBQ, toys etc
3. The colours you use can help represent items. For instance all chairs in brown, all tables in grey and add a key showing this.
4. You can Draw big features like houses and ponds straight onto your map. Very small features could be represented by a symbol and added to your key.
5. Move around your cut out objects on the map outline you created in stage 1 and stick once they are in the correct position.

Treasure hunt: Hide a toy and mark X on the map where it is (ideally with a mark that can be removed). Get a member of your household to use the map to find it. Swap over.

Key Concepts.

- **Key:** A key shows what different symbols mean. Symbols are small pictures that stand for different features on a map. A symbol is often drawn to look like what it represents. For example a forest could have little shapes that look like trees.
- **Orientation:** Your map needs to have a north, east, south and west so that it matches the real world.
- **Scale:** The scale shows how many times you would have to enlarge your map to get it to actual size of the. For example if your map has a scale of 1:50, this means that every 1 cm on the map represents 50cm in the real world.

Physical Skill

*Develop and acquire technical knowledge and skills.
Develop physical skills that they can adapt and apply.*

Time:

30 min plus

Space:

House, Garden or Park

Equipment:

Pencils, Paper, Scissors, Glue, Ruler



Draw a route on a map, marking on features along the route. Get another household member to follow your map and spot the features.

1. Plan a short walk or a route around your house and garden. This should only take 10 minutes.
2. Make a map and draw your route on clearly. See the 'Make a Map' sheet for more on how to create a good map.
3. Walk your route looking for items that will be good for eye-spy e.g. post box, blue door, apple tree etc.
4. Plot these on your map. Cutting and sticking your eye - spy points works well here.
5. Have a go at following your route yourself.

Testing your skills:

Now get somebody else to follow your route spotting the eye-spy features along the way. The more accurate your map is, the easier they will find this!

Review:

Ask how hard they found it.
Was the map easy to follow?
Did you see anything interesting along your route?

Notes:

For an extra challenge, try creating a 'key' for your map. Does this make it easier to follow? A scale may also make your map easier to use, this will take longer to get right but makes for a much better map!

If your map is really good, whoever is using it could try to follow it and spot the eye-spy points without any input from you.

Physical Skill

Develop and acquire technical knowledge and skills.

Time:

30 mins plus

Space:

House, Garden or Local area.

Equipment:

Pencils and Paper



Here are the possible learning outcomes for our activity sheets. We have focused on our Educational Benefits which we apply on our residentials, although there are many more everyday and subject specific skills that can be developed, when completing these activities.

Enjoyment and Appetite for Learning:

Enjoy being outdoors
 Motivated to participate and persevere showing resilience with new challenges
 Encourage others to take part
 Describe their experiences and use them to inspire other aspects of life
 Work cooperatively with others
 Adapt and change related to situations
 Take on a lead role

Health and / or Well Being:

Keep fit and continue interest in outdoor activities
 Have a positive self-image
 Understand link between physical and emotional well-being
 Identify and adopt a healthy lifestyle

Environmental Awareness:

Experience a range of different environments in different conditions
 Understand the impact of human activities on the environment
 Demonstrate care for the environment through their actions
 Appreciate and draw inspiration from the environment
 Experience 'awe and wonder'

Social Awareness

Learn to recognise their own and others strengths and weaknesses
 Understand impact of their actions
 Respect others and develop trust
 Identify the impact of their actions
 Develop and value friendships

Personal Qualities and Skills

Build confidence and self esteem
 Stretch comfort zone and overcome fears
 Identify risk and push boundaries to complete goals
 Develop independence and use initiative
 Effective communication

Physical Skill

Develop and acquire technical knowledge and skills
 Develop physical skills that they can adapt and apply
 Understand how to dress appropriately for the outdoors
 Respond positively in challenging
 Unlock talent