



4. Great seed gather



Key and creative
information to help you
gather and process tree seeds



I-spy, it's seed gathering time

It's time to explore the outdoors, observe nature, and discover the signs of seed-gathering season! Have fun with this I-Spy game and learn about the changes happening in nature, signalling the start of seed gathering season.

How to play

You can play on your own or with a group of friends or family.

Print the cards below showing the signs of seed-growing season.

Go outside to a park, garden, or any natural setting.

Take turns picking a card and announcing the sign that is being searched for.

Everyone search for that specific sign. The first person to spot the sign and point it out gets a point.

Cards



Look for trees with their leaves changing colour.

Spot a group of birds migrating, flying in a V formation.



Look for bushes or plants with fruits like blackberries.



Find ivy with blooming flowers or seed pods.



Look for mushrooms and fungi growing on trees or logs.



Spot seeds falling from trees or plants, ready to grow.



Seed categorisation challenge

Seeds come in all sorts of shapes and sizes. Each seed is carefully designed to survive and grow into a new plant when given the right conditions. Can you match the pictures of each seed type to each of the descriptions? You can colour-code them or draw arrows to the correct category.

horse chestnut



wild cherry



oak acorn

Scots pine



beech



silver birch



alder

hawthorn



laburnum



sycamore



hazel

Pods

Pods are elongated, seed-bearing structures that often resemble the pods of peas.

Cones

Some trees protect seeds in a cone-like structure until they are ready to be dispersed.

Fleshy fruits

Fleshy fruits and berries are soft and juicy, and their seeds are typically encased within the pulp of the fruit.

Winged seeds

These wings act as tiny helicopters, helping the seeds glide through the air as they fall from the tree.

Nuts

These hard-shelled fruits contain a single seed inside. They usually have a woody outer shell that protects the seed within.

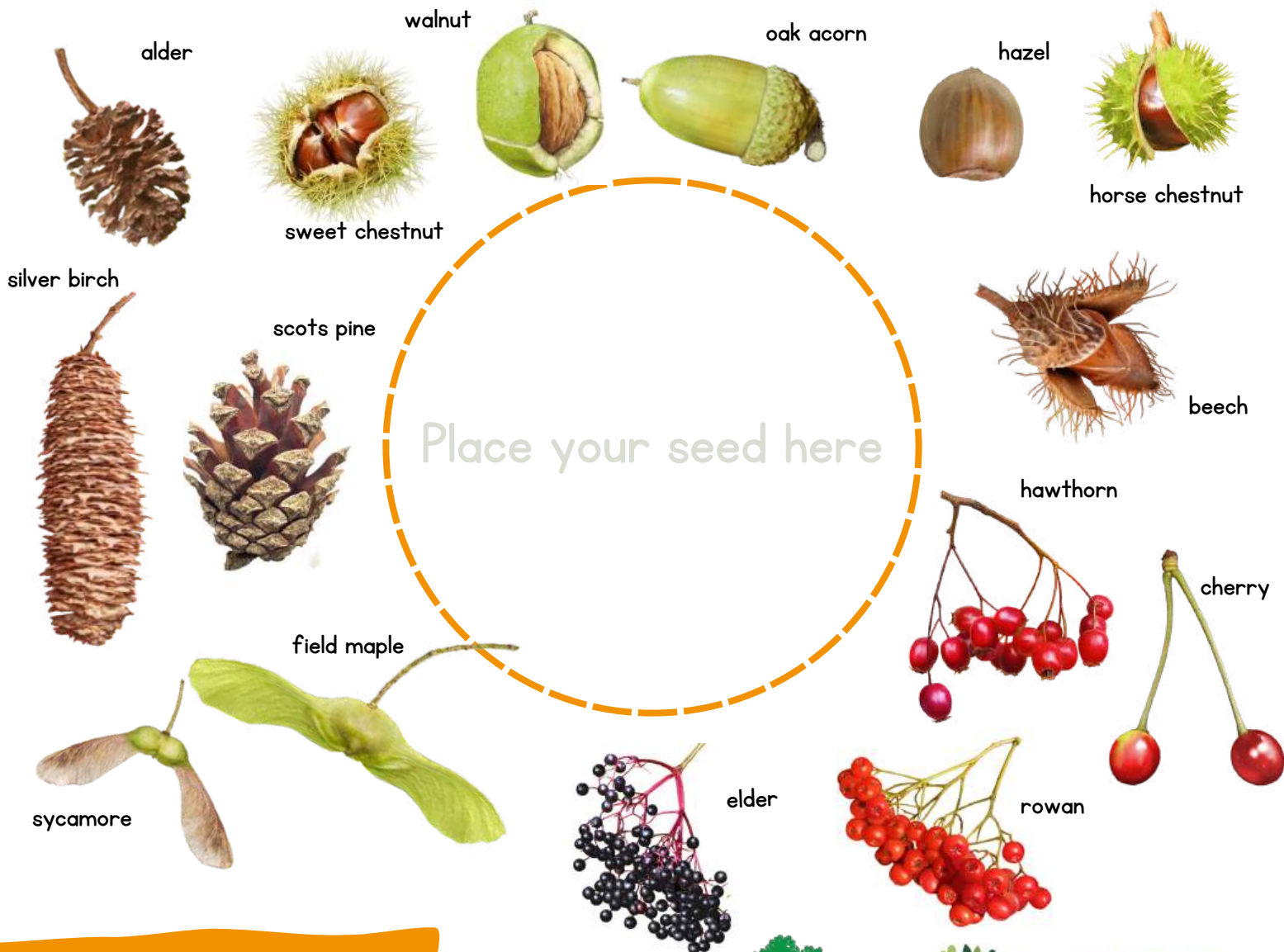


Seed identification

For this activity, you'll need to head outside and gather some seeds from your surroundings. Look for them in your school grounds, parks, gardens, or even in your back garden.

Once you have collected a variety of seeds, bring them back and lay them out on this worksheet. In the centre, you will find a space where you can place one of the seeds you found during your exploration. Then, surrounding this central space, you will find images of different seeds.

As you examine each seed, pay attention to its unique features, such as size, shape, colour, and texture. Use the images on the worksheet to guide you in identifying the seeds you have gathered.



Remember! Do not take seeds from another person's land without permission.



Tree identification tool

Did you know that there are around 100 different tree species living in Britain today? Let's take a closer look at some of them. Then, see if you can identify them in your local area.



Hornbeam-*Carpinus betulus*

Hornbeam



Wild cherry-*Prunus avium*

Wild cherry



Silver Birch-*Betula pendula*

Silver birch



Hawthorn-*Crataegus monogyna*

Hawthorn

We've picked out some species that are quite common in the UK and aren't too difficult to grow from seed.



Tree identification tool

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Walnut-*Juglans regia*

Walnut



Elder-*Sambucus nigra*

Elder



Beech-*Fagus sylvatica*

Beech



Horse chestnut-*Aesculus hippocastanum*

Horse chestnut

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Tree identification tool

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Rowan



Sycamore



Field maple



English oak



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Tree identification tool

Did you know that there are around 100 different tree species living in Britain today? Let's take a closer look at some of them. Then, see if you can identify them in your local area.

Alder



Hazel



Scots pine



Sweet chestnut

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Tree top trumps

It's time to play Tree Top Trumps!

1. Cut out the cards and share them between players.
2. Players pick up their cards and look at their top cards only.
3. Player 1 chooses and calls out their best stat (e.g. 'Biodiversity boost - 4').
4. Others see if they can beat the stat for this category.
5. The card with the highest stat wins all the top cards played.
6. The winner chooses the next stat.
7. The first player to get all of the cards wins!

Oak

Max height	40m
Biodiversity boost	10/10
Growth speed	5/10
Disease resistance	8/10
Max age	1,000y



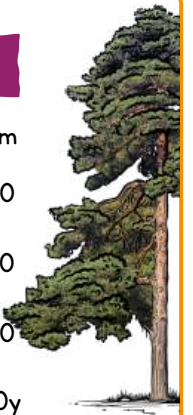
Silver birch

Max height	25m
Biodiversity boost	8/10
Growth speed	6/10
Disease resistance	5/10
Max age	70y



Scots pine

Max height	30m
Biodiversity boost	5/10
Growth speed	4/10
Disease resistance	8/10
Max age	300y



Alder

Max height	25m
Biodiversity boost	4/10
Growth speed	7/10
Disease resistance	4/10
Max age	125y



Wild cherry

Max height	30m
Biodiversity boost	3/10
Growth speed	8/10
Disease resistance	3/10
Max age	60y



Rowan

Max height	15m
Biodiversity boost	5/10
Growth speed	6/10
Disease resistance	5/10
Max age	120y



Categories:

- Maximum height - how tall will the tree grow in metres?
- Biodiversity boost - how valuable is the tree to wildlife?
- Growth speed - how fast will the tree grow?
- Disease resistance - how good is the tree at fighting off pests and diseases?
- Maximum age - how long might the tree live?



Tree top trumps

It's time to play Tree Top Trumps!

Each of the Tree Top Trumps cards holds valuable information about each tree's maximum height, its potential to boost biodiversity, growth speed, susceptibility to diseases and age in the wild.

The scores are different between categories, but 1,000 is the best score possible and 1 is the worst.

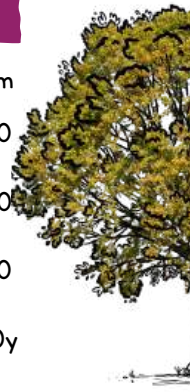
Walnut

Max height	30m
Biodiversity boost	3/10
Growth speed	6/10
Disease resistance	5/10
Max age	150y



Beech

Max height	40m
Biodiversity boost	8/10
Growth speed	7/10
Disease resistance	8/10
Max age	400y



Elder

Max height	10m
Biodiversity boost	6/10
Growth speed	6/10
Disease resistance	5/10
Max age	60y



Horse Chestnut

Max height	35m
Biodiversity boost	3/10
Growth speed	7/10
Disease resistance	8/10
Max age	300y



Sycamore

Max height	35m
Biodiversity boost	7/10
Growth speed	8/10
Disease resistance	5/10
Max age	400y



Field Maple

Max height	20m
Biodiversity boost	7/10
Growth speed	6/10
Disease resistance	5/10
Max age	400y



These cards not only make a fun game of 'Tree Trumps' but they also help you decide which are the best trees to grow from seed, depending on your planting plans.



Seed spot bingo

Before you start collecting seeds, it's really important to make sure the area is suitable and safe. To do this, use the Seed Spot Bingo grid!

Explore the seed gathering area and mark off the boxes if you find the described items or conditions. Try to get a "full house" by ticking off all the boxes on your bingo sheet and you'll have found the perfect spot!

Remember, safety first! Always have an adult with you during your seed gathering adventure.



Within arm's reach

Look for seeds that are easily reachable without any special tools or equipment.

Danger free

Avoid gathering seeds in areas with livestock, steep drops or unstable ground.

Have permission

Always ask for permission before gathering seeds in any area.

Not poisonous

Avoid gathering seeds from plants that are poisonous. Stick to non-toxic seeds mentioned in this guide.

Ripe - seek guidance

Seek guidance from an adult or expert to know when the seeds are ready to gather.

Free from nettles and brambles

Keep an eye out for nettles or brambles that might be present in the area.

Seeds hanging from tree

Look for seeds hanging from trees or bushes that are easy to spot.





Seed gathering record

Did you know that seeds should stay in the same area as the tree they are from? Trees and seeds moved to different regions can spread pests and diseases to other trees.

Keeping a record of your seed gathering and planting is crucial, because it allows you to see how successful you have been.

This record will be your trusted companion as you venture out to different locations to collect seeds. You will carefully document the date, location, tree type, and the number of seeds collected. You will also keep a record of when you plant the seeds and the number that successfully germinate into seedlings. This will help you have even more success in future years!

Date collected	Tree type	No. of seeds	Date planted	No. germinated

Top tips for gathering seeds

Use paper bags for seed collection to allow proper air circulation and prevent moisture build up.

Label each paper bag with the date and location of seed collection and the tree type to keep track of the seeds.

Avoid mixing seeds from different trees in the same bag to maintain their purity and identity.





Processing your seeds

So you've collected your seeds... but now what? Different types of seeds require different processes and storage. Take a look at our handy guide, before you get started!

General tips

- Take a tub or a paper bag, but avoid plastic bags to stop seeds becoming too moist.
- Remember to label each bag clearly with the type of seed inside and record them using your seed gathering record.
- Take care not to damage the seeds during collection and processing.



Nuts

- Some nuts have a hard or spiky outer shell, like walnut, horse chestnut, and sweet chestnut. Carefully remove the shell without damaging the nut inside (or your fingers!).
- Other nuts, like oak, beech, and hazel, have a hard casing that doesn't need removal.
- Test all the nuts using the 'float test.' If they sink in a bowl of water, then you can plant a few in a pot with compost. If they float, they have failed to develop properly and so you can discard them.
- Protect the nuts from hungry mice or voles by covering your pots and hopefully your seeds will germinate in the spring.



Winged seeds

- Collect winged seeds when they are slightly green.
- Lay them out on newspaper and turn every two days until they are dry.
- Put several seeds in a pot with a mix of slightly damp compost and sand.
- Leave the seeds outside over winter where the cold will help with successful germination.
- Don't forget to protect your seeds from hungry rodents with netting, stones or bricks.
- In the spring, select the germinating seeds and plant them, with their wings, in their very own pot.



Useful vocab

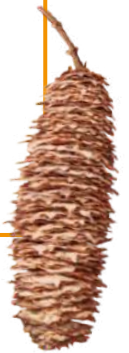
Processing – sorting and preparing seeds before planting or stratifying.



Processing your seeds

Cones

- Collect brown (ripe) cones which are still tightly closed and let them dry in a paper bag.
- When the cones are dry and begin to open, shake the bag to release the seeds from the cones. They are now ready for planting.
- Spread a layer of seeds over the surface of compost in a pot and cover with a thin layer of sand.
- Leave the seeds outside over winter where the cold will help with successful germination.
- Don't forget to protect your seeds from hungry rodents with netting, stones or bricks.
- In the spring, select the germinating seeds and plant them in their very own pot.



Fleshy fruits

- Fleshy fruits need some processing: Place them in water and gently squash to remove the seed from the flesh.
- For rowan and mulberry, squash the berries in a bowl of water to release the seeds.
- For apples and pears, score them with a knife, break them in half, and remove the pips.
- For hawthorn, squeeze the berry gently between your fingers and collect the one or two seeds within.
- Rinse the seeds to remove any remaining flesh and reduce the chance of pests and diseases.
- Put the seeds in a pot with a mix of slightly damp compost and sand.
- Leave the seeds outside over winter for successful germination.
- Protect from hungry mice or voles by covering your pots with some wire netting held down with a stone or brick.

