

A decorative floral border surrounds the central text. It features stylized flowers in shades of pink, red, and purple, with green leaves and small pink buds. The flowers are arranged in a symmetrical pattern, with larger blooms at the corners and smaller elements along the sides.

# Wanderlust Child Nature Study: Winter

Inspiring the next generation of explorers,  
adventurers and scientists.



# WINTER

## Winter Bucket List

- Go ice skating
- Build a snowman
- Look out for Starling murmurations
- Take a snowy woodland walk
- Read stories by the fire or in a home made den
- Have a soup night
- Play a board game
- Go for a drive and look at the winter lights
- Have a fire and ice party
- Decorate a tree
- Use rubber stamps to make you're own wrapping paper
- Make decorations using nature
- Visit a reindeer farm
- Shake a snow globe
- Go on a winter picnic
- Make pine cone bird feeders
- Spend some quiet time in nature

## RECIPES TO TRY

Fruit cake  
Apple crumble  
Yorkshire puddings and gravy  
French onion soup  
Rice pudding  
Slow cooked casseroles with dumplings and seasonal vegetables  
Warm chocolate chip cookies  
Gingerbread house  
Cottage pie  
Winter salad bowl with carrots, spinach, red onions, red cabbage and green peppers.

## Nature Shelf

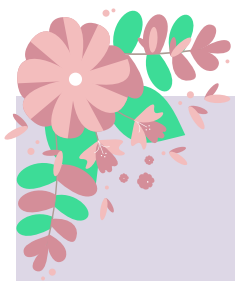


## Book Ideas

Over and Under the Snow by Kate Messner  
Winter Sleep: A Hibernation Story by Sean Taylor  
Robin's Winter Song Paperback by Suzanne Barton  
Pick a Pine Tree Paperback by Patricia Toht  
One Snowy Night by Nick Butterworth

## Artist of the season

Jackson Pollock splat and drizzle paintings.



# WINTER

## FACT SHEET

Each December (around the 21st December) is the start of winter in the northern hemisphere. This is when the Earth reaches the point in its orbit that's nearest to the Sun. Despite some common misconceptions, the seasonal drop in temperature has nothing to do with the distance of our planet to the Sun. It instead has everything to do with which direction the Earth's axis is tilting, which is why the two hemispheres experience winter at different times of the year.

Winter days in the UK are short and nights are long, with the sun rising at about 7 or 8am and setting at about 4 pm. Temperatures during these months often range between 0 to 7°C (32° - 45°F) and although sunny days are possible they will be cold. There is often frost in the mornings, ice on car windscreens and roads, and sometimes snow fall. British winters are usually very wet and windy as well, so make sure you wrap up warm and waterproof.

Aomori City in northern Japan receives more snowfall than any major city on the planet. Each year citizens are faced with 312 inches, or about 26 feet, of snow on average.

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# WINTER

## FACT SHEET

Much of the U.K wildlife in Winter either migrate or hibernate. However there are still lots of amazing wildlife to spot. Like starlings that fill the skies with the incredible patterns of their murmurations (the wonderful shape they make when flying in their tens and hundreds of thousands). These are best to see at dusk as flocks from all directions come together in one big group and find some reeds to swoop down onto.



Almost half of the worlds population of Atlantic grey seals come back to the warmth of the U.K beaches in the winter. Having spent months in the sea the seals head to the U.K to have their seal pups in the shelter of the sand dunes.

In the winter Barn Owls can be easier to spot as they often hunt in the daylight to get the extra food they need to keep them going. As they swoop down on their prey (small mammals) they need un-windy conditions. You can find them on moorland or grassy meadows. Why not try listening out for the screech of a barn owl.

Winter time is a great time to look out for the plant Mistletoe. This has green leaves and white berries. It can often be seen growing on the branches of willow. The mistle thrush loves eating the sticky white berries!







# WINTER

## CURIOSITY PICTURE

Use this picture as a starting point to find out what your children know already about the Winter? Here are some prompts to help with your sustained shared thinking together.

Show the children this picture and ask them what it shows?

What do they know already about this time of the year?

What has happened in this photograph?

How do they think the ice will melt?

What sort of clothes do you need to wear in the winter?

Will the trees grow more leaves?

What happens to the animals?





# WEEK 1: WINTER TREES

## NATURE WALK



Go for a signs of winter walk, look at what tells us winter is coming and discuss the types of festivals celebrated in the winter.

## SELF CARE



Layer up and get outside for some sunlight. You might walk, run or visit your garden with a cup of warm tea. The sunlight will help lift your mood.

## RECIPES TO TRY



Make a wintery dried fruit salad with the children and enjoy with some warmed Lingonberry or Cranberry juice.

## GARDEN JOBS



Take a cutting from a woody perennial and put it in a glass of water on the table inside. In 7-10 days, leaf buds should swell and will even burst forth sharing new life from within.

## PROVISION



Hooks: Take a winter walk in nature with the children and just practice being in the moment. Talking about what you can see, hear and smell. There are so many things that happen up inside trees that we can't easily see during the summer when they are covered with leaves. Look closely up at the tree branches. What do you see? Look for bird nests, vines, seeds, and maybe some birds or squirrels. Look out for leaf scars on the branches of the tree. Choose a tree to study for the year, visit it often and take photographs of it and the changes.

Search for some leaves; perhaps from a fir tree and look at their imprints on natural playdough

Explore leaf skeletons on the light box.

Study the evergreen trees around you and look at the types of soil they grow in, the shape of the leaves, the shade of green and the pine needles.

Set up a small world winter tree scene and add in some small world people.

## COLLECT



Collect the textures you discover in the outdoors. Try imprinting these onto clay or do bark rubbings and display.

## BOOK IDEAS



The Christmas Eve Tree by Delia Huddy  
Pick a Pine Tree by Patricia Toht  
Tree: Seasons Come, Seasons Go by Patricia Hegarty  
Stick Man by Julia Donaldson





# WEEK 1: WINTER TREES

During the winter months trees in the U.K have learnt ways to adapt to the cold and at times harsh environment. Bark provides insulation and protection against freezing and cracking during the winter. It comes in a variety of textures and thicknesses and can reflect light and disperse heat.

The trees also have leaves and needles that help them to survive the cold winters. With deciduous trees (oak, maple or beeches) they shed their leaves in Autumn to reduce the amount of water loss. Most needle-leaved trees, known as conifers, retain needles year round only losing older, damaged needles. Needles are better at retaining water than broadleaves thanks to their small surface area and waxy outer coating.



Even though trees have amazing ways to survive they can sometimes explode during times of great coldness. This happens when the sap inside the tree starts to freeze and expands putting pressure on the bark. The bark can then crack and cause an explosion.





# WINTER NATURE SHELF

Create your winter nature shelf with;

Books about winter

Displaying winter foliage like Holly in a clear jam jar

Tree bark and tree cookies

Pretend snow and icicle decorations

Small world snowy trees, barn owls, seal pups and people.

Pines cones

Wooden stars

Photos of your local area in winter

Mirrors

Sleepskin rugs and felt to add texture

Snowflake decorations

Twigs in a vase



From my member Heather: Little House on the Green



# DRIED FRUIT SALAD

You Will Need:

- 600 grams of dried fruits like prunes, pears, apricots, figs and cranberries
- 3 tablespoons of clear honey
- 1 vanilla pod
- 1 tablespoon of fresh lemon juice



How To:

1. In a large saucepan, combine 700 ml of water with the dried fruits. Then add honey and the vanilla pod.
2. Bring it to boil. Then lower the heat and simmer for 10 minutes.
3. Remove from the heat and leave it for 10 minutes.
4. Discard the vanilla pod and transfer the fruits and liquid into a bowl.
5. Then pour the lemon juice and stir. Serve at room temperature.



# WEEK 3: SNOWFLAKES

## NATURE WALK



Go on a silent nature walk.

## SELF CARE



Light a scented candle - Bring a little warmth and cosy light to your home when it's dark outside.

## RECIPES TO TRY



Decorate some digestive biscuits with white icing to represent snowflakes.

## GARDEN JOBS



Look after the birds - clean feeders, stock up on fat balls and make sure they have access to fresh water.

## COLLECT



Collect brightly coloured stems and berries for your Christmas decorations

## PROVISION



Hooks: Catch snowflakes on your mitten or on a black cloth and try to draw them before they melt. Take a look at these under the microscope. What happens to it when brought inside?

Notice the various patterns of snow sculpting that is formed by the wind drifting the snow. Can you spot any animal tracks?

Set up a snowflake loose parts provocation with mirrored base boards, blue glass gems, blue and white buttons, snowflake pattern cards, white beads and cotton and bamboo cotton buds.

Collect some snow and put it in a container in the freezer. Get this out in the warmer months to add curiosity.

Display snowflake decorations on the lightbox and project paper dollies onto a blank wall to add enchantment or play a snowstorm on then smartboard.

## BOOK IDEAS



The Story of Snow: The Science of Winter's Wonder  
by Mark Cassino  
Snow in the Garden: A First Book of Christmas by  
Shirley Hughes  
One Snowy Night (A Tale from Percy's Park) by  
Nick Butterworth  
Snowballs (Rise and Shine) by Lois Ehlert







# SNOWFLAKES

Snowflake Dance  
(Sung To: "Are you Sleeping")

Dance like snowflakes, Dance like snowflakes  
In the air, In the air  
Whirling, Twirling snowflakes, Whirling, Twirling  
snowflakes  
Here and there, Here and there

How are snow flakes formed?

Every snowflake that you see on the ground started its life up in a cloud as a single tiny droplet of water in the air. ... Then, other water droplets stick to the ice droplet, and the other droplets freeze. Because of the way they stick together, the frozen droplets make a shape with six sides.





# WEEK 4: DECORATIONS

## NATURE WALK



Go on an evening walk through your local area and admire all of the beautiful decorations lit up in your area.

## SELF CARE



Do some de-cluttering in your home.

## RECIPES TO TRY



Enjoy some toast with berry jam on.



## GARDEN JOBS



Plant some hawthorn or holly to provide berries for the birds visiting your garden.

## PROVISION



Hooks: Talk about how others decorate their homes at this time of year. Sharing ideas of how you can bring nature inside and have a go at creating ice candles (See the details on the next sheet)

Make edible wreaths for the birds and hang in your outdoor area.

Create a land art Christmas Tree using 6 different sized sticks and foliage for decoration.

Suspend a branch from your ceiling using curtain wire and dangle decorations from it.

Collect some sticks and paint these white and display them in a vase in your setting.

Fill clear Christmas tree baubles with nature and hang up.

Wrap presents with the children using brown paper and garnish with foliage.

Send a letter from the fairies to ask for help decorating their fairy garden.

## COLLECT



Sweet chestnuts to be baked, boiled or roasted.

## BOOK IDEAS



Pick a Pine Tree by Patricia Toht  
My RSPB Nature Craft Box: Make and Play  
Foraging with Kids: 52 Wild and Free Edibles to Enjoy with Your Children



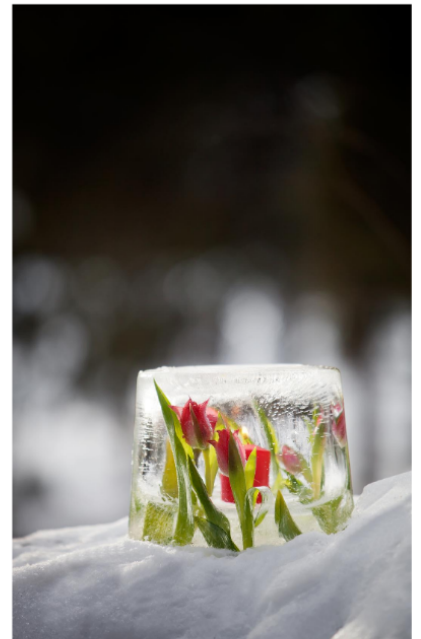


## CREATE A SNOW LANTERN

During my time in Yllas, Finland one of my favourite memories was walking down the street and admiring the beautiful ice lanterns lining the streets at night. It gave such a beautiful and magical glow. Now i want to show you how to make your own.

What do you need?

- 1 small container
- 1 larger container
- Foliage (berries, ferns, orange slices)
- Water
- Freezer



What to do

1. Fill your larger container with water and place your smaller container inside it. You might require stones to hold it down.
2. Add foliage to the water in the larger container. As the berries float add these as sprigs instead.
3. Leave in the freezer over night
4. Take outside and add a candle.







# WEEK 5: MOUNTAINS

## NATURE WALK



Find the highest hill or mountain you can and walk up it. Talk about what you can see and the way an up hill climb makes your body feel.

## SELF CARE



Think about the last year - what's gone well, what not so, what did you learn?

## RECIPES TO TRY



Make some flapjack to take mountain or hill walking.



## GARDEN JOBS



Order your seeds to sow in in the Spring for your fruit and vegetables..

## PROVISION



Hooks: Provide children with a collection on images of famous mountain ranges around the world; Mount Everest, Mount Fuji, Mont Blanc, K2, Ben Nevis, Rocky Mountains and the Matterhorn to provoke curiosity and intrigue. What do the children know already about what a mountain is?

Create a small world scene with mountains, a river, snow and a little lodge. Add loose parts like pieces of felt; glass gems, bark, rocks, cotton wool alongside this to allow children to add to the play.

Watch video clips of children and adults climbing mountains and skiing down. Use a map to look for your nearest hill or mountain to climb.

## COLLECT



Things that are the same as your favourite colour.

## BOOK IDEAS



Let's Explore... Mountains by Lonely Planet  
Mountains by Chris Oxlade





# MOUNTAIN FACT FILE

## What is a mountain?

A mountain is a geological landform that rises above the surrounding land. Typically a mountain will rise at least 1,000 feet above sea level. Some mountains exceed 10,000 feet above sea level with the highest mountain in the world, Mount Everest, rising 29,036 feet.

Small mountains (below 1,000 feet) are usually called hills.

## How are mountains formed?

Mountains are most often formed by movement of the tectonic plates in the Earth's crust. Great mountain ranges like the Himalayas often form along the boundaries of these plates. Tectonic plates move very slowly. It can take millions and millions of years for mountains to form.

## Types of Mountains

There are three main types of mountains: fold mountains, fault-block mountains, and volcanic mountains and they get their names from how they were formed.

**Fold mountains** - Fold mountains are formed when two plates run into each other or collide. The force of the two plates running into each other causes the Earth's crust to crumple and fold. Many of the world's great mountain ranges are fold mountains including the Andes, Himalayas, and the Rockies.

**Fault-block mountains** - Fault-block mountains are formed along faults where some large blocks of rock are forced upwards while others are forced down. The higher area is sometimes called a "horst" and the lower a "graben" (see the picture below). The Sierra Nevada Mountains in the western United States are fault-block mountains.

**Volcanic mountains** - Mountains that are caused by volcanic activity are called volcanic mountains. There are two main types of volcanic mountains: volcanoes and dome mountains.

Volcanoes are formed when magma erupts all the way to the surface of the Earth. The magma will harden on the Earth's surface, forming a mountain.

Dome mountains are formed when a large amount of magma builds up below the Earth's surface. This forces the rock above the magma to bulge out, forming a mountain. Examples of volcanic mountains include Mount Fuji in Japan and Mount Mauna Loa in Hawaii.





# OVER THE MOUNTAIN

Oh the bear went over the mountain,  
The bear went over the mountain,  
The bear went over the mountain,  
To see what he could see.  
But all that he could see,  
But all that he could see,  
Was the other side of the mountain,  
The other side of the mountain,  
The other side of the mountain,  
Was all that he could see.

So he went back over the mountain,  
He went back over the mountain,  
He went back over the mountain,  
To see what he could see.  
But all that he could see,  
But all that he could see,  
Was the other side of the mountain,  
The other side of the mountain,  
The other side of the mountain,  
Was all that he could see. All that he could see!







# WEEK 6: ROBINS

## NATURE WALK



Go for a wonder in the woods and look out for birds nests in the trees.

## SELF CARE



Slowly sip a warm drink at an open window or in your doorway. Be intentional on being present here.

## RECIPES TO TRY



Nibble on berries at snack time (blueberries, raspberries and strawberries) and have a vote on which everyone's favourite one is. Link the eating of the berries to the birds favourite food.

## GARDEN JOBS



Plant garlic till March

## COLLECT



Twigs- can you put them in order of length? How can we measure a curvy stick?

## PROVISION



Hooks: Leave a bird watching sketch book by the window for children to observe what they see. In here you might add some photos of robins and information books on birds.

Set up an outdoor bird watching nook that becomes a quiet space for the children to observe and watch the robins and other visiting birds.

Create a bird box (see factsheet)

Add feathers, twigs, small world insects and coloured felt to your malleable area. Along with some books on Birds and nests.

Set up a bird small world area with tree stumps, twigs, insects, pretend snow (white sheet) and books about robins.

Set up a red colour provocation and encourage children to add to it.

## BOOK IDEAS



Let's Explore... Mountains by Lonely Planet  
Mountains by Chris Oxlade





# ROBIN FACT FILE

Robins are orange-red face and breast with pale grey border. Robins can be found all over Europe, except for parts of the Mediterranean coast and northern Scandinavia. They can also be found in the Azores, Canary Islands and parts of North Africa; eastwards into central Russia, Turkey and Iran. In the UK we have 5.5 million robins.

Robins like a natural woodland, hedgerows, parks and gardens.

Unlike some British bird species which migrate annually, it is possible to see robins all year round. They are very territorial but also a very tame bird and with quietness and patience a Robin may start regularly visiting your outdoor space.

## Feeding the Robins

Create a log pile in your garden space that will encourage insects to gather there and provide easy food for the birds.

Create a space in your garden where you grow plants with berries and seeds.

These may include; Ivy, Crab Apple, Cosmos, Sunflowers, Wild Cherry, Honeysuckle, Hawthorne and Holly.

Robins need lots of fresh water but in winter it can be tricky to get this. Put out small dishes of fresh water each day throughout the colder months.

Robins prefer to feed from the ground so why not put down a ground feeding tray for the birds. In here you could add a mixture of bird seed, sunflower seeds, raisins, meal worms and a sprinkle of mild cheese on top!



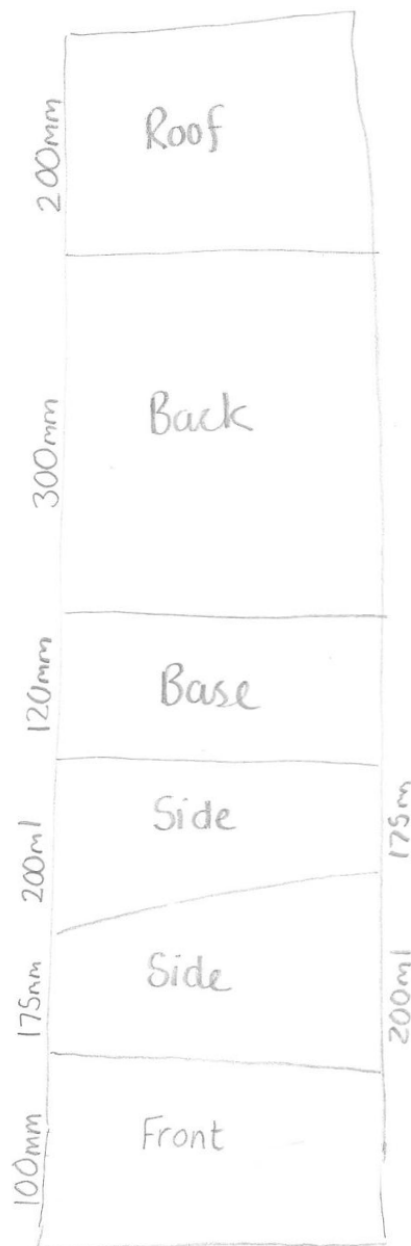


## BUILD AN OPEN NEST BOX

Robins like to visit an open nest box and it's best to dot the nest boxes around your outdoor area leaving a space of 5 - 10 per hectare is recommended. Here is a plan to make your own nest box.

Use screws and woodglue to hold the structure together and use wood with a 15mm thickness. Robins like to be 6-7 feet off the floor and in the vegetation. Why not decorate it with the children.

Plank Size - 150x1095mm





# WEEK 7: MOSS

## NATURE WALK



Go on a frosty walk through the grass and watch as your feet leave a trail.

## SELF CARE



Make a list of 10 qualities you have that make you wonderful!

## RECIPES TO TRY



Make a cosy den and enjoy crackers and cheese with warm milk.

## GARDEN JOBS



Sow seeds of lettuce, summer cabbage and cauliflowers, plus round varieties of carrots, spinach, salad onions and turnips in window trays.

## COLLECT



Winter leaves and petals for pressing.

## PROVISION



Hooks: Set up a doctors station with bandages and talk to the children about how moss was used during the war as a bandage.

Go outside with magnifying glasses and pastels and create your own representations of moss.

Walk barefoot on moss and talk about how it feels.

Pour water on moss and watch what happens.

Use the moss to create a fairy house in your outdoor area.

Create a terrarium using either jam jar or a clear bauble. These are often kept as decorative pieces and contain soil and living plants and mosses. You could even put a small world figure inside to add to the fun for the children. The transparent walls of the jar allow for both heat and light to enter the terrarium.

## BOOK IDEAS



Mossy by Jan Bret  
Nature Anatomy Paperback by Julia Rothman







# MOSS FACT FILE

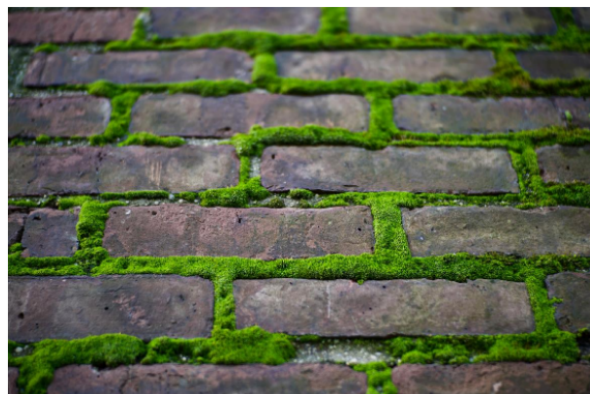
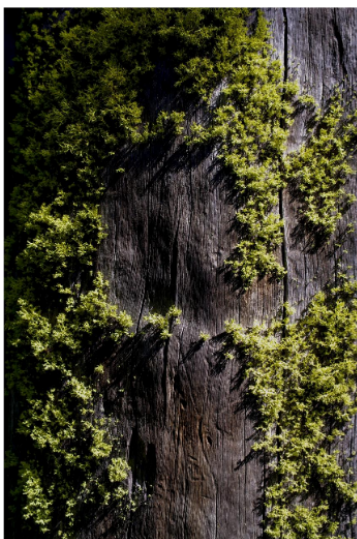
There are over 1000 different types of moss in the UK alone and are unlike flowering plants as they produce spores. They also have stems and a head but no roots! Moss needs damp conditions to reproduce as the male cells move and collaborate with the female cells through a layer of water.

Moss can reach on average 4 inches in height and some even up to 20 inches! Mosses are essentially non-vascular, which means they lack any internal vascular tissues to transport water and nutrients, or at least those tissues are poorly developed. This is why mosses are so small. They don't have the rigid internal structures that would allow them to grow taller like vascular plants.

Moss is super absorbent and soaks up rainfall and also provides a home to many creatures like slugs and woodlice. Apart from reindeers (who eat moss as it contains a chemical that keeps their blood warm) many animals avoid eating moss as it's very difficult to digest and has very little nutritional value.

They collectively provide more carbon offset than all of the trees in the world which makes them important for us.

Sphagnum Moss has incredible properties of absorption, due to the porosity of the cell walls: each cell absorbing up to 25 times its own weight in liquid. In ancient times and even in World War 1 Sphagnum Moss was used instead of bandages and also many cultures used moss to line babies nappies as a way of absorbing waste.





# THE WISH TREE

The Wish Tree by Kyo Maclear and Chris Turnham



Read the story of the Wish Tree and talk to the children about their wishes, hopes and dreams. Mark make these together and hang them up in your home or setting. You could also ask staff and families too!





# WEEK 8: ICE

## NATURE WALK



Go for a walk and look out for snow drops popping up.

## SELF CARE



Make yourself a hot drink and make time to actually sit and drink it whilst it's still warm.

## RECIPES TO TRY



Make your own healthy ice pops. Whiz together two handfuls of spinach, two small apples, one kiwi, one frozen banana and a small handful of blueberries. Then spoon into ice lolly holders and freeze over night.

## GARDEN JOBS



Chit potato tubers

## PROVISION



Hooks: Leave some ice in a water tray for your children to discover. What do they know about ice? Record their thoughts and questions around it. Add some of your small world figures to the ice and be curious with the children about how these might be saved?

Look for winter leaves, foliage and fallen petals outside and with the children add these into a muffin tray and freeze them over night. Add some sting to each section before you freeze. Then hang these up in your outdoor area as beautiful natural decorations.

Create your own icicles using pipe cleaners and threading beads. Then hang these up on your nature shelf.

Have a fire and ice festival with families (see fact sheet)

Set up a small world tray as an ice rink by adding a small tray of water in your freezer over night. Use mini-me's of the children in their winter clothes to play with

Explore painting on ice freezing ice in different shaped cake moulds and using brushes and paint.

## COLLECT



Collect things that are seen through

## BOOK IDEAS



Walking in a Winter Wonderland by Tim Hopgoodding

Flower Fairies of the Winter by Cicely Mary Barker

White Snow, Bright Snow by Alvin Tresselt







## ICE FACT FILE

The solid form of water is called ice. Ice is created when water gets below 32 degrees Fahrenheit and it freezes. The freezer is not the only place where you can find ice. Ice is seen in many parts of nature all over the world. There are icebergs, which are large pieces of ice in the ocean. On land, there can be anything from a small icicle to a large glacier, which is a massive piece of ice that forms in places where there is a great amount of snow. When lakes freeze, they become a hard, slippery surface. This is called an ice shelf. There are also different types of weather that are made of ice, such as snowflakes, ice pellets, sleet and hail. Ice is everywhere!







## ICE AND FIRE FESTIVAL

Invite your families to a fire and ice festival in your setting. Set up a range of crafts and ice play activities. Display ice lanterns and ice baubles around your outdoor area. Share a winter story and then have hot chocolate and smores around a fire pit.





# WEEK 9: NORTHERN LIGHTS

## NATURE WALK



Visit your favourite place in Winter and take some photos. of it. Stick these in your scrapbook.

## SELF CARE



Create a family photo album and enjoy looking at all your favourite memories together.

## RECIPES TO TRY



Use heart shaped cutters and make sandwiches full of love ready for a winter picnic.

## GARDEN JOBS



Cut back deciduous grasses left uncut over the winter, remove dead grass from evergreen grasses

## PROVISION



Hooks: Use the internet together to search for videos of the Northern Lights. Provide globes and maps to talk about the parts of the world where you're most likely to see them.

Freeze some blue and green water beads in a tuff tray over night and then add the polar small world animals to it the next day.

Use a range of loose parts (blue and green beads, ribbons, tinsel, scarves, coloured glass gems and counters and black sheet) to re-create the Northern Lights. You could also adapt this and make your loose part collections on a lightbox or using an over head projector.

Using Youtube 'Under the Northern Lights' dance and move your body as though you are the Northern Lights. Add blue and green ribbons to your movement.

Create your own representations of the Northern Lights using black paper, toothbrushes and blue and green paint. Talk about what it's like using a paint brush to make marks and wonder what will happen as the two colours dance together in the sky.

## COLLECT



How many different shades of green can you find?

## BOOK IDEAS



Maybe- by Kobi Yamada

The Northern Lights: Celestial Performances of the Aurora Borealis by Daryl Pederson and Calvin Hall

Aurora: A Tale of the Northern Lights by Mindy Dwyer





# NORTHERN LIGHTS FACT FILE

## What are the northern lights?

The northern lights (called the aurora borealis) and the southern lights (aurora australis) appear when tiny particles stream out from the Sun and hit Earth's atmosphere. The particles give some of their energy to atoms and molecules of gases in the upper atmosphere. But the atoms and molecules cannot hold the energy. They quickly give it off as another kind of energy—the colors of light that we call the aurora. These lights occur most often around the North Pole and South Pole because the incoming particles have an electric charge. As the particles arrive, Earth's magnetic field guides them toward the poles.







# WEEK 10: MUD

## NATURE WALK



Put on your welly boots and walk through the mud.

## SELF CARE



Bring some foliage inside and display on a windowsill.

## RECIPES TO TRY



Make some Yorkshire puddings with the children and pour gravy on top of them. You might even have these cold with jam on!

## GARDEN JOBS



Cut back deciduous grasses left uncut over the winter, remove dead grass from evergreen grasses

## PROVISION



Hooks: Set up a mud painting station and talk about how the mud and explore changing the texture. Explore making prints with their hands in the mud. How does it feel, what noises can you hear as you squash your hand down in the mud? Who has the biggest muddy hand print?

Working in your woodland kitchen use a recipe book and see if you can re-create some of the recipes by using mud. Perhaps the children could have a go at creating their own mud recipe book?

Create a deep mudding digging pit in your outdoor space. Giving children the opportunity to develop upper body strength and dig deep.

Add magnifying glasses, different sized pots, tweezers and pipettes to an outdoor mud investigation area.

Create a muddy outdoor construction site with trucks and diggers. Explore mud and real bricks and how we can construct with mud.

## COLLECT



Collect different shades and textures of mud outside in pots.

## BOOK IDEAS



Can I Play in the Mud? by Mathew Price  
Beautiful Hands by Kathryn Otoshi  
Dirt + Water = Mud by Katherine Hannigan







## MUD PAINTING

Show the children how artist Henry Neubigwe uses mud to create representations of amazing landscapes. Show the children that we can use mud to paint and make marks. This is a great input for exploring different colours and textures.

First go outside with some old pots and collect different samples of mud from around the outdoors. Try getting dry soil, lumpy or mixed with grasses. You could even take out a brown paint sample chart and look to see all the different shades of mud you can find and let the children name them 'chocolate brown,' or 'Bark brown' to see what it reminds them off.

Next explore adding in different amounts of water and mixing these into your mud with old paintbrushes. Remember that the learning we are focussed in here in the process of the learning rather than the actual end outcome.

Next apply the mud onto white paper or even a white sheet (we once made a flag using our mud paint outside!). If it's a windy day you might want to use masking tape on the corners of your paper to hold it down and stop it from blowing away.

Have lots of fun!





# WEEK 11: ROCKS

## NATURE WALK



Take an evening walk and take a look at the night sky. Look out for the full moon and also Venus is visible in the night sky around dusk (17:30) this month.

## SELF CARE



Use towels straight from the dryer.

## RECIPES TO TRY



Make rock buns

## GARDEN JOBS



Sow sweet peas from seed inside.

## PROVISION



Hooks: Watch videos of rock climbers scaling huge boulders or doing a speed climb.

Collect a variety of different sized rocks and sort these by colour, size, shape, texture. You might provide your children with different sized compartment trays, weighing scales, magnifying glasses and paper.

Look at the work of Andy Goldsworthy (Stone) and take inspiration from his land art.

Explore which rocks will roll down a drain pipe.

Add rocks of different sizes into your malleable area and see how the children use them.

Create a boulder land small world area in a tuff tray.

Ask child to choose their favourite rock and why. Turn this into a favourite rock station.

Paint with water and small paintbrushes on rocks.

## COLLECT



Collect rocks of different sizes and shapes.

## BOOK IDEAS



Rocks and Minerals: Find Adventure! Have fun outdoors! Be a rock detective!  
If Rocks Could Sing by Leslie McQuirk  
A Rock Is Lively by Dianna Hutts





# ROCKS FACTFILE

Rocks and stones are naturally occurring solids made up of minerals. They come in a variety of sizes with smaller rocks known as pebbles.

There are three different types of rocks based on the way they form, **igneous**, **sedimentary** and **metamorphic**. When magma cools and solidifies it forms igneous rock.

Examples of igneous rocks include granite, basalt, gabbro, obsidian and pumice.

Sediment deposited over time, often as layers at the bottom of lakes and oceans, forms sedimentary rocks. Examples of sedimentary rocks include sandstone, mudstone, flint, greywacke and chalk.

Extreme pressure and heat over time forms metamorphic rocks. Examples of metamorphic rocks include marble, quartzite, schist, granulite and slate.



# ROCK CAKES

## Ingredients

- 225g/8oz self-raising flour
- 75g/2½ oz caster sugar
- 1 tsp baking powder
- 125g/4½ oz unsalted butter, cut into cubes
- 150g/5½ oz dried fruit
- 1 free-range egg
- 1 tbsp milk
- 2 tsp vanilla extract



1. Preheat oven to 180C/160C Fan/Gas 4 and line a baking tray with baking parchment.
2. Mix the flour, sugar and baking powder in a bowl and rub in the cubed butter until the mixture looks like breadcrumbs, then mix in the dried fruit. In a clean bowl, beat the egg and milk together with the vanilla extract.
3. Add the egg mixture to the dry ingredients and stir with a spoon until the mixture just comes together as a thick, lumpy dough.
4. Add a teaspoon more milk if you need it to make the mixture stick together.
5. Place golfball-sized spoons of the mixture onto the prepared baking tray. Leave space between them as they will flatten and spread out to double their size during baking. Bake for 15–20 minutes, until golden-brown. Allow to cool for a couple of minutes, then turn them out onto a wire rack to cool.





# WEEK 12: WORMS

## NATURE WALK



Take a walk and look in the hedgerows to see what nature you can spot. Perhaps the Peacock butterfly and Blackthorn Blossom.

## SELF CARE



Eat dinner by candle light this week.

## RECIPES TO TRY



Make mac and cheese

## GARDEN JOBS



Under glass sow sunflowers

## PROVISION



Hooks: Introduce worm week with Yucky Worms and ask the children what they think about worms? Use this as your starting point.

Go on a worm hunt outside (don't forget to take magnifying glasses) and record what you find. You could make some worm zigzag books about your worm adventure.

Create a wormery and observe how the worms move around and create their own tunnels.

Make some worms out of clay or explore painting these.

Create some worms out of socks and use these in your play.

Pretend to be a worm and explore moving around in the dark.

Sing songs about worms.

## COLLECT



Cherry blossom

## BOOK IDEAS



Yucky Worms (Our Stories) by Vivian Fren  
The Worm and the Bird by Coralie Bickford-Smit  
It's a Good Thing There Are Earthworms by Jodie Shepherd





## WORMS FACT FILE

In the UK there are more than 26 different types of earth worm. Worms stay alive by breathing through their skin, so if it rains they have to come to the top of the soil to avoid drowning. Earth worms do an important job to help our environment by burrowing through the soil creating channels that add oxygen to the soil and allow carbon dioxide to escape. The channels also allow rain to drain away and can prevent flooding. They like to eat soil and organic matter like leaves. If a worm is cut in half only the part with the head will regenerate as it has 5 heart chambers. Lastly worms like to be in the dark and use their senses to move around as they have no eyes.





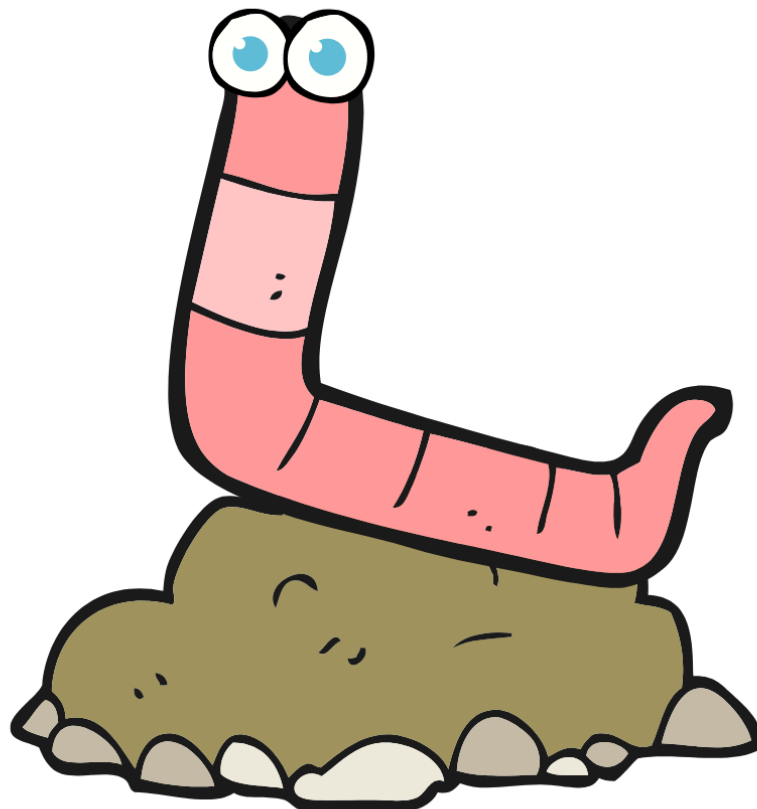
## WORM AT THE BOTTOM OF THE GARDEN

There's a worm at the bottom of my garden,  
And his name is Wiggly Woo.

There's a worm at the  
bottom of my garden  
And all that he can do is wiggle all day,  
And wiggle all night.

The neighbours say,  
What a terrible fright!

There's a worm at the bottom of my garden,  
And his name is Wiggly Woo





# VEGAN MAC AND CHEESE



## Ingredients

- 3 cups small cauliflower florets, chopped
- 2 teaspoons extra-virgin olive oil
- 1 large shallot
- 1 large clove garlic
- Juice of 1 small lemon
- 1 tablespoon white or yellow miso paste
- 2 teaspoons spicy mustard
- Salt and freshly ground black pepper
- 1/2 teaspoon ground cayenne pepper
- 1/8 teaspoon ground turmeric
- 3/4 cup plain unsweetened almond milk
- 1/4 cup nutritional yeast flakes
- 2 teaspoons packed brown sugar
- 10 ounces shredded vegan Cheddar
- 1 pound elbow macaroni

## Method

1. Bring a large pot of water to a boil. Put the cauliflower and 1 cup water in a small saucepan over medium heat. Cover, bring to a simmer and cook until the cauliflower is fully softened, about 20 minutes.

2. Transfer the cooked cauliflower and all the cooking liquid to a food processor and set aside. Wipe out the saucepan. Heat the oil in the saucepan over medium heat. Add the shallot and garlic and cook, stirring, until softened, about 3 minutes. Stir in the lemon juice, miso, mustard, 1 teaspoon salt, 3/4 teaspoon black pepper, cayenne and turmeric until well combined.

3. Gradually whisk in the almond milk, nutritional yeast and brown sugar and bring just to a simmer. Remove from heat. Process the cauliflower until smooth. With the food processor running, gradually add the warm almond milk mixture and process until extra creamy. Transfer the cauliflower-almond milk mixture to a large saucepan over medium heat, add the vegan Cheddar and stir occasionally until it melts.

4. Gradually whisk in the almond milk, nutritional yeast and brown sugar and bring just to a simmer. Remove from heat. Process the cauliflower until smooth. With the food processor running, gradually add the warm almond milk mixture and process until extra creamy. Transfer the cauliflower-almond milk mixture to a large saucepan over medium heat, add the vegan Cheddar and stir occasionally until it melts.