

ABOUT US

Hi Im Skye-lee a unschooling mum, living and raising three wildlings on a island, i have a deep desire for nature and a holistic approach to education, so I started to create wildschool and nature inspired learning resources, and from that passion BarefootChild was created. I believe strongly in entwining Nature into children's educations and getting children outside, observing and learning alongside a force as wild as they are!

WHERE YOU WILL FIND US









head to our website we have over 100 freebies

Not only do we love providing affordable nature inspired learning resources, but we have a passion to help other stay at home mums, homeschoolers and women learn how to start their own online business, making passive income, from their social media accounts, check out our NEW STORE DEDICATED TO THAT



NATURE IN AUTUMN WORKSHEET AND ACTIVITY BUNDLE

MIX AGE 4-12

Important

OVER 80 PAGES

This pack is to be printed on A4 size paper! double print pages as needed-laminate or print on thick cardstock any flashcards for better durability.

there is roughly 80 pages, each page includes its own instructions, but are always adaptable, so feel free to use however you like

included are information study sheets, worksheets, activities, flash cards, mini journal, craft activities PLUS BONUS WORKSHEETS-you can create your own questions, suitable for your childs age

perfect for mix ages 4-12,

we have used a mix of reggio emilia philosophy, including pieces for your nature tables, morning baskets and provocations

EACH PAGE CONTAINS THERE OWN INSTRUCTIONS AND IS SEPERATED INTO 4 EASY TO NAVIGATE SECTIONS

Nature in Autumn study and activity bundle pack

Welcome autumn hands on fun with your children this season, while also entwining nature into their learning with our BIG wildschool autumn activity pack. This pack is full of autumn learning worksheets and activities, covering the key changes that happen to nature in AUTUMN. We have tried to create this bundle so you can easily tailor it to fit your individual child and mould it into any studies. There is activities included for younger children with worksheets for older children, your child will be learning all about, how seasons happen, what is autumn, how and why leaves change colour, how certain animals behaviour changes in autumn and how they adapt, we have included alot of english language arts worksheets ,they will also get to have lots of hands on learning fun as well as creative art using nature. We want our BarefootChild resources to be expandable so at the end you will also find some BLANK QUESTION WORKSHEETS, these are ideal for you to write your own questions to suit your childs learning level/age and to further your learning studies.

We have seperated this bundle into 4 separate categories to help with organising these include:

MINI AUTUMN THEMED REFLECTION JOURNAL FOR KIDS

MINI SEASONS AND AUTUMN STUDY WORKSHEETS AND ACTIVITIES

3
CHANGES
TO TREES IN AUTUMN AND MINI TREE STUDY
WORKSHEETS AND ACTIVITIES

MYreflection



JOURNAL

WEEKLY nature observations SOME THINGS I HAVE NOTICED IN NATURE THIS WEEK.

MONDAY	TUESDAY
WEDNESDAY	THURSDAY
FRIDAY	SATURDAY
SUNDAY	Notes

DAILY

reflection planner

TIME	

Month	of:		
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MONTHLY



reflections and gratitudes EACH DAY OF THE MONTH THIS SEASON WRITE AS MANY WORDS THAT REMIND YOU ABOUT YOUR DAY, OR WHAT YOU ARE THANKFUL FOR.

MON.	TUE.	WED,	THUR.	FRI.	SAT.	SUN.

MY seasonal READING LOG

No.	Book Title	Author	Date	Page	My Toughts

BEST BOOK SO FAR

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About My Day		
-		
Self Reflection		

Date

Today's Feeling











Description

What I Feel	Gra	tefu	l for
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1.

2.

3.

What Makes Me Sad

1.

2.

3.

Things I Should do Better

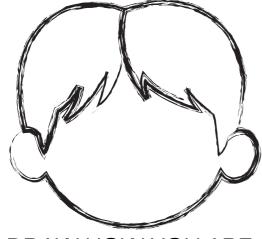












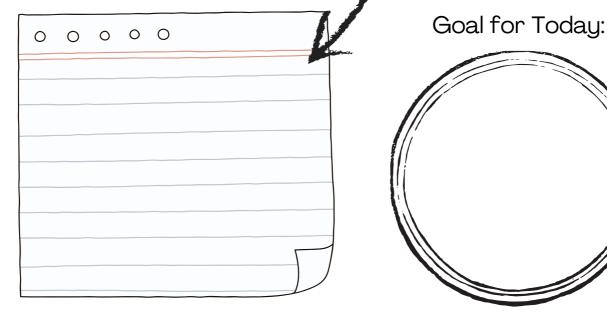
DRAW HOW YOU ARE FEELING RIGHT NOW

MORNING CHECK-IN

HOW I FEEL ABOUT TODAY:

Нарру	Ti	red	Норе	eful	Nervous
Focused	Sad	Frustra	ated	Conf	ident
Excite	ed	Angry	Jo	yful	Borec

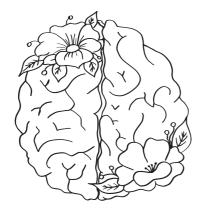
Reason for my rating



—— Something I am looking forward to today: —	
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Month	
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BRAIN DUMP



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Group 1 Task	Duedate
1. 2.	
3. 	
4. 5.	
6.	

Group 2 Task	Duedate
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2. 3.	
4.	
5. 6.	
o. 	

Notes			



MY NATURE VISUAL OBSERVATION SKETCH

Head outdoors and find a breath taking
Autumn inspired backdrop to sit down and sketch.

Maybe its the big pumpkin growing in your garden, or
the beautiful autumn Sky, or maybe its a big oak tree
changing colours of its leaves. Find something inspiring
and draw it below.

LOCATION OBSERVATION
WAS SKETCHED:
OBSERVATION DATE:



MY AUTUMN NATURE EXPLORATION RECAP

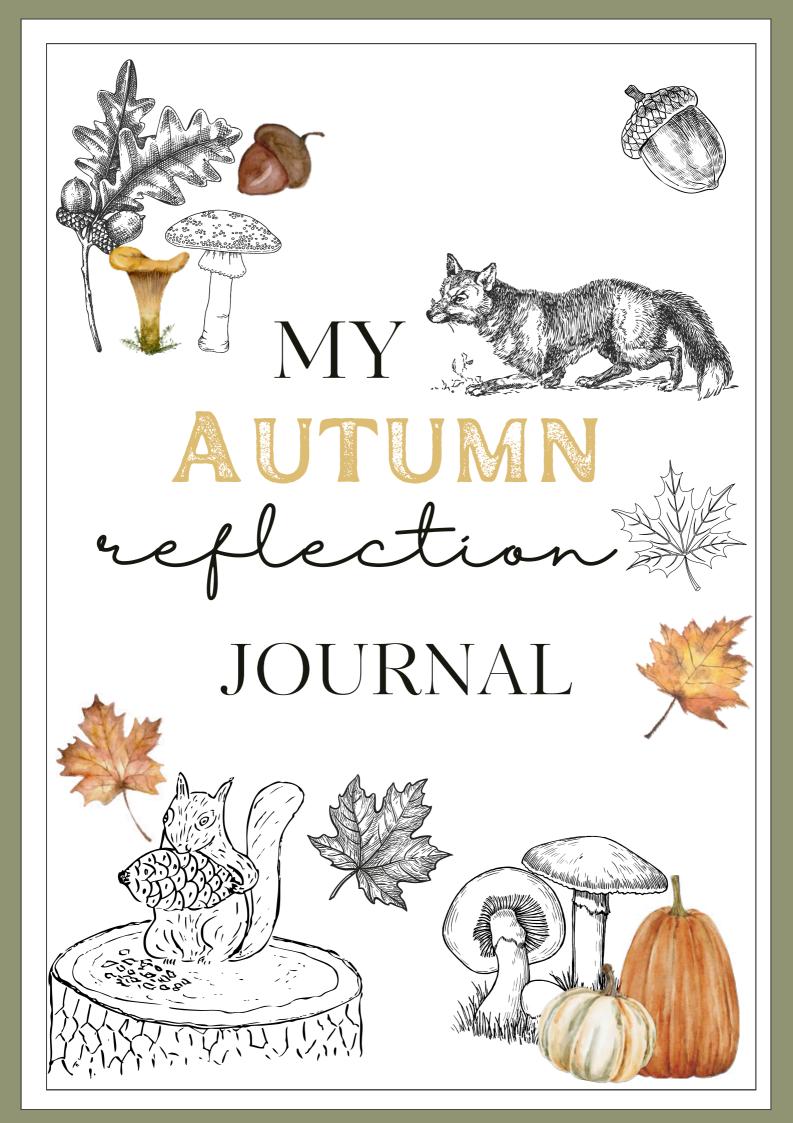
This Week out amongst Autumn, I have been busy exploring, observing and investigating,

STICK PHOTO HERE

In this photo I am	WEEK OF:

Nofes Date:

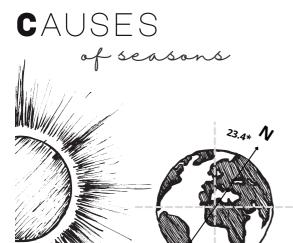
SEASONS AND AUTUMN INSPIRED LEARNING WORKSHEETS AND ACTIVITES



SEASONS Fact File

Seasons are annual changes in weather. There are four seasons each year: summer, autumn, winter and spring.

Each last for 3 months.



Earth is tilted on an imaginary line that runs between the North and South Pole (called an axis). When the South Pole is facing the sun, it means the Southern Hemisphere experiences summer, while the Northern Hemisphere is in winter, facing space. It takes the earth one year to revolve around the sun, and during this time each hemisphere experiences weather changes associated with the amount of sunlight and warmth it receives.

SUMMER

Warmest temperatures and longest days of sunlight

AUTUMN

Temperatures begin to fall. Some trees lose their leaves and some animals prepare to hibernate, stock up on food or migrate.

WINTER

Coldest temperatures and less daylight hours. Some animals hibernate and some plants die.

SPRING

The days begin to warm. Plants grow new leaves and animals emerge from hibernation

DID YOU KNOW?

The Equator is an imaginary horizontal line through the earth, which gets lots of sunlight and is warm year round. Not all countries experience four seasons. Countries near the equator have milder seasons and almost remain constant year-round..

what causes SEASONS?

The imaginary line that runs from the North to the South Pole is called an **axis**. Earth continually spins around its axis, taking 24 hours (1 day) to make a full rotation. During this time, one side of Earth is exposed to the sun, while the other side faces away from the sun. This forms day and night.

Earth's axis is slightly tilted on an angle of 23.45 degrees

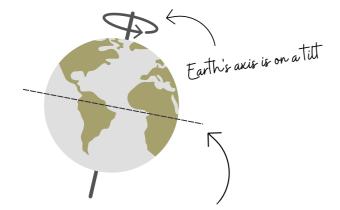
As well as spinning around its axis, Earth is also slowly orbiting around the sun. It takes 365 days (1 year) to complete a full rotation. The Earth's axis points in the same direction for the full rotation.

During Earth's orbit, there is two hemispheres (North and South) each have a turn of facing the sun.

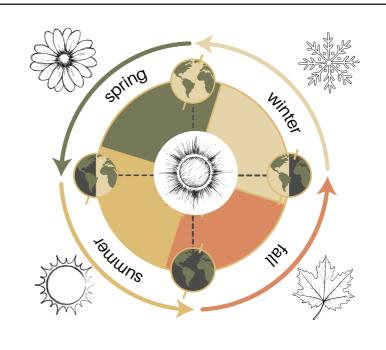
The hemisphere that is tilted towards the sun experiences summer.

The hemisphere that is tilted away from the sun experiences winter.

North Pole



The imaginary line that divides the Earth into two hemispheres is called the **equator**.



SEASONS

- 1.Draw a picture of an event that takes place in each season.
- 2. Write everything you know about each season.

aummar	autumn —
summer	dataiiii
winter —	spring
Will Co.	opinig)

All About Autumn

Autumn, also know in some parts of the world as fall, is one of the four temperate seasons in a year that occur between summer and winter. Autumn plays a crucial role in the natural cycles of life and marking a period of transition that sets the stage for the onset of winter. The Autumn season is characterized by several distinct scientific phenomena and processes including:

- <u>Daylight and Temperature Changes</u>: During autumn, the Earth's tilt relative to its
 orbit around the Sun causes the sun to take a lower and shorter path across the
 sky. This results in reduced daylight hours and lower temperatures. As the angle
 of sunlight decreases, it delivers less direct energy to the Earth's surface, leading
 to cooling temperatures.
- <u>Leaf Colour Change</u>: One of the most noticeable features of autumn is the colour change in deciduous trees. This occurs due to a decrease in chlorophyll, the pigment responsible for the green colour in leaves. As chlorophyll breaks down and fades, other pigments such as carotenoids (which produce yellow and orange colours) and anthocyanins (which produce red, purple, and blue hues) become more visible. This process is triggered by shorter daylight hours and cooler temperatures.
- Photosynthesis and Nutrient Storage: In autumn, many trees begin to prepare for winter by reducing photosynthesis. The nutrients in the leaves are reabsorbed into the tree, and the leaves eventually fall off. This helps trees conserve energy and protect themselves during the colder months when water and sunlight are less available.
- Animal Behaviour: Autumn is a crucial time for many animals. Some species, like birds, migrate to warmer regions to find food and suitable breeding conditions.
 Others, like squirrels and certain mammals, engage in behaviours to store food or build shelters in preparation for winter.
- Harvesting and Agriculture: This season marks the end of the growing cycle for many crops. Farmers harvest a variety of produce, including grains, fruits, and vegetables like pumpkins and apples which are a favourite. This is due to the favourable conditions for ripening that autumn provides, including cooler temperatures and adequate moisture levels.
- <u>Ecological Impact:</u> The falling leaves contribute to the ecosystem by enriching the soil. As leaves decompose, they release nutrients back into the soil, which supports plant growth and contributes to the nutrient cycle.

WHEN IS AUTUMN?

Autumn, or fall, appear at different times in the Northern and Southern Hemispheres due to their opposing seasons. Here's a breakdown:

Northern Hemisphere

Start: Autumn begins with the autumnal equinox, which typically falls on September 22 or 23.

End: It concludes with the winter solstice, around December 21 or 22.

Southern Hemisphere

Start: Autumn begins with the autumnal equinox, which occurs around March 20 or 21.

End: It ends with the winter solstice, around June 20 or 21.

During these times, each hemisphere experiences the transition from the warmth of summer to the cooler temperatures of winter, though the exact timing and duration of autumn can vary slightly based on local climate and geographical factors.

- 1- Write what hemisphere you live in, and when autumn (fall) starts and ends this year for you!
- 2- Can you name 2 things that begin to happen in Autumn?
- 3- What season is autumn after and before?
- 4- Write what your favourite season of the year is and why!

REFLECTION TIME



<u>Directions:</u> Use the Season and autumn information posters and answer the questions below

1.	How many months, do seasons last for?
2.	Name the 4 seasons in order from start to the end of the year, depending on which hemisphere you live in.
3	What 2 fruit and veg are popular harvests in autumn time?
4	What season is it when the hemisphere points to the sun?
5	How many days does it take for earth to orbit around the earth?
6	How long does it take for earth to spin around on its axis?
7	What is a equator?
8	What is one of the most noticeable changes that happen in autumn
9	What angle is Earth's axis slightly tilted on?
10	List any special occasions and celebrations that take place in autu

SOME THINGS THAT HAPPEN IN Autumn

SOME TREES GO THROUGH A CHANGE

One of the most noticeable changes that happen in autumn, are to trees. Many deciduous tree leaves begin to change colour, from green to yellow, orange, reds, browns and even purple. This is the tree's way of saving up nutrients for next spring and summer. This is also the season you will notice deciduous trees will lose their leaves.



CERTAIN FRUIT AND VEG ARE READY FOR HARVEST IN AUTUMN

When we think of autumn (also known as fall) what comes to mind is pumpkins, yes pumpkins are ready for harvest in the autumn season and going to a pumpkin patch is a exciting activity, but also apples and apple picking are very popular ,squash,Zucchini and more are ready for harvesting. The pumpkin has became a symbol for autumn time.



ANIMALS IN THE WILD BEGIN TO PREPARE FOR WINTER AT THIS TIME

During autumn, animals engage in various activities to prepare for the upcoming winter. Many animals, such as squirrels and chipmunks, gather and store food to ensure they have enough to eat during the colder months. Birds often migrate to warmer climates. Bears and other hibernating animals increase their food intake to build up fat reserves that will sustain them through their long winter sleep. Deer and other mammals grow thicker fur to insulate themselves against the chill.



traditional festivals and activities are on this time of year

The fall equinox, is a time of year with many different celebrations taking place around the world, including THANKS GIVING, HALLOWEEN, MOON FESTIVAL, and day of the dead, just to name a few.



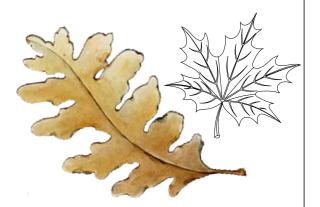
MY FAVORITE FALL ACTIVITIES



Draw your favorite fall activities and describe them

1	
1	

AUTUMN VOCABULARY MATCHING



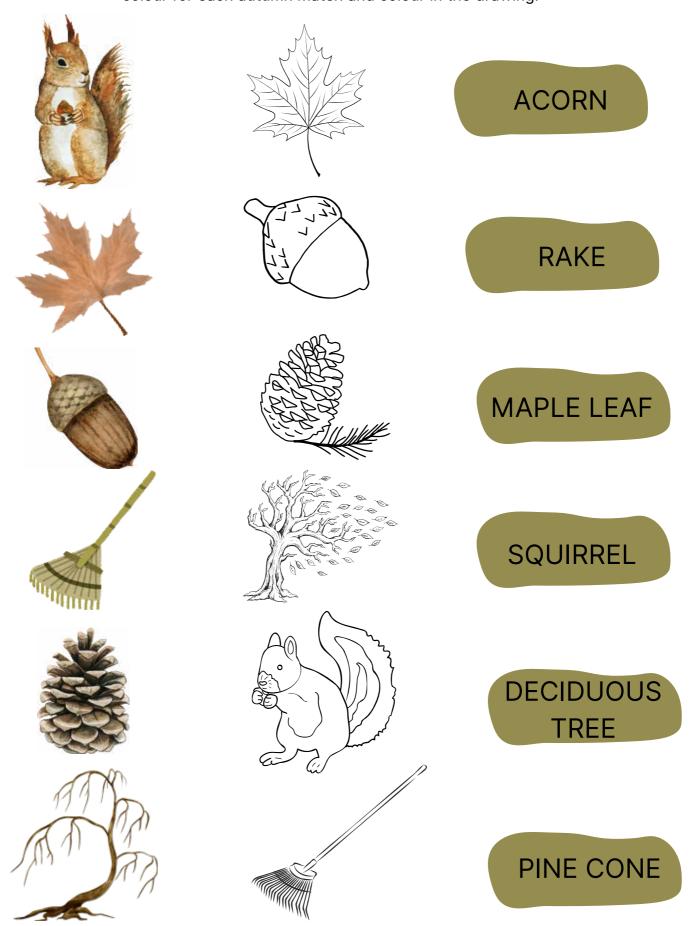
Match the words to their definitions: Below, you'll find 10 words related to the fall season and 10 definitions. Your job is to draw a line between each word and the correct definition.

Bonus activity: After you've matched all the words, choose your favorite word and write a sentence using it!

ACORN	•	A small animal with a bushy tail that collects nuts in the fall.
HARVEST	•	The time of year when crops are gathered from fields.
SCARECROW	•	A large, round orange fruit often used to make pies or for Halloween.
PUMPKIN	•	A tool used to gather fallen leaves into a pile.
MIGRATION	•	A thin layer of ice that forms on surfaces when it gets very cold at night.
HIBERNATION	•	The time when some animals sleep during winter to save energy.
CHILLY	•	When birds and animals travel to warmer places for winter.
FROST	•	A small nut that falls from an oak tree.
RAKE	•	When the weather feels cold, but not freezing.
SQUIRREL	•	A figure made of straw used to scare birds away from crops.

WELCOME AUTUMN

Match the pictures with the drawings and with the correct word. Use the same colour for each autumn match and colour in the drawing.



AUTUMN IS HERE! three words game

Think of three words for each category. Write them and then share them with your classmates.

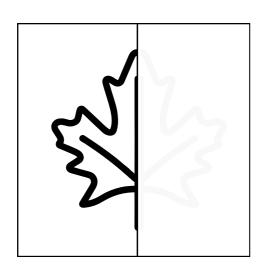
Fall Colours	Fall Activities	Fall Weather
Fall Food	Fall Clothes	Fall Animals
Fall Holidays	Fruits and Vegetables	Fall Smells
		100

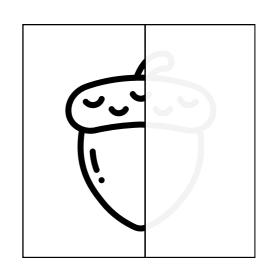
AUTUMN HALVES

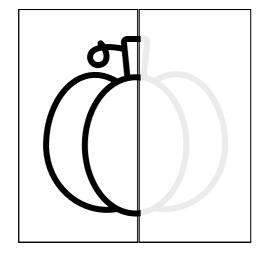
Draw the other halves and color the pictures. Then, trace the words.

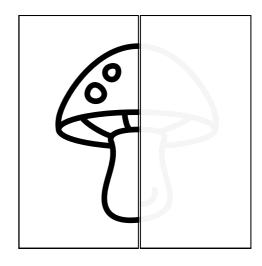












AUTUMN SYMMETRY

Draw and complete the other halve of the autumn picture.

Colour it to match.



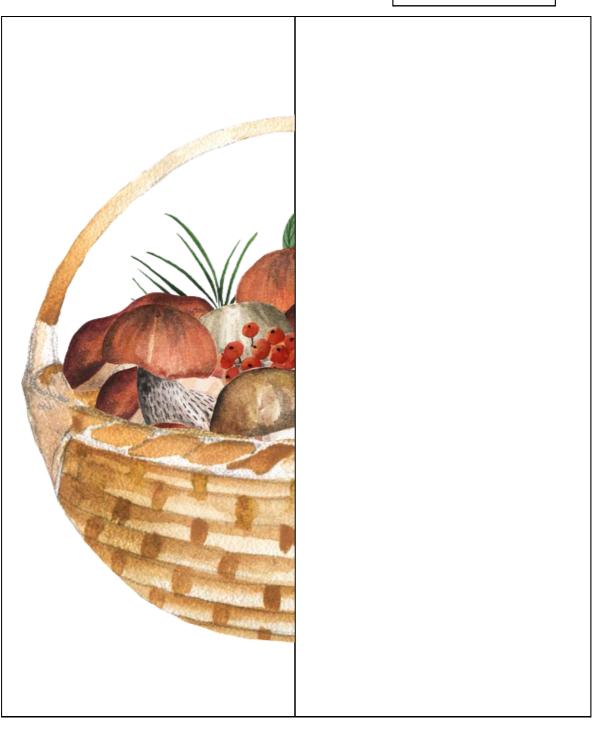


AUTUMN SYMMETRY

Draw and complete the other halve of the autumn picture.

Colour it to match.



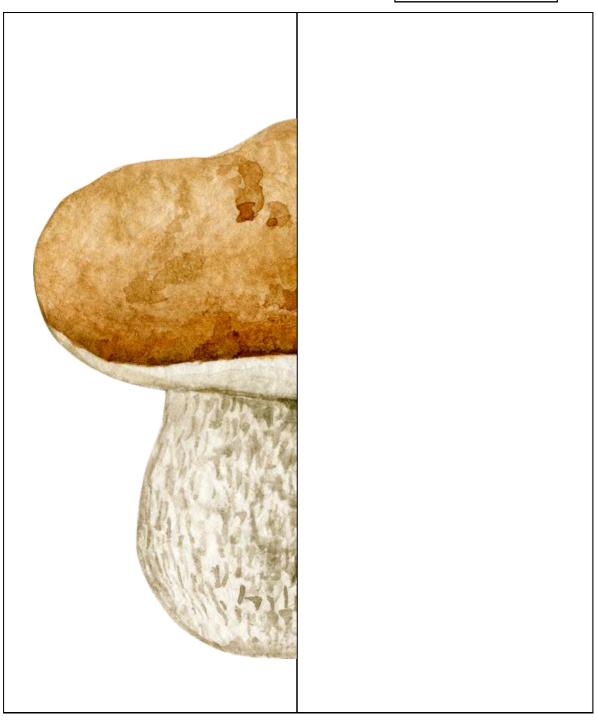


AUTUMN SYMMETRY

Draw and complete the other halve of the autumn picture.

Colour it to match.





HEDGEHOG NATURE CRAFT

Its time for some nature craft fun, use fallen leaves, dried flowers, twigs and any other resources in nature to decorate the hedge hog and autumn templates.

- 1- glue the template pages of the hedgehogs to some cardboard (any recycled cardboard will do, to make it sturdier,)
 - 2) next cut out your template on cardboard by following the lines,
- 3) now its time to get creative, crafting and decorating your templates using nature collections.
- 4) once your happy with your design, either use a hole punch and punch a hole through the top ,add twine through to hang and display your Autumn creations OR sticky tape to a paddle pop stick.

SOME HEDGEHOG INSPIRATION

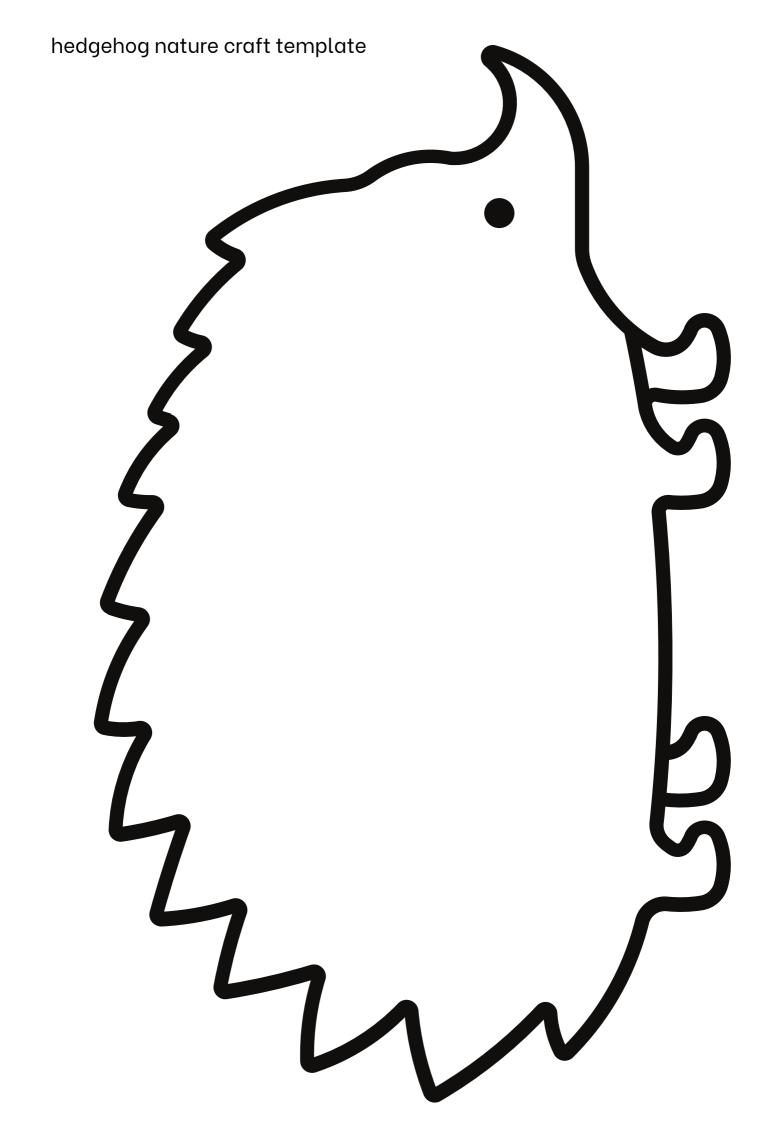


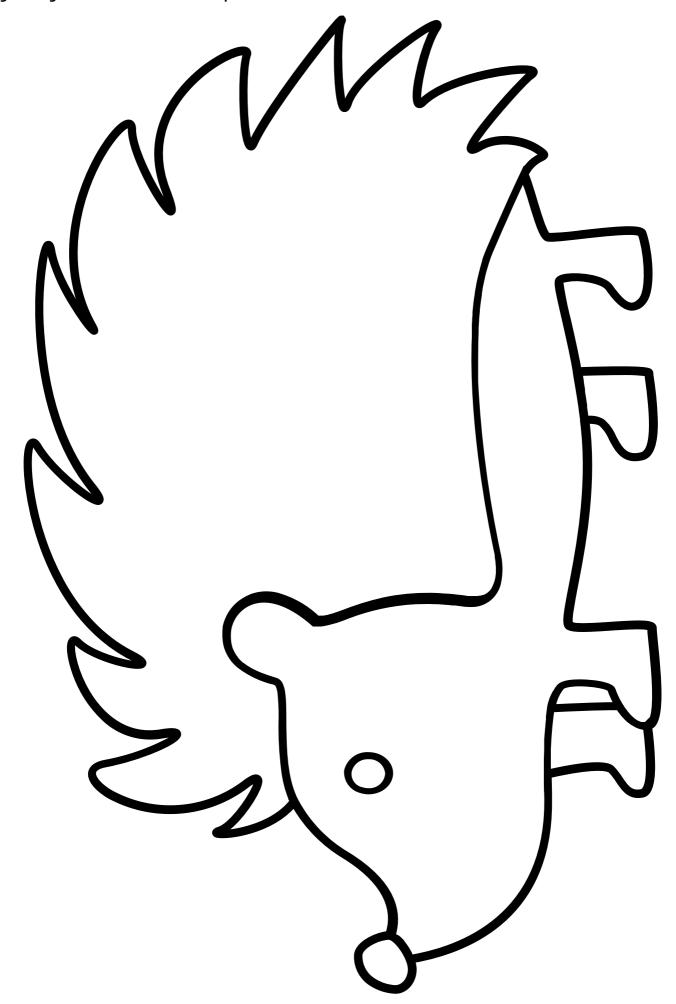




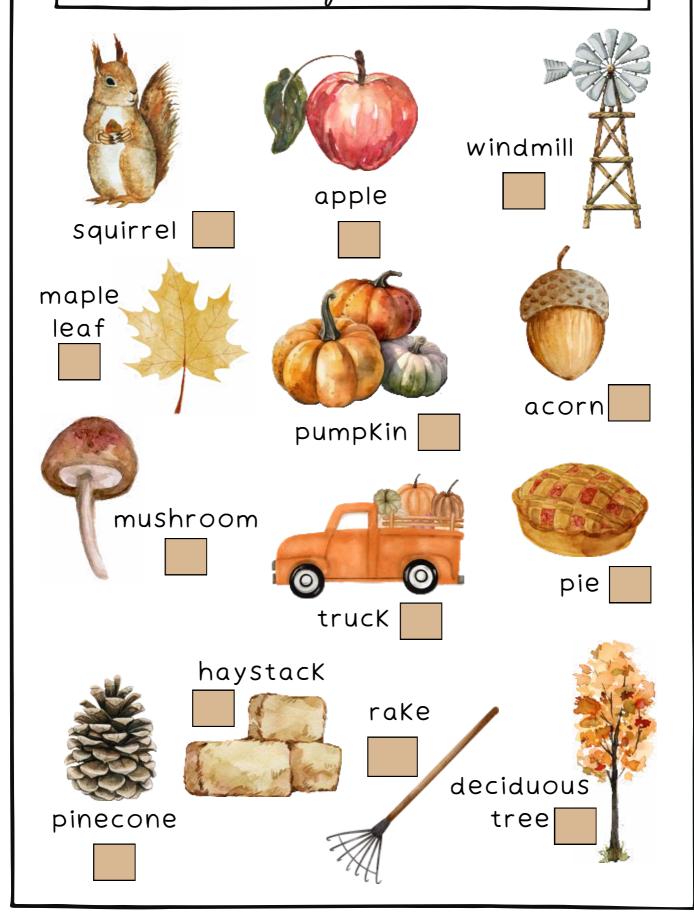








AUTUMN Scavenger Hunt







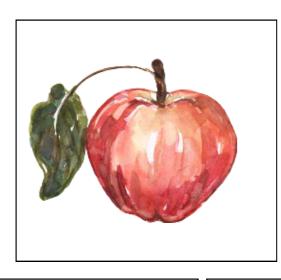




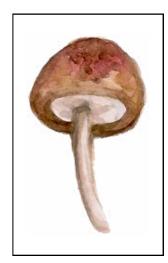






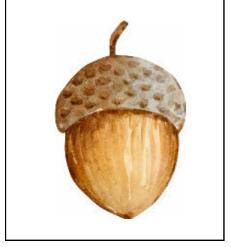






If you live in a area, that doesnt have the above autumn scavenger hunt pictures, you can instead cut out these images, and hind them outside and get children to find these pictures instead and tick off, print multiple pages



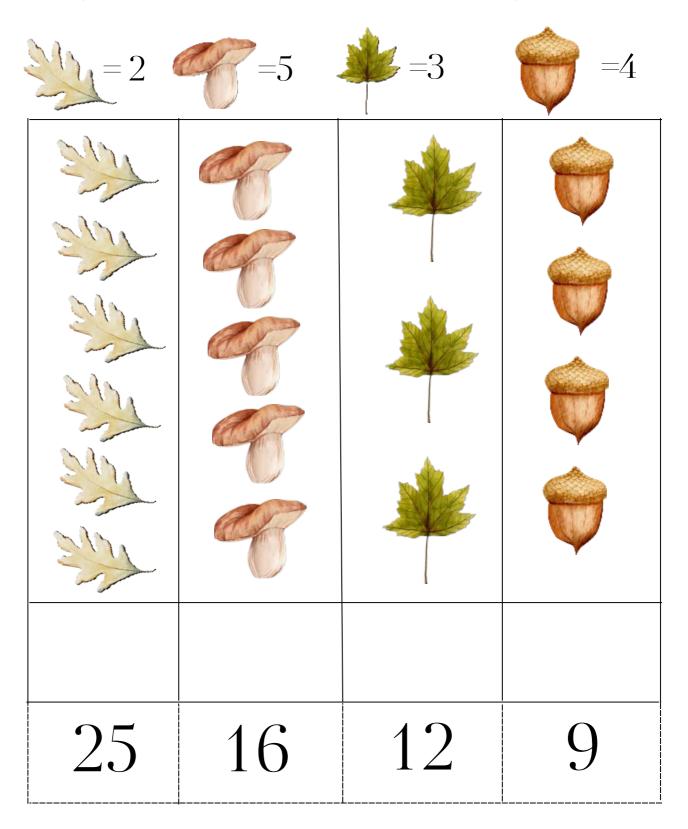






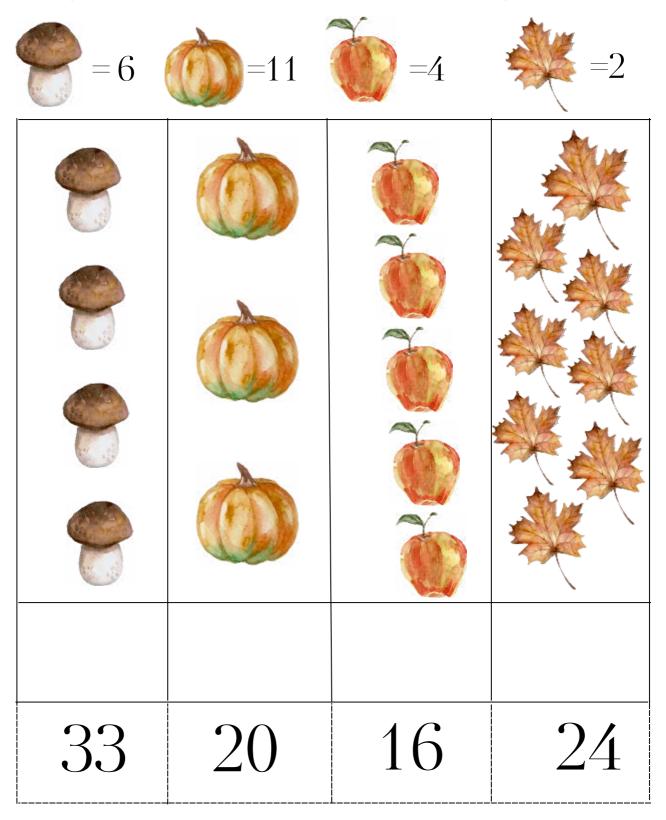
HOW MANY?

Use the key to work out what number each picture represents, add each picture together to work out the correct tally, Cut and paste the correct number under each of the pictures.



HOW MANY?

Use the key to work out what number each picture represents, add each picture together to work out the correct tally, Cut and paste the correct number under each of the pictures.





AUTUMN WORD GUESS

Look at the pictures and mark the correct option.



Leaves

Fruit basket

Maple leaf



Pumpkin

Hazel nut

Mushroom



Hazel nut

harvest basket

shopping bag



Scarecrow

Mushroom

Boot



Leaves

Mushroom

acorn



Sea star

Garden fork

Leaves



Maple leaf

Umbrella

Fruit basket



Boot

Scarecrow

Umbrella



Pumpkin

Boot

Maple leaf



Fruit basket

Leaves

Boot

FALL-THEMED ACROSTIC POEM

Create an acrostic poem using the word FALL. Then, illustrate your poem below.

F	
A	



Draw three (3) activities you can do in Autumn: Write three (3) words that describe Autumn: What are the three (3) months of Autumn? Draw three (3) items of clothing that you can wear in Autumn:

A PERFECT FALL DAY

Imagine and describe your ideal autumn day.

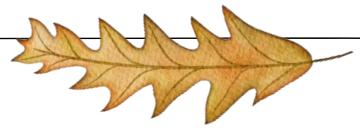
What activities would you do?

How would you feel as you enjoy the weather, colours, and scents?

Draw and write about your perfect fall day.



WELCOME FALL: VOCABULARY



Complete the sentences with the words in the box.

owl- pumpkin- rain boots- orange- apple- yellowacorn- sweater- leaves- scarf- sunflowers

- The squirrel found an ______on the ground to eat.
 The tree's _____ are falling as autumn approaches.
 picked a bright red _____ from the tree in the orchard.
 The _____hooted softly as night fell in the forest.
 wore my cozy _____ to keep warm during the chilly evening.
- 6. The leaves turned ____ and ___ before they fell to the ground.
- 7.1 like to wear my _____when jumping in puddles.
- 8. The garden is filled with _____ that reach high towards the sky.
- 9. My favorite _____is soft and keeps my neck warm.
- 10. The _____ is bright orange and perfect for Halloween.

AUTUMN rd scramble

Unscramble the following autumn words



TEER	
LAFE	
WNID	
ARNOC	
LAEVSE	
BESKAT	
ALPEPS	
PIUMKPN	
MSHUOORM	
UBREMALL	
HRAVETS	
PLEI FO LAEVES	

wordsearch

X	Е		Ш	Е	Α	V	Е	S	S	С
S	Т		R	Τ	U	_	Ш	0	Ρ	0
Е	Α	R	Ш	L	Т	0	V	Е	Y	0
Е	N	Е	Е	O	U	Е	S	F	Е	L
R	R	Т	N	D	М	Н	U	Α	L	Е
T	Е	0	R	Α	N	G	Е	Е	L	R
Е	В	R	М	С	В	R	S	L	0	Е
R	[L	L	0	U	G	Н	0	W	L
Α	Н	L	Т	R	D			U	М	W
В	А	Е	Е	N	F	0	X	R	L	Е
F	S	Е	Α	Z	I	K	Р	Μ	U	Р

AUTUMN ORANGE RED HIBERNATE
FALL COOLER YELLOW FOX

LEAVES ACORN BARE TREES LEAF

FALL SEASON READING COMPREHENSION



Read the following short story and answer the questions below.

It was a cool autumn morning. Sarah and her friend Jack decided to go for a walk in the park. They put on their jackets and headed outside. The trees were covered in leaves of orange, red, and yellow. Sarah and Jack loved the sound of leaves crunching under their feet. As they walked, they saw squirrels scurrying around, collecting acorns to store for the winter. Sarah spotted a cute hedgehog curled up in a pile of leaves, taking a nap. Jack wanted to jump into a big pile of leaves too, so they found a pile near a tree and jumped in with a laugh. After a while, the sky started to darken, and Sarah felt a few raindrops on her cheek. They quickly put up their hoods and decided to head back home. On the way, they saw a scarecrow standing tall in a field, protecting the pumpkin patch. Sarah thought it looked funny with its floppy hat and straw sticking out. Back at home, they enjoyed warm cups of tea and shared stories about their autumn adventure.

1- What season is it in the story?
2- What did Sarah and Jack put on before going for a walk?
3- What colors were the leaves on the trees?
4- What sound did Sarah and Jack like as they walked?
5- What were the squirrels collecting?
6- Where did Sarah and Jack jump into a pile of leaves?

FALL QUIZ



How much do you know about fall? Read and choose the correct options and find out!

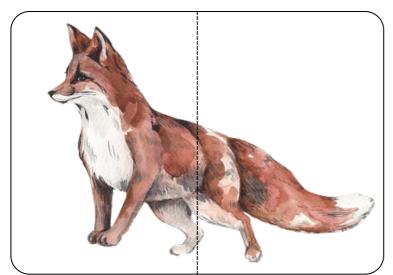
- 1 What season comes before fall?
 - a) Summer
 - b) Spring
 - c) Winter
- **2** Which of the following is a characteristic of fall?
 - a) Snow falling
 - b) Flowers blooming
 - c) Leaves changing color
- **3** What happens to the weather during spring?
 - a) It gets colder
 - b) It stays the same
 - c) It gets warmer
- Which of these animals often collects food during fall?
 - a) The elephant
 - b) The squirrel
 - c) The kangaroo
- 5 When does fall start in the northern hemisphere?
 - a) In September
 - b) In March
 - c) In June

- 6 What is another name for Fall?
 - a) Aunt
 - b) August
 - c) Autumn
- **7** What happens to the leaves on many trees during fall?
 - a) They fall off the trees
 - b) They turn green
 - c) They grow bigger
- **8** What do people often wear during fall?
 - a) Light T-shirts
 - b) Shorts
 - c) Jackets and sweaters
- **9** Which fruit is typically harvested in fall?
 - a) Watermelon
 - b) Apple
 - c) Pineapple
- 10 When does fall start in the southern hemisphere?
 - a) In September
 - b) In March
 - c) In June

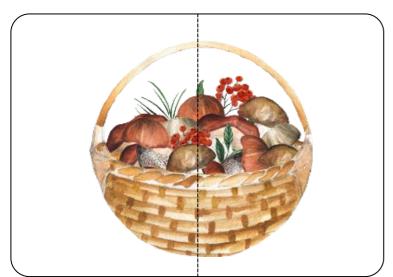


AUTUMN MORNING BASKET MATCH FLASHCARDS:

cut out around the border and down the middle of the dotted line, get children to find the other halve and match them together.

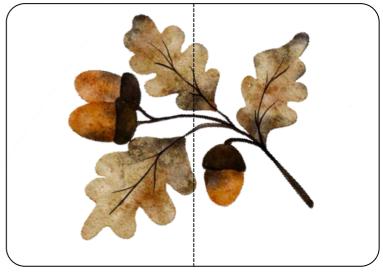








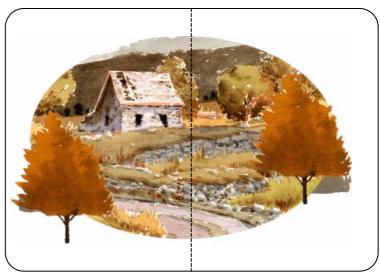


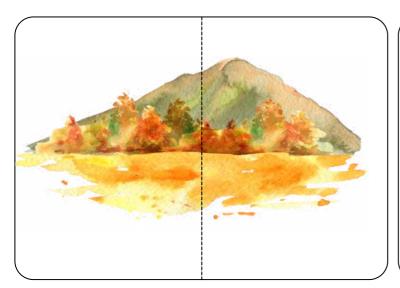


AUTUMN MORNING BASKET MATCH FLASHCARDS:

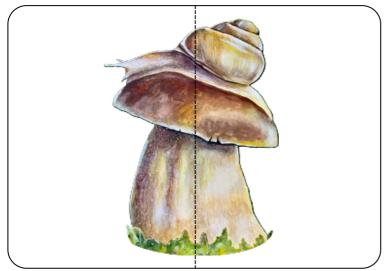
cut out around the border and down the middle of the dotted line, get children to find the other halve and match them together.

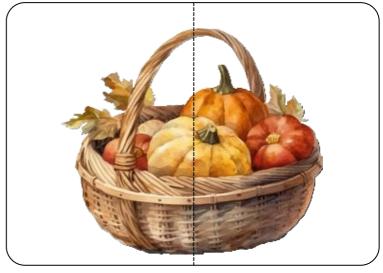










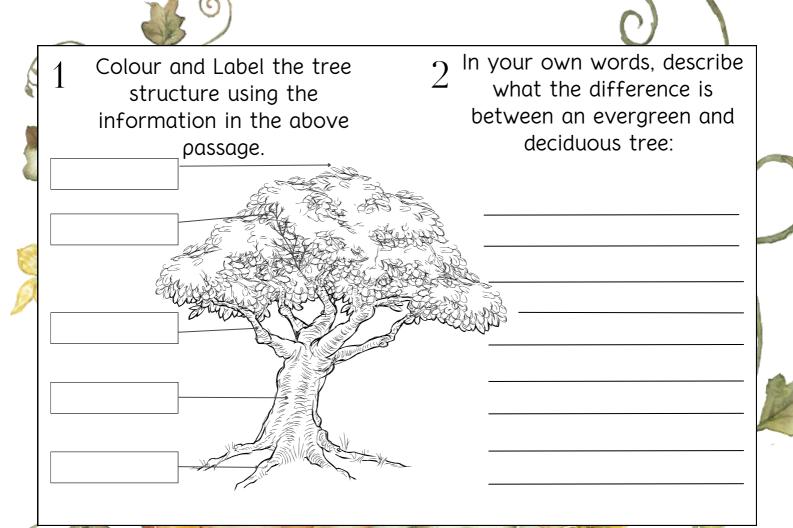


CHANGES TO TREES IN AUTUMN AND MINI TREE STUDY WORKSHEETS AND ACTIVITIES

WHAT IS A tree!

Trees are plants. While they share similarities with shrubs, the difference is that trees have a woody, main trunk, a crown (top) of foliage and measure at least 4 meters in height. Trees fall into two categories: evergreen and deciduous. As the name suggests, evergreen trees do not lose all their leaves at the same time, instead remaining green year round. Deciduous trees on the other hand, lose their leaves during autumn, and regrow new leaves during spring. During autumn, the leaves on deciduous trees change colour – usually yellow, orange and red shades, before falling to the ground. The structure of a tree includes roots, trunk, branches, twigs, and a crown of foliage. The root system of a tree feeds the plant by taking in water, oxygen and minerals. The foliage crown filters the air. Leaves use the sun's energy to convert carbon dioxide into oxygen. As well as being the lungs to the earth, trees provide shade for humans, timber for buildings, a home and shelter to many

creatures, and edible fruits and nuts.



LEAVES BEGIN TO CHANGE

colour

In autumn, leaves change colour due to a <u>decrease</u> in daylight and cooler temperatures. As summer fades, trees <u>reduce</u> the production of *chlorophyll*, (the green pigment that helps

plants make food from sunlight). Without as much *chlorophyll*, other pigments in the leaves, such as *carotenoids* (which produce yellow and orange hues) and *anthocyanins* (which create red and purple shades), become more visible. This transition results in the vibrant array of colours we see in autumn. When the leaves change colour in the Autumn, they return to their natural hues. During the summer months, the *chlorophyll* in the leaves causes them to turn green and causes the leaves to hide their true colours.

THINGS IN NATURE THAT HAPPEN IN AUTUMN TO TREES

LEAVES BEGIN TO

fall



Leaves fall in autumn as part of a tree's <u>preparation</u> for winter. As temperatures drop and daylight decreases, trees start a process called abscission. They form a special layer of cells at the base of each leaf stem, which gradually weakens and eventually severs the connection between the leaf and the tree. This helps the tree conserve water and energy during the colder months when resources are scarcer. By shedding leaves, trees also reduce the risk of damage from heavy snow and ice, making it easier to survive the winter. Not all trees shed their leaves in autumn. Trees that lose their leaves each fall are called deciduous trees. These trees, such as maples, oaks, and birches, go through the process of shedding leaves On the other hand, evergreen trees. such as pines, spruces, and firs, keep their leaves throughout the year.

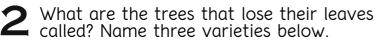


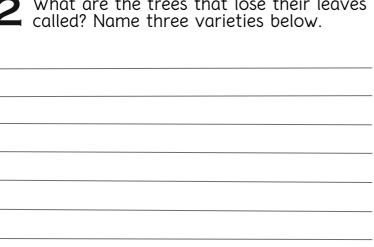
WHAT I HAVE LEARNT ABOUT TREES IN AUTUMN

Instructions: Read through the tree information poster and answer the below questions



In your own words why do some trees change colour in Autumn?





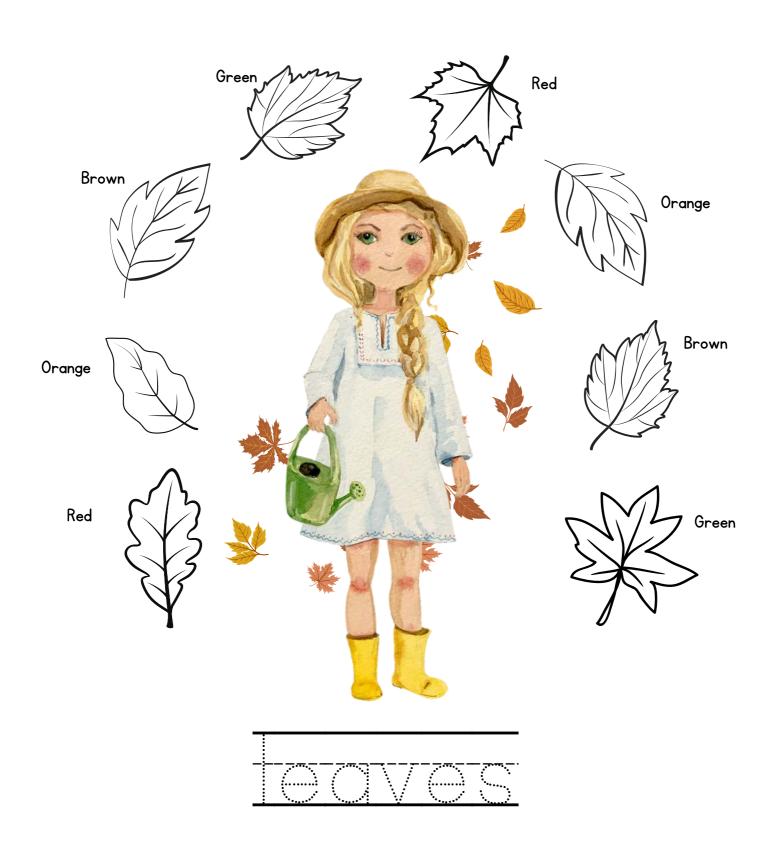




What is a tree? Names its characteristics.

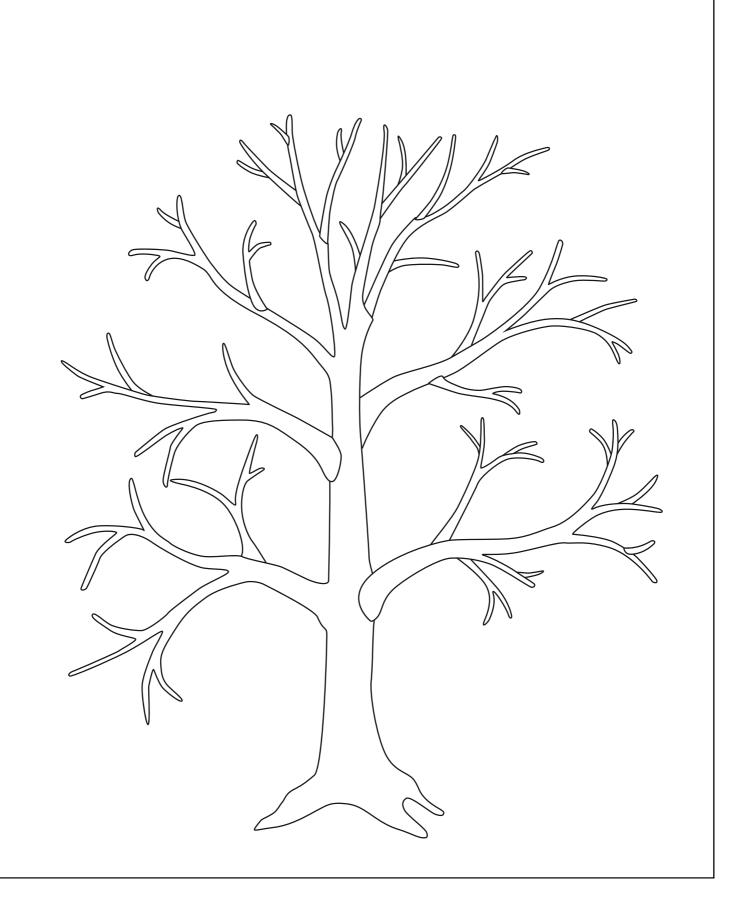
AUTUMN LEAVES

Color the picture below. Use the fall colors indicated for the leaves. Use colors of your choice to color the boy.



MY AUTUMN TREE

It's autumn. Take a stamp or dip your finger in paint and stamp the leaves on the tree in autumn colours. Choose from green, yellow, orange, and brown





Key Stages of Tree Seed Growth: 1- SEED STAGE:

Formation:

Tree seeds develop from the fertilization of flowers. Each seed contains an embryo, nutrients (endosperm), and a protective seed coat.

Dormancy:

Many seeds enter a dormant state, allowing them to survive unfavourable conditions until the environment is suitable for germination.

2- GERMINATION:

Triggering Conditions:

Germination occurs when conditions such as moisture, temperature, and light are favourable. The seed absorbs water, swells, and breaks its coat.

Emergence:

The embryo begins to grow, developing roots (radicle) that anchor into the soil and shoots (plumule) that push upward toward the light.

3-SEEDLING STAGE:

Growth:

The seedling develops its first true leaves and begins photosynthesis, using sunlight to convert carbon dioxide and water into energy.

Root Development:

A strong root system forms, anchoring the plant and enabling it to absorb nutrients and water.

4-JUVENILE STAGE:

Further Growth:

The tree continues to grow taller and wider, developing a thicker trunk and more complex root systems.

Branching:

Side branches begin to develop, increasing the tree's ability to capture sunlight and expand its foliage.

5-MATURE STAGE:

Reproductive Development:

The tree reaches maturity and begins to produce flowers and seeds, completing the life cycle.

Ecological Role:

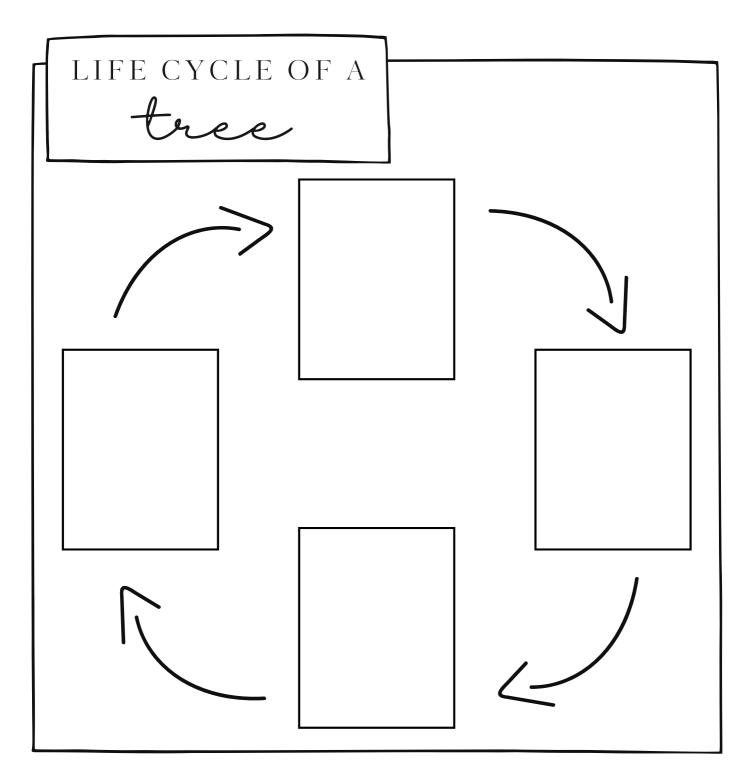
Mature trees contribute to their ecosystem by providing oxygen, habitat, and food for various organisms.

TREE STUDY REFLECTION



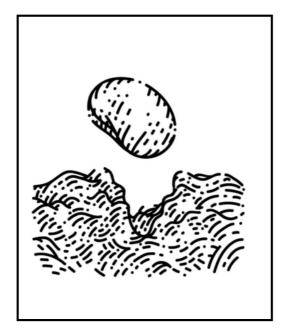
<u>Directions:</u> Use the tree information posters and answer the questions below

	below
1.	How many stages of growth do tree seeds usually go through?
2.	What happens when a seed is germinated?
3	How do tree seeds develop?
4	What do tree roots do?
5	What stage does the tree grow its first true leaf?
6	What are the trees roots called? What are the trees shoots called?
7	
7	List as many different tree varieties that you know!
8	What do you think trees provide to their ecosystem?
9	What do you think it means when a tree seed is dormant?
10	What do tree seeds need, in order to grow?

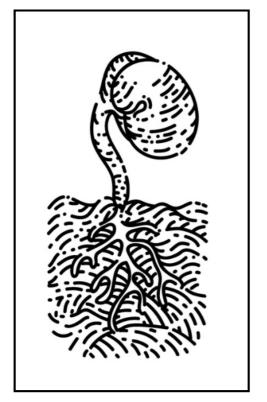


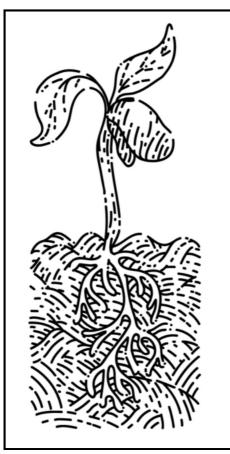
Cut around the images and place in order on the lifecycle diagram above





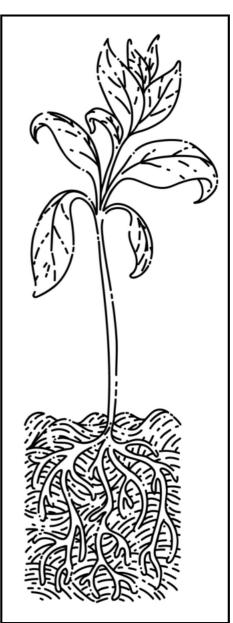






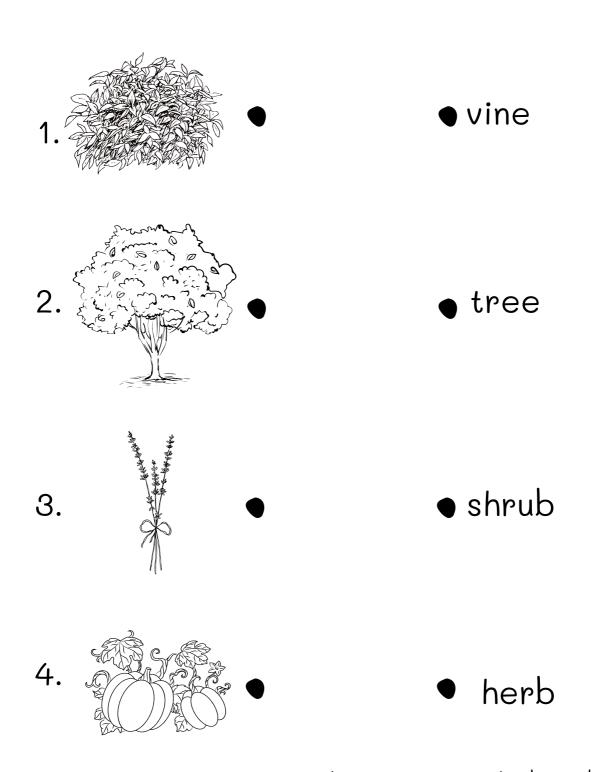


cut out seed flashcards and get your child to arrange in order the growth stages



WHAT TYPE IS THE PLANT?

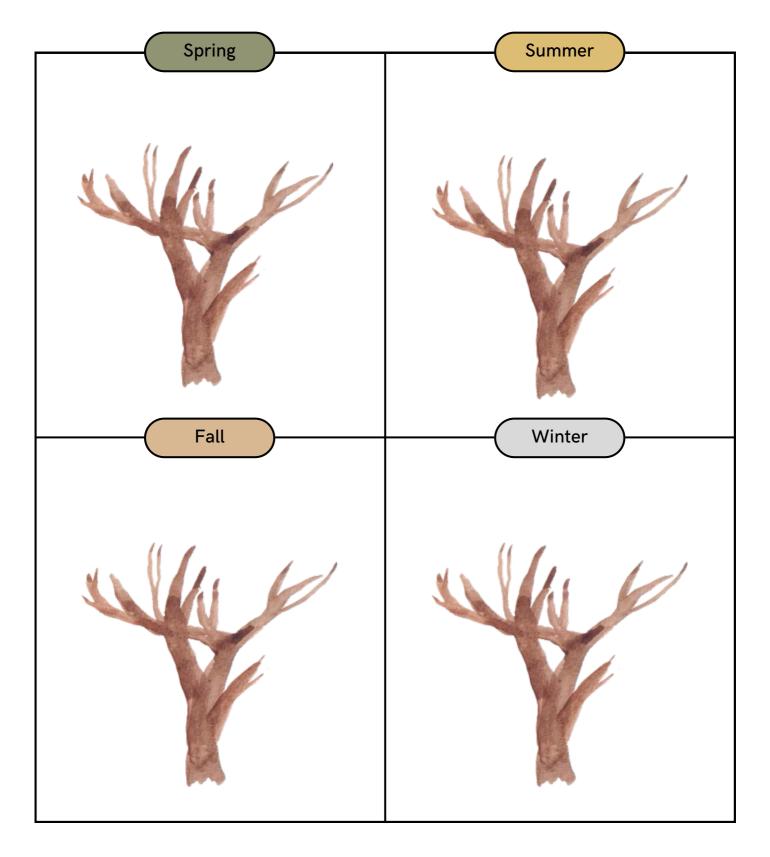
What type is the plant? Connect the pictures to the right with its correct type of plant.



On a piece of paper, create a graph of vines, trees, herbs and scrubs and list as many of each that you know under the correct graph. If you are unsure what each one is, research what they mean using google and some common plants from each category.

TREES, LEAVES AND SEASONS

When days get shorter and temperatures drop, types of trees called deciduous trees need to conserve energy. They can only do this by producing less chlorophyll until leaves fall off.



Complete the picture of a deciduous tree in each season.

THE CHANGING LEAVES

of fall

The world was changing. Each morning, when Emma walked to school, everything seemed just a little bit different. The once green leaves of the trees lining the streets were turning into shades of yellow, orange, and red.

The gentle rustling sound of summer leaves was changing to a crisp crunch underfoot. Emma's favorite tree in the park was transforming, its leaves changing from green to an autumn tapestry.

Emma visited the park every day and was beginning to get concerned. As the days passed, the leaves continued to change, their colors deepening each day.

Emma wandered around, checking on every leaf, worried they might fall off and leave the tree bare.

One day, Emma saw her friend, Jack, playing in the park. "Jack, do you know why the leaves are changing?" Emma asked. "It's fall, Emma!" Jack said with a smile. "Everything is supposed to change."

Emma furrowed her brow and tilted her head. "But why does it have to change? I liked it the way it was." Jack smiled. "Change can be beautiful, Emma. Just wait and see."

As the days went by, Emma watched the tree transform. The leaves turned into brilliant hues. Children played in leaf piles, and families gathered to admire the beautiful scenery. Emma's favorite tree was more dazzling and lively than ever.

One afternoon, Emma met her friend, Lily, at the park. "Do you see now, Emma? The change has brought new beauty and excitement," Lily said.

Emma nodded, her eyes wide with wonder. "I do, Lily. The tree is even more wonderful than before."

From that day on, Emma embraced the changes, running through the park with joy. She realized that sometimes, change brings new and beautiful things into our lives. And she was no longer concerned, but excited to see what the next season would bring.

INFERENCING TO THE CHANGING LEAVES OF FALL

Make inferences about the story by answering the questions below.

DRAW Emma looking at the changing leaves of the tree.



Why is Emma concerned about the tree changing?
Why do you think Jack smiled when he told Emma about the changes?
What does Emma's daily visit to the park suggest about her character?
Why did Emma feel the tree was more dazzling and lively than ever?
Why did Emma's feelings about the tree change by the end of the story?

CHANGING LEAVES OF FALL WRITING

Now it's your turn to continue the story. Consider the following questions when you are writing.

What new changes does Emma notice as winter approaches?

- How do the animals in the park prepare for winter?
- How will the park transform with the first snowfall?
- How does Emma feel about accepting change?
- What new activities will Emma try that she hasn't experienced before?
- How does Emma help her friends appreciate the changes in the park?

FALL CLUE MATCH

Can you guess the correct fall item? Cut and paste the picture under the correct clue.





What do squirrels love to find and hide in the fall?



What falls from the trees when it gets cold?



What fruit can be carved and used as a decoration?



What fruit grows on a tree and can be picked?



What tool can help you collect leaves?



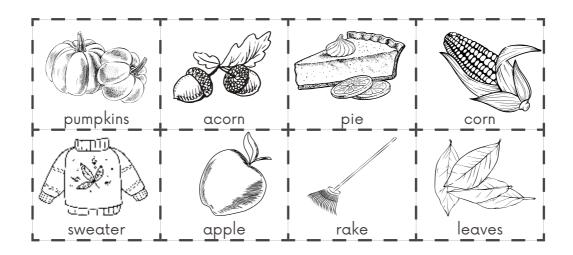
What dessert is made of pumpkin or apple?



What grows on a large and long stalk?



What do you wear to keep warm in the fall?



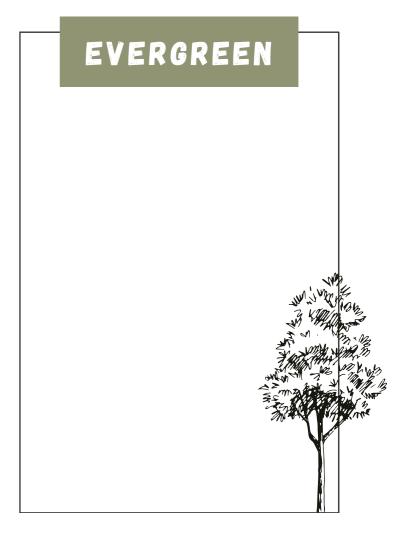
SORT THE TREES

Take a look at the trees displayed below and determine which category each tree belongs to — deciduous or evergreen. Remember, deciduous trees' leaves fall during autumn, while evergreen trees keep their needles or pines all year long. If you are unsure, research each tree to find out.



EUCALYPTUS	BEECH	SPRUCE	BIRCH	CHESTNUT
OAK	HAZEL	YEW	PINE	OLIVE
ELDER	ASH	SYCAMORE	ROWAN	FIR

DECIDUOUS



What's your favourite tree?

ANIMAL ADAPTIONS IN AUTUMN MINI STUDY WORKSHEETS AND ANIMAL ACTIVITIES

AUTUMN BRINGS ON A CHANGE IN

animals behaviour

In autumn, animals engage in a variety of activities to prepare for the challenges of winter. As temperatures drop and food sources become less abundant, many animals adjust their behaviours to ensure their survival.



HERE'S A SUMMARY OF WHAT DIFFERENT ANIMALS TYPICALLY DO DURING THIS SEASON:

1. Food Storage and Foraging

- **Squirrels:** Collect and cache nuts, such as acorns and walnuts, by burying them in the ground. This behaviour, known as *caching*, helps them have a food supply during the winter.
- Chipmunks: Gather seeds, nuts, and insects and store them in their burrows. They use their cheek pouches to transport food back to their storage sites.
- Bees: Collect nectar from flowers and convert it into honey, which they store in their hives to sustain them through winter when foraging is not possible.
- **Birds:** Many bird species forage for seeds and insects, and some store food in various locations like tree bark or the ground.

2. Migration

• **Birds:** Many bird species migrate to warmer regions where food is more plentiful and temperatures are milder. Migration is often triggered by changes in daylight and temperature.

3. Preparing for Hibernation

- **Bears:** Enter a period of *hyperphagia*, this is where they eat excessively to build up fat reserves. This fat will sustain them through their winter hibernation period when they do not eat or drink.
- Groundhogs and Some Rodents: Enter hibernation or torpor, a state of reduced metabolic activity. They build or find shelters to stay warm and rely on stored body fat for energy.

THINGS IN NATURE THAT HAPPEN IN AUTUMN TO ANIMALS

THINGS IN NATURE THAT HAPPEN IN AUTUMN TO ANIMALS

AUTUMN BRINGS ON A CHANGE IN

animals behaviour

4. Nest Building and Shelter Preparation

Deer and Other Mammals: Begin to grow thicker fur for insulation and may seek out sheltered areas to stay warm.

• Insects: Some insects, such as certain beetles and spiders, seek out sheltered locations to survive the cold.

They may also enter diapause, a form of dormancy that helps them withstand harsh conditions.

5. Reproductive Behaviours

• **Deer and Elk:** Engage in mating behaviours during the fall, known as the rut. Males compete for dominance and mating rights, which ensures that offspring are born in the spring when resources are more plentiful.

6. Changing Physical Adaptations

• Animals: Many animals, such as foxes and rabbits, grow thicker fur to protect against the colder temperatures. Some species also change their diet to adapt to the available food sources in autumn.

Autumn is a critical time for animals as they prepare for the winter months. Their behaviours during this season are essential for their survival, showcasing their adaptability and resourcefulness in facing seasonal changes.

WEIRD ANIMAL ADAPTION FACT:

Hibernating Frogs' "Frogsicles":

Certain frogs, like the wood frog, can freeze solid during autumn and winter. As temperatures drop in autumn, these frogs enter a state where they effectively "shut down" their bodily functions to withstand

the cold. They enter a state of suspended animation a frog's heart rate, breathing, and other metabolic activities become almost imperceptible a frog's heart rate, breathing, and other metabolic activities become almost imperceptible. The frog then thaw out in the warmer spring months to resume normal activity.



ANIMAL AUTUMN ADAPTIONS growing thick fur

As autumn arrives and temperatures begin to drop, many animals undergo a significant physical change to prepare for the colder months: they grow thicker fur. This adaptation is crucial for their survival through winter.

HERE'S HOW AND WHY THIS PROCESS OCCURS:

PURPOSE OF THICKER FUR

- <u>Insulation:</u> The primary function of thickened fur is to provide better insulation against cold temperatures. The added layer of fur traps air close to the body, which acts as an insulating barrier to retain heat and keep the animal warm.
- <u>Protection:</u> Thick fur also offers protection from the elements, including wind, rain, and snow. This helps animals maintain body temperature and avoid hypothermia in harsh winter conditions.

PROCESS OF FUR GROWTH

- <u>Seasonal Changes:</u> As autumn progresses, animals' bodies respond to shorter daylight hours and cooler temperatures by triggering the growth of a thicker winter coat. This process involves the shedding of the lighter summer fur and the growth of a denser, often longer, winter coat.
- Hormonal Influence: The change in fur is regulated by hormonal changes in response to environmental cues. Hormones such as melatonin and others related to seasonal changes stimulate the growth of thicker fur.

ANIMALS WITH THICKENED FUR

- Foxes: Foxes, such as the red fox, develop a dense undercoat beneath their longer guard hairs. This double-layered fur provides excellent insulation against the cold.
- <u>Deer:</u> Deer grow a thicker and denser winter coat to help them survive the winter months. This coat provides warmth and helps to insulate them from the cold.
- Hares: Snowshoe hares undergo a dramatic change in fur color and thickness.
 They grow a thick, white winter coat that provides insulation and camouflage against the snow

BENEFITS BEYOND WARMTH

- <u>Camouflage:</u> In some species, the change in fur color associated with the thicker winter coat also serves as camouflage, helping them blend into their snowy surroundings and avoid predators.
- Health and Survival: Proper insulation helps animals conserve energy by reducing the need to shiver or seek additional shelter. This energy conservation is vital for survival when food sources are scarce during winter.

ANIMAL AUTUMN ADAPTIONS Migrating

Autumn is a critical time for many animal species, as it marks the beginning of migration, a vital survival strategy for coping with seasonal changes. Migration involves the regular, often long-distance, movement of animals from one place to another HERE'S AN OVERVIEW OF WHY AND HOW ANIMALS MIGRATE IN AUTUMN:

PURPOSE OF MIGRATION

- Resource Availability: Many animals migrate to find more abundant food resources. As temperatures drop and food becomes scarce in their breeding grounds, migrating allows them to move to areas where food is more plentiful.
- Optimal Breeding Conditions: Migration can also be driven by the need to find suitable breeding grounds. For many species, the breeding season is timed to coincide with optimal conditions in the destination habitat.
- Avoiding Harsh Weather: Migration helps animals avoid harsh winter conditions. By moving to warmer regions, they can evade the extreme cold and adverse weather that would otherwise challenge their survival.

TYPES OF MIGRATION

- Long-Distance Migration: Some animals, such as monarch butterflies and arctic terns, undertake extensive journeys. Monarch butterflies travel from North America to central Mexico, while arctic terns migrate from the Arctic to the Antarctic, covering thousands of miles.
- <u>Seasonal Migration:</u> Many birds, such as swallows and geese, migrate seasonally to escape the cold of winter. They typically move from their northern breeding grounds to southern wintering areas.
- Altitudinal Migration: Some species, like mountain goats and American pikas, migrate vertically by moving to lower elevations during the colder months to find more favourable conditions.

MIGRATION PATTERNS AND NAVIGATION

- Innate Navigation Skills: Animals have evolved various methods to navigate during migration. Birds use celestial cues (sun, stars) and Earth's magnetic field, while sea turtles rely on the Earth's magnetic field and ocean currents.
- Environmental Cues: Changes in daylight, temperature, and food availability trigger migration. For instance, shortening day length in autumn signals birds to start their migration journey.

CONCLUSION

Migrating animals play crucial roles in ecosystems. For example, migratory birds help in seed dispersal and pest control, while species like salmon provide essential nutrients to freshwater ecosystems as they spawn and die. Migration requires significant energy, as animals need to build up fat reserves to sustain them during their journey. For instance, birds often double their weight before migration.

ANIMAL AUTUMN ADAPTIONS

In Autumn animals begin to prepare for the coming winter months. With colder temperatures and reduced food availability on the horizon, animals engage in various behaviours to collect and store food.

food

HERE'S A SUMMARY OF HOW DIFFERENT ANIMALS COLLECT AND MANAGE THEIR FOOD RESOURCES IN AUTUMN:

PURPOSE OF FOOD COLLECTION

- <u>Survival Preparation:</u> The primary goal of food collection in autumn is to build up reserves that will sustain animals through the winter when food is scarce. This preparation helps ensure survival during the cold months when foraging becomes difficult.
- Energy Storage: By collecting and storing food, animals create energy reserves in the form of fat and stored food supplies. This energy is vital for maintaining body functions and overall health during periods of inactivity or hibernation.

METHODS OF FOOD COLLECTION

Caching and Hoarding:

Squirrels: Squirrels are well-known for their caching behavior. They collect nuts, seeds, and fruits, and bury them in the ground in various locations. This process, called caching, ensures they have access to food throughout winter.

<u>Chipmunks:</u> Similar to squirrels, chipmunks use their cheek pouches to transport and store food, such as nuts and insects, in their burrows for later consumption.

Storing in Nests:

- <u>Bees:</u> Honeybees collect nectar from flowers, which they convert into honey. They store this honey in the hive, where it serves as their primary food source during winter.
- <u>Birds:</u> Some bird species, like nuthatches and chickadees, gather seeds and store them in various places, such as crevices in trees or hidden spots on the ground.

Building Food Stores:

Woodpeckers: Certain woodpecker species store food by creating holes in trees. They cache insects or larvae in these holes, which they can retrieve later.

Bears: Bears dont store food,however they consume large quantities of food in autumn, a behaviour known as hyperphagia. They build up fat reserves that will sustain them during hibernation, a period of prolonged inactivity where they do not eat or drink.

In summary, autumn is a critical time for many animals as they engage in food collection and storage to prepare for winter. These behaviours involve complex strategies and adaptations that help ensure their survival during periods when food is not readily available.

WHAT I HAVE LEARNT ABOUT ANIMALS IN AUTUMN

Instructions: Read through the animal information posters and answer the below questions



List the 6 different and common changes animals do in Autumn!

2 What is it called what bears do in Autumn time? Write a short summary of what it means!



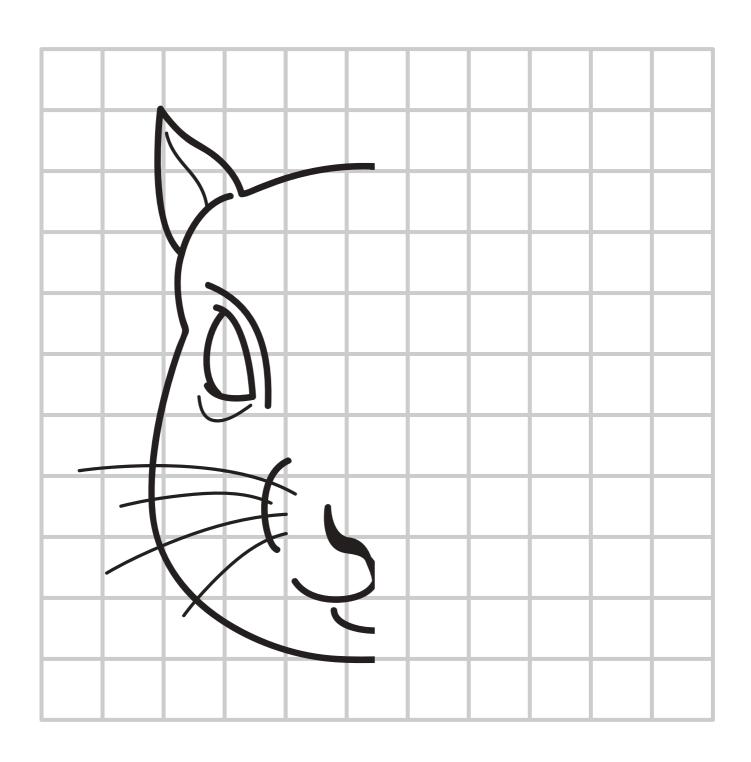


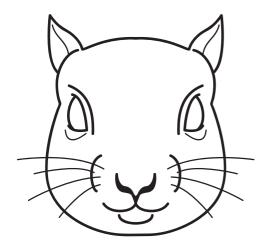
What do squirrels like to stock up on in Autumn? what is the name given to their "food storing adaption"?

WHAT I HAVE LEARNT ABOUT ANIMALS IN AUTUMN

Can you draw a animal in autumn? What are they doing?		
Can you list some different methods of food collecting that animals do in Autumn?		
List the different types of migrations!		
How do birds know how to navigate when migrating?		
Can you list some benefits to animals who grow thicker fur in autumn ?		
Write a summary of some things you know that happen to animals in autumn!		

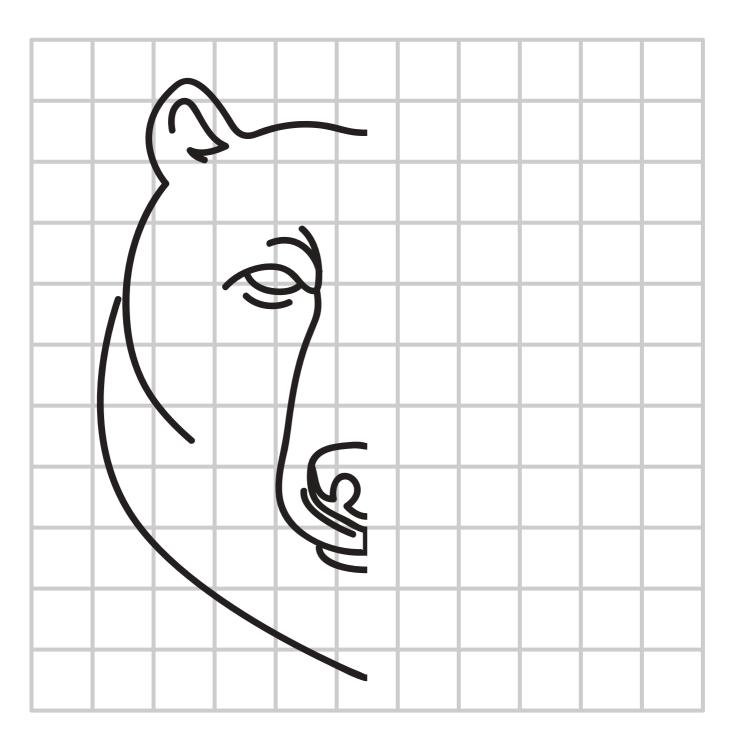
Use the grid to draw the other side of the squirrel and color it.





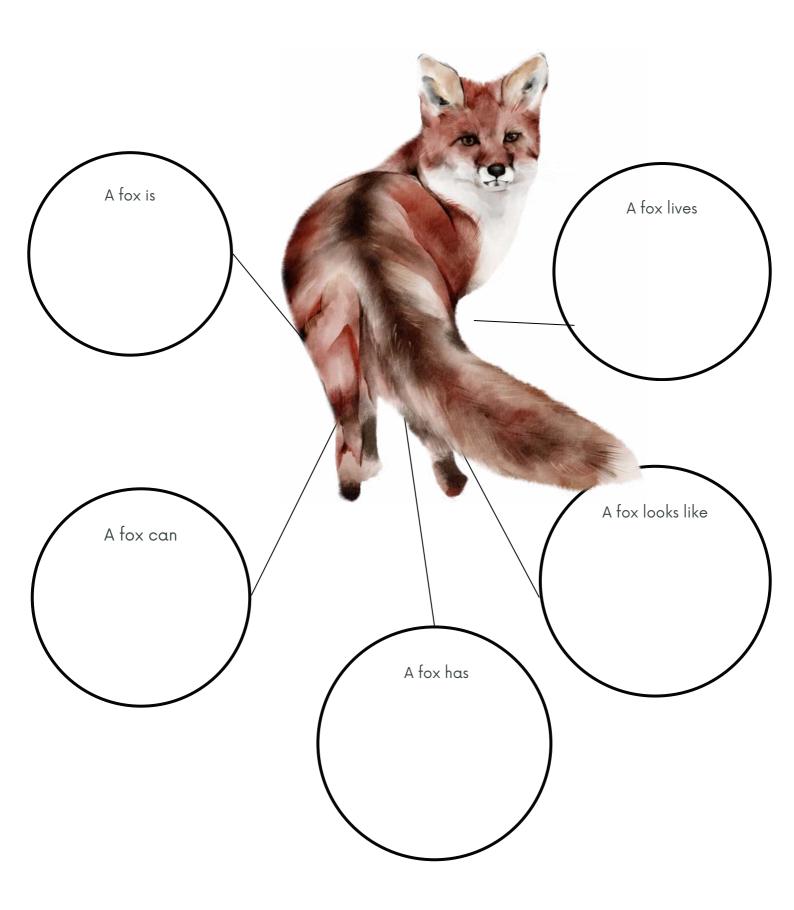
SQUIRREL

Use the grid to draw the other side of the bear and color it.



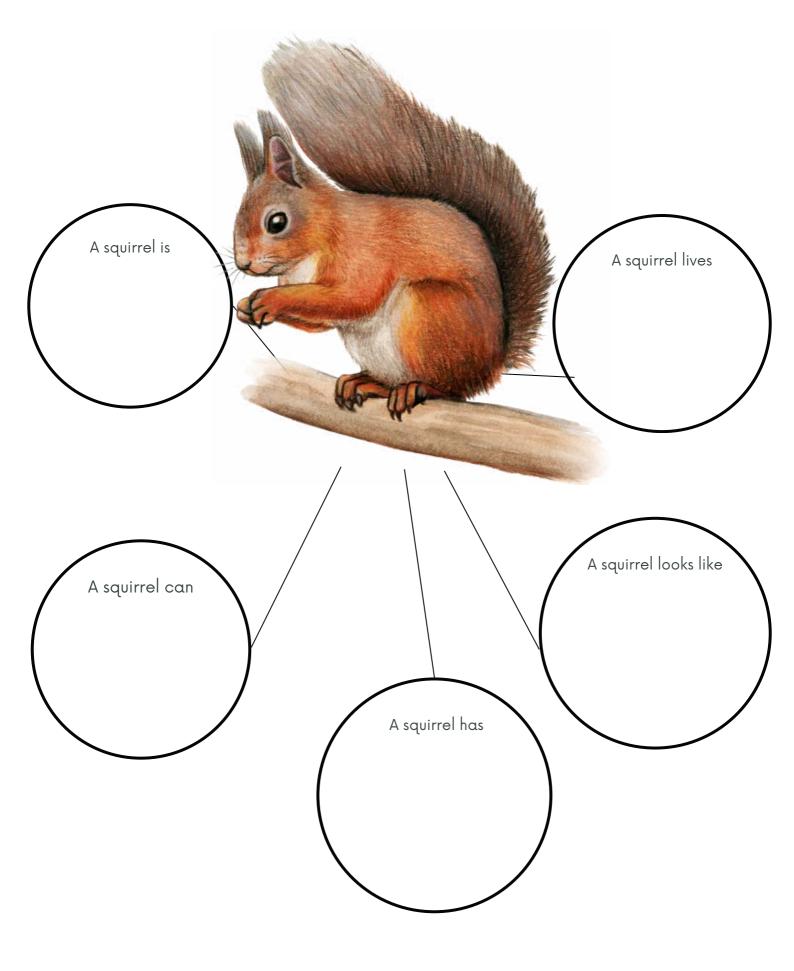


BEAR



DESCRIBE A FOX

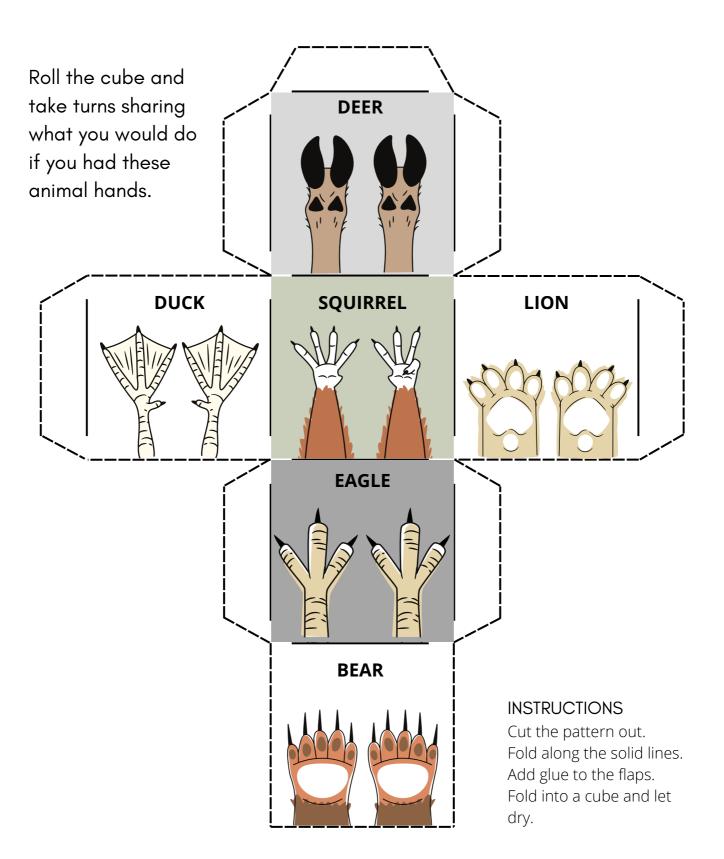
Describe a fox by completing each sentence below.If you are unsure research the animal to help you answer.



DESCRIBE A SQUIRREL

Describe a squirrel by completing each sentence below.If you are unsure research the animal to help you answer.

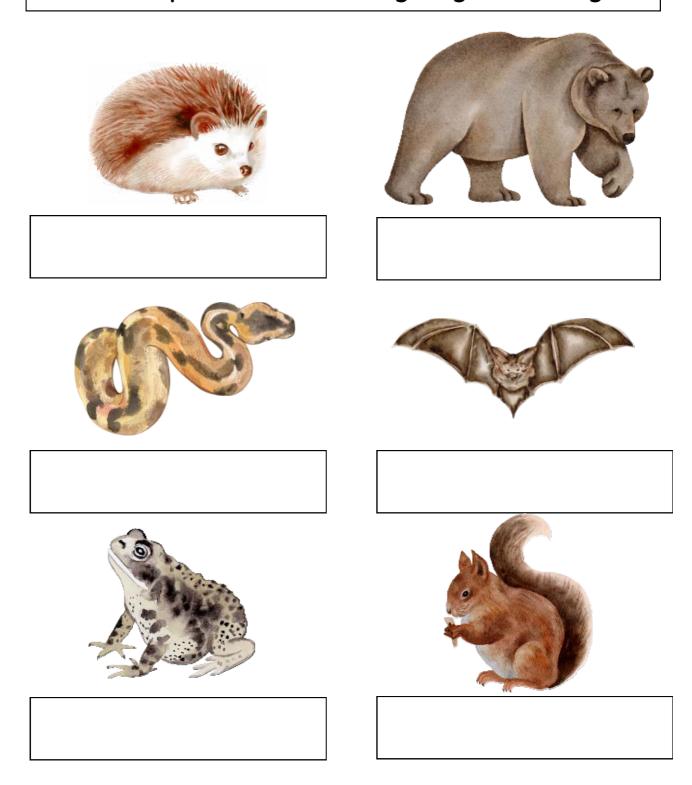
WHAT WOULD YOU DO WITH HANDS LIKE THESE?



ANIMALS THAT HIBERNATE

Use the word bank to spell the name of each animal that hibernate or go into a like hibernate state below the correct picture.

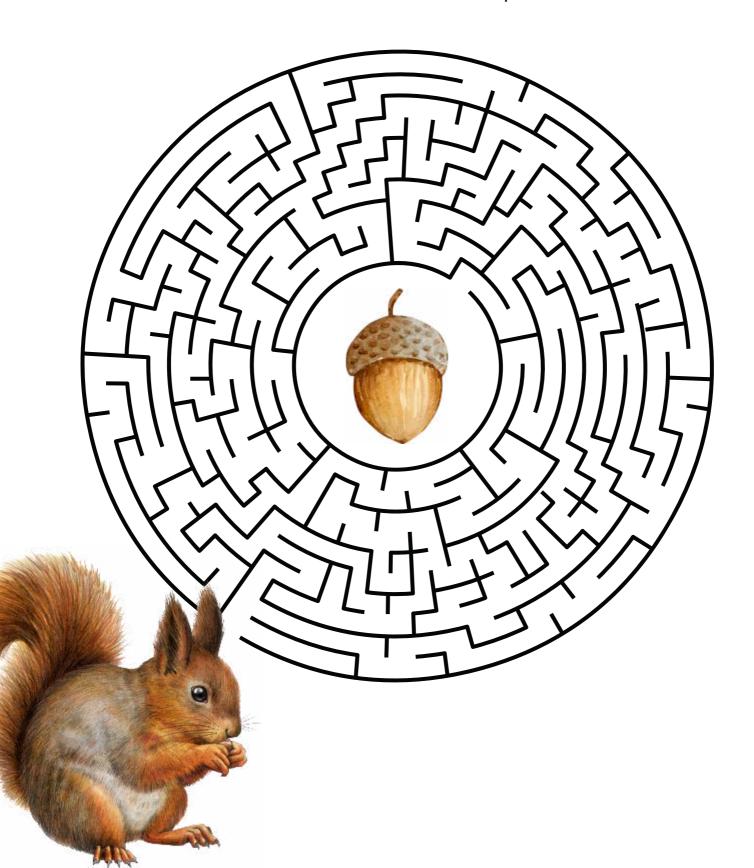
bear - squirrel - snake - hedgehog - bat - frog



Fall Maze Challenge

Fall is here!

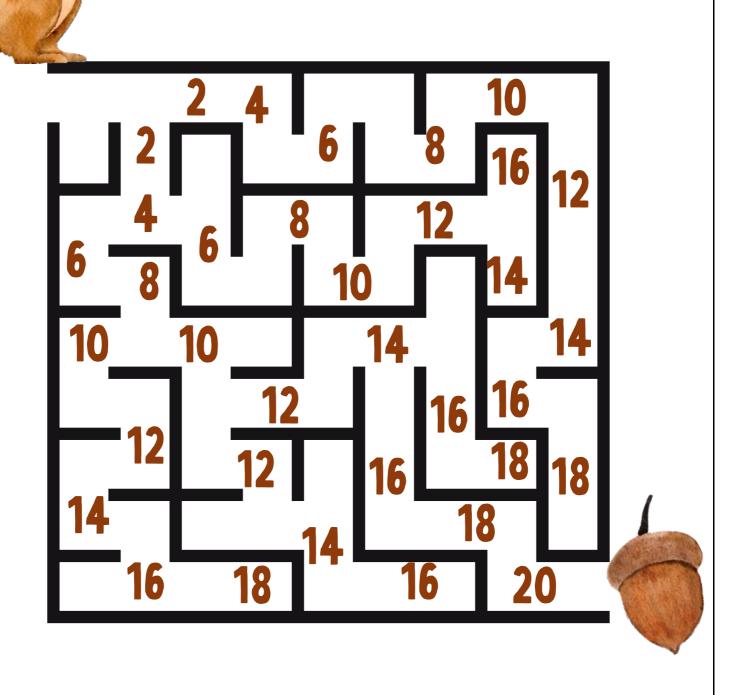
Can you help the squirrel find more acorns? You have 5 minutes to find the correct path



FIND THE ACORN

Help the squirrel find his acorn.

Count by 2's and follow the correct path.





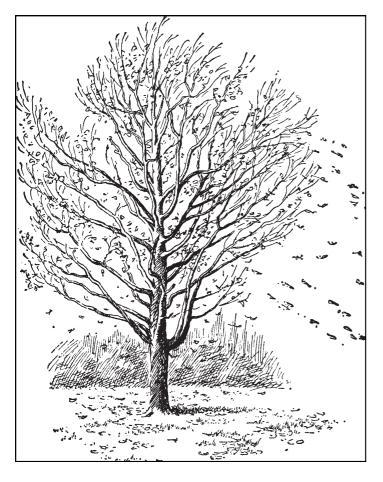


cut out images and hang over your autumn themed provocation or nature tables for decor









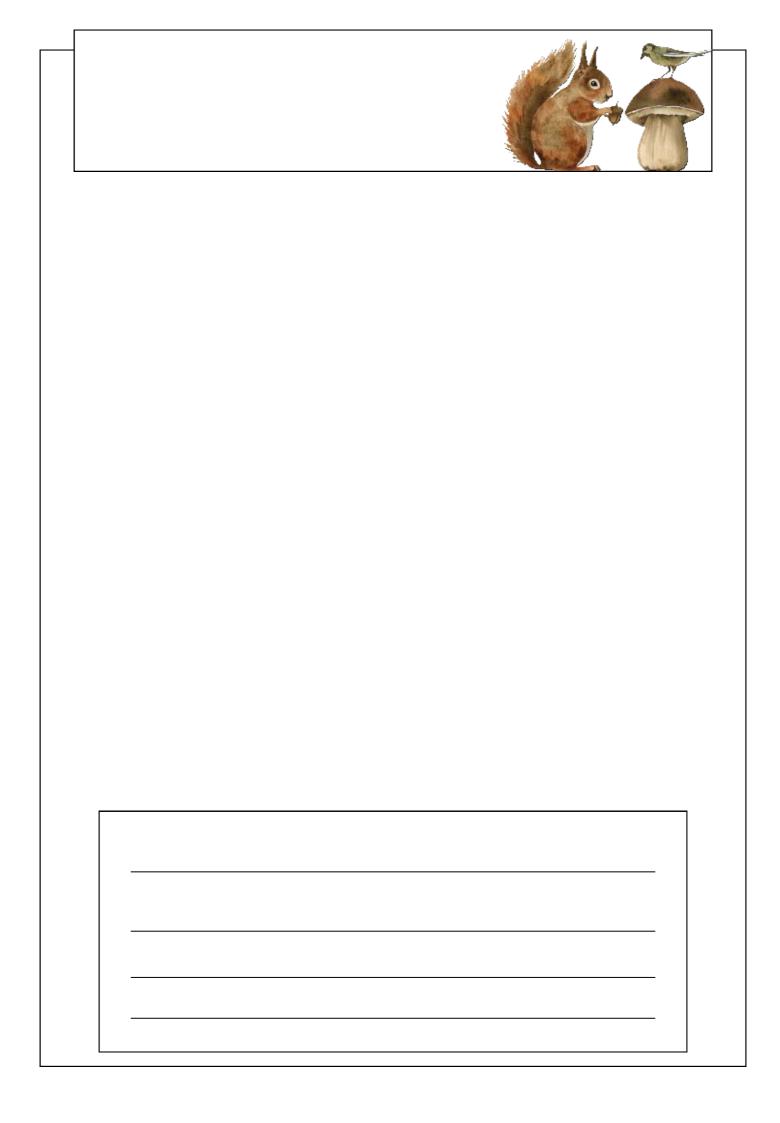




cut out images and hang over your autumn themed provocation or nature tables for decor

QUESTION TIME fill in the questions

Question:		
Answer: ———		
		_
Question:		_
Answer:		-
		_
Question:		_
Answer:		_



QUESTION TIME

As you read each question, simply tick "yes" if you agree or "No" if you disagree with the statement.

O1	YES	NO
O2	YES	NO
03	YES	NO
04	YES	NO
O5	YES	NO
06	YES	NO
07	YES	NO
08	YES	NO