

RHS
GARDEN

Bridgewater



Autumn
DETECTIVE
Trail

We need your help to solve some clues,
crack the Autumn code and discover
fascinating facts along the trail.



1

Autumn Carnival

Autumn is one of our four seasons; it happens every year. In Britain the start of Autumn is usually defined by the earth's orbit of the sun and begins on the Autumn equinox around the 22nd September.



A sign of Autumn is the changing colour of leaves, shorter days and cooler temperatures. In Britain and around the world Autumn is a time of celebration, but is also a time of change in the natural world, food is harvested and animals and plants prepare for winter.

Different countries celebrations relating to Autumn can happen at different times of the year than those in Britain, this depends on whether you live in the southern or northern hemisphere. For example in Australia, Autumn begins in March.

AUTUMN FACTS from around the World...



Did you know?

In the USA, the word 'Fall', short for falling leaf, is used instead of Autumn.

'Fall' was also used in the 17th Century throughout Britain.

Find the
symbols on our
Autumn Detective Trail
to crack the code.





Trees in Autumn

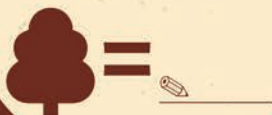
There are two main types of trees based on their leaves, deciduous and evergreen.

Deciduous trees are trees whose leaves lose their green colouring and turn orange, red or brown before they are shed at the end of the growing season, generally in autumn.

Evergreen trees carry their leaves throughout the year. Evergreens do shed their leaves, but only a few at a time and over a long period, so there is never a noticeable change. For most evergreen trees, the leaves don't change colour.

Trees are vital. As the biggest plants on the planet, they give us oxygen, store carbon, stabilise the soil and give life to the world's wildlife. They also provide us with the materials for tools and shelter.

Find the symbols on our Autumn Detective Trail to crack the code.



Tick the boxes if you spot these trees. Do you know which trees are deciduous and which are evergreen?

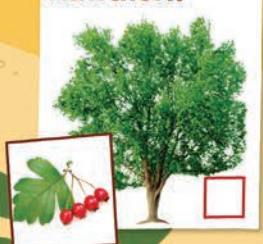
Oak



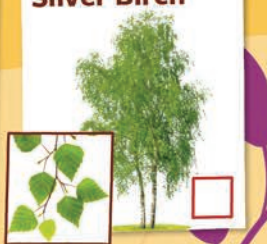
Scots Pine



Hawthorn



Silver Birch



Answers: Oak - Deciduous, Scots Pine - Evergreen, Hawthorn - Deciduous, Silver Birch - Deciduous

AUTUMN FACTS from around the World...

Did you know?

The people of Thailand celebrate Loy Krathong in November. A festival of light to honour the goddess of water. The annual event has a very festive feeling.



3

Leaves in Autumn

One of the most stunning signs of autumn is the turning of the leaves. Trees blaze with intense yellows, reds and copper. The shorter days are a sign to trees to begin to prepare for winter.

During winter there is not enough light for photosynthesis (the process used by plants to harness energy from sunlight and turn it into chemical energy) to occur, so as the days shorten throughout autumn, the trees begin to close down their food production systems which means the leaves change from green to the beautiful orange, red and brown colours and will eventually fall.

Dropping leaves gives trees a chance to take a break from energy-intensive work of photosynthesis.

Find the symbols on our Autumn Detective Trail to crack the code.



Activity

Can you make a picture on the ground using the fallen leaves. Take a picture of it and share using [#rhsautumncarnival](#) Follow the RHS on instagram

 [@rhsbridgewater](#)

Tick the boxes of the leaves that you can find in the garden today.

Horse Chestnut



Field Maple



Hawthorn



Oak



**AUTUMN
FACTS**
from around
the World...

Did you know?

Chuseok is a Korean harvest festival, celebrations are held to thank their ancestors. Friends and family gather and eat delicious food. The festival is held in late September or early October.



4

Fruit and Vegetables in Autumn

Autumn is a bountiful season when it comes to fresh produce. The last of the summer fruits and many root vegetables are coming into season.

Blackberries, apples and pears are just some of the delicious Autumn fruits enjoyed by many and also very popular with birds and insects.

Pumpkins have become one of the most recognised Autumn fruits with the pumpkin season running from October to December. Not only are they great to carve for Halloween, they are really good for you to eat, packed full of vitamins and fibre.

Beetroot is a perfect root crop for the Autumn growing season along with radishes, carrots and turnips. Starting life in warm soil and enjoying cooling weather conditions to mature.

Find the symbols on our Autumn Detective Trail to crack the code.



Activity

Can you pull a scary face like a halloween pumpkin?

AUTUMN FACTS from around the World...

Did you know?

The people of Ghana in Africa celebrate in August or September the 'Festival of the Yams'. Yams are a prized vegetable of the harvest and everyone comes together to celebrate.





Autumn Tree Seeds

As the leaves on the trees begin to change colour for Autumn, their seeds are also ripening. Trees produce seeds, so new trees can grow. Seeds come in all shapes and sizes and some are very easy to recognise.

Horse Chestnut trees produce one of our most recognised seed, the conker. This large seed is held in a prickly husk.



Oak tree seeds are called acorns, they are eaten by many animals. A bird called a Jay loves to collect them and hide them away.



Silver Birch seeds are tiny and grow together on stalks called catkins, they are a favourite food of some birds.



Sycamore tree seeds are wing shaped and can travel in the wind like helicopters for hundreds of metres.



Find the symbols on our Autumn Detective Trail to crack the code.



Activity

Can you pretend you're a Sycamore tree seed and spin around with your arms out like a helicopter (but don't make yourself too dizzy!)

AUTUMN FACTS from around the World



Did you know?

In China, family and friends come together to celebrate the 'Moon Festival'. The legend says, to protect an elixir of immortality from falling into the wrong hands, Chang'e, the wife of a great warrior, drank it and ascended to the moon, where she still lives.





Birds in Autumn

Many birds are seasonal visitors to different countries, this is called Migration.

Why do birds migrate to Britain in Autumn?

Winter visiting birds arrive in Britain in the Autumn, flying here from the north and east for the mild climate and abundance of food, such as hedgerow berries and Autumn fruit, then return to countries to the north and east in the Spring to breed.

Birds play an important role in shaping plant life around us

When birds fly from place to place, they take with them seeds they have eaten and disperse them through their droppings (poo), some birds carry seeds across the sea during migration to other countries.

Find the symbols on our Autumn Detective Trail to crack the code.



Different types of winter visitors:

Redwing



Fieldfare



Canada Goose



Bewick's Swan



Keep your eyes peeled, you might spot one of these birds here in the garden today.

AUTUMN FACTS from around the World



Did you know?

The Arctic Tern has the longest migration of any bird in the world. These birds can fly more than 49,700 miles in a year, making a round trip between their breeding grounds in the Arctic and the Antarctic.

Activity

Can you pretend to be a migrating bird and fly off, flapping your arms, to the next clue board?





Animals in Autumn



Male frogs hibernate underwater underneath piles of mud and rotting leaves. Female frogs and young frogs stay on land and hibernate in small cracks or under piles of logs, leaves or stones.

During Autumn many of Britain's animals begin to prepare for the winter by storing food in their nests and dens and eat a lot to keep themselves alive during winter.

Some animals hibernate (go to sleep) for the winter. In Britain bats, hedgehogs and dormice hibernate. Squirrels don't hibernate, they bury thousands of nuts across woodland and then find them to eat during the Winter.



Activity

Hedgehogs grunt and snuffle like pigs hence the hog part of their name. Can you pretend you're a hedgehog?

Find the symbols on our Autumn Detective Trail to crack the code.



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AUTUMN FACTS from around the World...

Did you know?

Thanksgiving in America celebrates the first harvest of the New World in October 1621.

Thanksgiving can be a bigger celebration than Christmas in America, family and friends get together for a traditional turkey dinner.





Minibeasts in Autumn

Autumn is a time of change for many minibeasts, with temperatures cooling and less food available.

Many winged insects come to the end of their life but leave eggs to hatch in the Spring. Snails and Butterflies hibernate (go to sleep) for winter. Ladybirds find it hard to find food so they will find a sheltered spot to hide from the cold weather, you can sometimes find groups of ladybirds huddled together for warmth.

Garden spiders die in the Autumn but young spiderlings will be safe in cosy silken cocoons until they hatch in the spring. Worms stay busy in the soil all year round and don't hibernate.



Find the symbols on our Autumn Detective Trail to crack the code.



Animals that normally eat insects have to change their feeding habits in the Autumn and Winter as there are fewer insects around.

AUTUMN FACTS from around the World...



Did you know?

Diwali in India is celebrated in October or November depending on the cycle of the moon. As a festival of lights, it celebrates abundance and light over darkness. The holiday also marks the Hindu New Year.



The Autumn Detectives Fun Zone



Autumn Code Cracker

Now you have found all the clues, can you crack the code to reveal the word?



Letter Jumble

Which panel contains the letters to spell 'AUTUMN CARNIVAL'

1 U N I A R
U A I V C A
N M U T V

2 U N N U C
A A M N R
T A I L N V

3 U A I N R
U A M N C A
T A U N V L

4 U I M N
C A N R A L
T U N V C

Word Search

O	B	U	P	U	P	A	Z	W	F	A	L	L	C
C	G	N	H	E	D	G	E	H	O	G	U	H	V
A	C	O	R	N	S	X	A	Q	G	D	W	I	U
P	E	Q	Q	X	J	X	L	S	P	U	I	B	G
P	Q	T	C	N	Z	R	H	Q	Y	Z	T	E	M
L	U	R	D	E	C	I	D	U	O	U	S	R	X
E	I	C	O	N	K	E	R	I	Y	S	B	N	R
R	N	M	D	J	G	T	W	R	E	W	J	A	U
I	O	C	H	F	S	F	K	R	H	D	G	T	S
G	X	A	U	T	U	M	N	E	V	C	J	E	T
P	U	M	P	K	I	N	G	L	P	C	H	H	L
C	H	E	S	T	N	U	T	M	B	O	O	X	I
A	A	N	D	W	C	A	R	N	I	V	A	L	N
J	Y	L	E	A	V	E	S	Q	P	N	V	E	G

- AUTUMN
- LEAVES
- SQUIRREL
- PUMPKIN
- HIBERNATE
- RUSTLING
- EQUINOX
- DECIDUOUS
- APPLE
- FALL
- ACORNS
- CONKER
- CHESTNUT
- HEDGEHOG
- CARNIVAL



Apple Maze

Can you help the caterpillar eat his way through the apple?



You're joking

What did one autumn leaf say to another?

I'm falling for you!

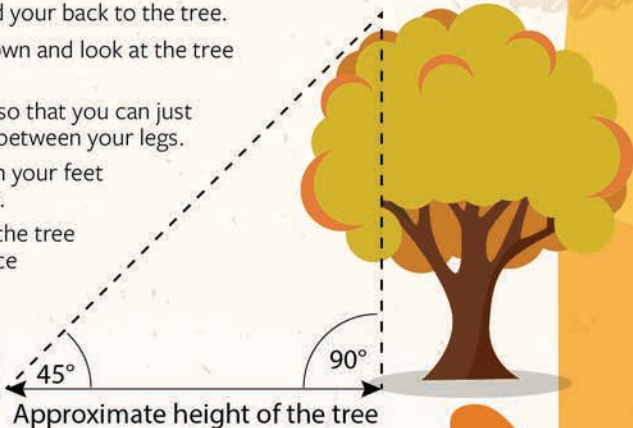
Get crafty at home with the RHS

Scan the QR Code to download your fun creative RHS crafting sheet.



How to measure the height of a tree

- 1 Stand with your legs apart and your back to the tree.
- 2 Keeping legs straight, bend down and look at the tree between your legs.
- 3 Move backwards or forwards so that you can just about see the top of the tree between your legs.
- 4 Measure the distance between your feet and the base of the tree trunk.
- 5 When you can see the top of the tree between your legs, the distance between where you are standing and the trunk of the tree is about the same height as the tree.



What is the tallest tree you can find? _____



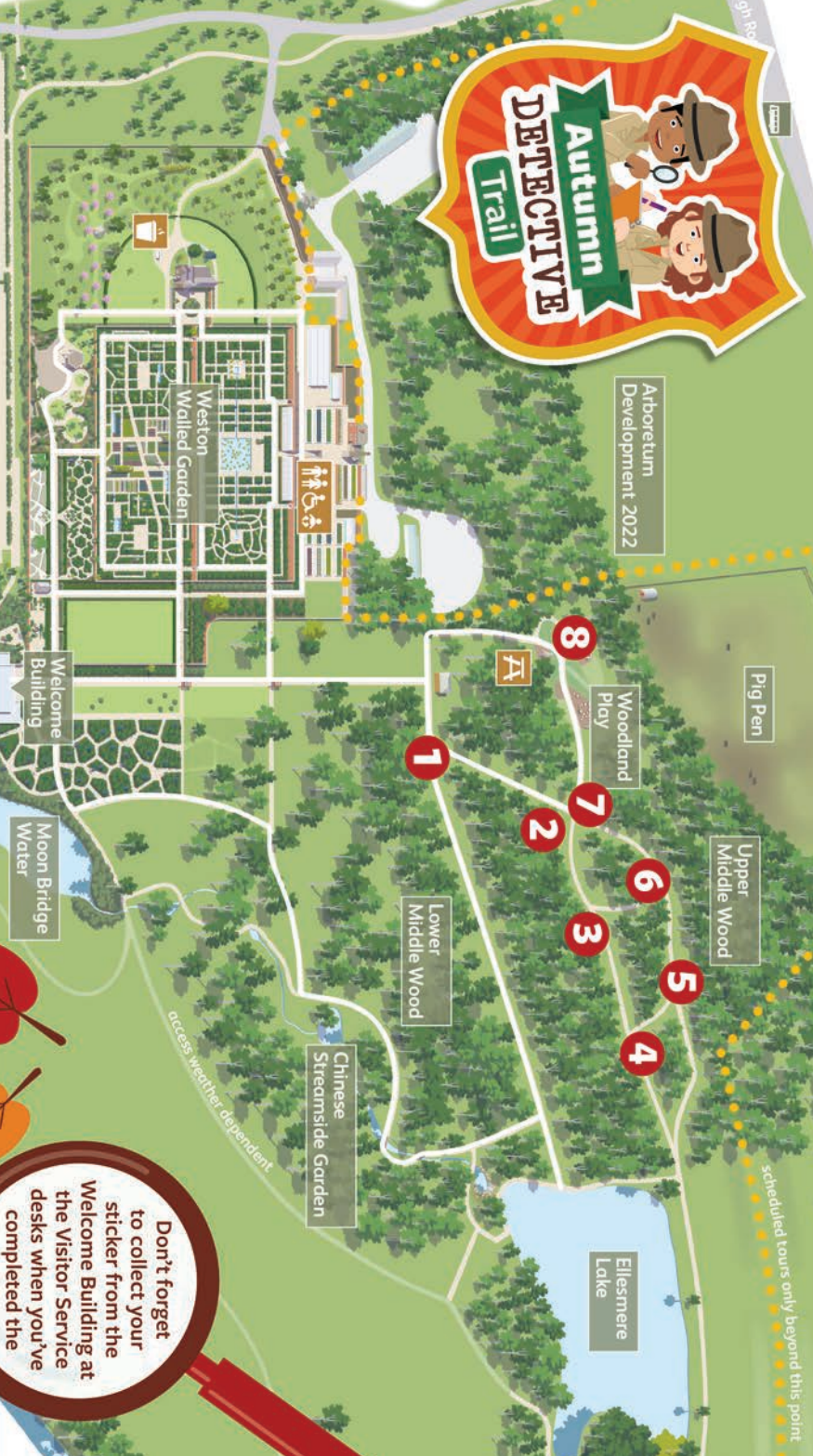
Arboretum Development 2022

Pig Pen

Upper Middle Wood

Ellesmere Lake

scheduled tour's only beyond this point



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Don't forget to collect your sticker from the Welcome Building at the Visitor Service desks when you've completed the trail.



Inspiring everyone to grow

rhs.org.uk/bridgewater

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