



# UK Vegetable Grower's Month-by-Month Planting Guide

*For Families, Home Educators & Young Growing Detectives*

A free companion resource from

**Why Play Learning**

[www.whypaylearning.com](http://www.whypaylearning.com)

# Welcome, Growing Families!

This planting guide has been designed with you in mind — whether you have a large garden, a tiny balcony, a row of pots on a windowsill, or anything in between. You do not need expert knowledge, expensive equipment, or perfect conditions. You just need curiosity, some seeds, and a little bit of patience.

This guide is split into two parts:

- A quick-reference planting grid at the front — for parents and carers to plan the year ahead at a glance
- Monthly detective mission pages — for children of all ages, with activities tailored to little ones (ages 4-7), middle years (ages 7-11), and older learners (ages 11+)

## A Note to Parents

No pressure here! You do not need to follow every suggestion or complete every mission. Dip in and out as your family's energy, time, and enthusiasm allows. Even one small thing each month adds up to a whole year of wonderful growing discoveries.

## How to Use This Guide

The detective missions are designed to grow with your child. Little ones can start with simple observation activities, while older learners can dive into real scientific investigations. Many activities work beautifully as family projects where everyone contributes something different.

All the vegetables in this guide can be grown:

- In a garden, raised bed, or allotment
- In containers, grow bags, or pots on a patio
- On a windowsill, balcony, or shaded spot

## Companion to the Natural Wellness Play Series

This guide accompanies the Natural Wellness Play book series. For detailed growing activities, plant science experiments, and inclusive learning ideas, visit [www.whyplaylearning.com](http://www.whyplaylearning.com)

# Quick-Reference Planting Grid

Use this grid to plan your growing year at a glance. Colour key: S = Sow Indoors | O = Sow Outdoors | P = Plant Out | H = Harvest

Vegetable	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Beetroot			S/O	O	O	O	O		H	H	H	
Broad beans	S	S	O	O	H	H	H			O	O	
Broccoli		S	S	S/P	P	P	H	H	H	H	H	H
Brussels sprouts		S	S	P	P					H	H	H
Carrots			O	O	O	O	O	H	H	H	H	
Chard			S	O	O	O	O	H	H	H	H	H
Courgettes				S	O/P	O/P	H	H	H			
Cucumbers			S	S	P	P	H	H	H			
French beans				S	O	O	O	H	H			
Garlic	P	P				H	H		P	P	P	
Kale			S	S	S	P	P		H	H	H	H
Leeks		S	S	P	P	P				H	H	H
Lettuce			S	S/O	H	H	H	H	H			
Onions	S	S	P	P			H	H				
Parsnips			O	O						H	H	H
Peas		S	S/O	O	O	H	H	H				
Radish			O	H	H	H	H	H	H			
Runner beans				S	O/P	O	H	H	H			
Spinach			O	H	H	H		O	H	H	H	
Spring onions			O	O	H	H	H	H	H	H		
Sweetcorn				S	O/P	O		H	H			
Tomatoes		S	S	P	P		H	H	H			
Turnips			O	O	O	H	H	H	H	H	H	

S = Sow Indoors	O = Sow Outdoors	P = Plant Out	H = Harvest
-----------------	------------------	---------------	-------------

Note: All timings are approximate and will vary depending on your location in the UK, the weather, and your growing conditions. Scotland and northern England will generally be 2-3 weeks behind the south of England.



# January *Winter*

Sow Indoors	Sow Outdoors	Plant Out	Harvest
<ul style="list-style-type: none"> <li>• Broad beans (in pots in a cold greenhouse)</li> <li>• Chillies (on a warm windowsill)</li> <li>• Onion seeds</li> </ul>	<ul style="list-style-type: none"> <li>• Nothing to sow outdoors — the ground is cold and resting</li> </ul>	<ul style="list-style-type: none"> <li>• Garlic cloves can go in if the ground isn't frozen</li> </ul>	<ul style="list-style-type: none"> <li>• Leeks</li> <li>• Winter cabbages</li> <li>• Brussels sprouts</li> <li>• Stored root vegetables</li> </ul>

## January Top Tip

January is a great planning month! Look through seed catalogues together, draw out your dream veg patch, and check your stored seeds are still good.

## The Seed Sorting Mission

*Your garden is sleeping under the cold winter sky — but a great detective is always busy planning their next investigation!*

### Little Detectives (Ages 4–7)

- Find 3 different packets of seeds and sort them by colour
- Draw what you hope will grow in your garden this year
- Look outside — can you spot any plants still growing in the cold?

### Growing Detectives (Ages 7–11)

- Sort seeds into groups: fast-growing, slow-growing, sow indoors, sow outdoors
- Write a seed storage check — are your seeds in a cool, dry, dark place?
- Plan which 3 vegetables you most want to grow this year and find out when to plant them

### Expert Detectives (Ages 11+)

- Research which vegetables are hardy enough to survive frost and explain why
- Calculate how many weeks until the last UK frost date (around mid-April) — create a countdown planting calendar
- Design your veg patch layout on paper, thinking about which plants need most space and sunlight

## My January Growing Notes

Date I started: \_\_\_\_\_  
 What I planted: \_\_\_\_\_  
 What I noticed: \_\_\_\_\_  
 My favourite discovery this month: \_\_\_\_\_

My Notes



# February *Late Winter*

Sow Indoors	Sow Outdoors	Plant Out	Harvest
<ul style="list-style-type: none"> <li>• Broad beans</li> <li>• Onions</li> <li>• Leeks</li> <li>• Chillies</li> <li>• Sweet peppers</li> <li>• Early tomatoes (end of month)</li> </ul>	<ul style="list-style-type: none"> <li>• Nothing yet — wait for the soil to warm</li> </ul>	<ul style="list-style-type: none"> <li>• Garlic (if not done in autumn)</li> <li>• Shallots</li> </ul>	<ul style="list-style-type: none"> <li>• Leeks</li> <li>• Purple sprouting broccoli</li> <li>• Winter salads under cover</li> </ul>

## February Top Tip

February is when things start waking up! Keep seedlings on the warmest, brightest windowsill you have — they need as much light as possible.

## The First Seedling Mission

*The days are getting longer — and seeds can feel it! Time to start your very first detective experiments of the year.*

### Little Detectives (Ages 4–7)

- Plant broad bean seeds in a pot and watch for shoots
- Draw your seed every day for a week and see what changes
- Feel the soil — is it warm or cold? What do you think the seeds prefer?

### Growing Detectives (Ages 7–11)

- Start a seed germination experiment: same seeds, different temperatures — which sprouts fastest?
- Record the hours of daylight over one week — is it getting longer?
- Research why seeds need warmth to germinate and explain it in your own words

### Expert Detectives (Ages 11+)

- Design a controlled experiment to test how light levels affect seedling growth
- Track and graph daily temperature and daylight hours throughout the month
- Research vernalisation (why some seeds need cold before they will grow) and write a short explanation

## My February Growing Notes

Date I started: \_\_\_\_\_

What I planted: \_\_\_\_\_

What I noticed: \_\_\_\_\_

My favourite discovery this month: \_\_\_\_\_

My Notes



# March *Early Spring*

Sow Indoors	Sow Outdoors	Plant Out	Harvest
<ul style="list-style-type: none"> <li>• Tomatoes</li> <li>• Courgettes</li> <li>• Cucumbers</li> <li>• Peas</li> <li>• Lettuce</li> <li>• Kale</li> <li>• Broccoli</li> <li>• Cauliflower</li> <li>• Celery</li> <li>• Beetroot</li> </ul>	<ul style="list-style-type: none"> <li>• Broad beans</li> <li>• Peas</li> <li>• Carrots (late month if mild)</li> <li>• Spinach</li> <li>• Spring onions</li> <li>• Radish</li> </ul>	<ul style="list-style-type: none"> <li>• Onion sets</li> <li>• Shallots</li> <li>• Garlic (last chance)</li> </ul>	<ul style="list-style-type: none"> <li>• Purple sprouting broccoli</li> <li>• Spring cabbages</li> <li>• Leeks</li> <li>• Overwintered spinach</li> </ul>

## March Top Tip

March is one of the busiest planting months! Start a growing diary to track everything — this is brilliant evidence for your science investigations.

## The Big Spring Awakening Mission

*Spring is here and your detective skills are needed everywhere! The garden is coming alive — can you spot all the changes?*

### Little Detectives (Ages 4–7)

- Go on a spring spotting walk — can you find 5 signs that plants are waking up?
- Plant cress seeds on damp cotton wool and watch them sprout in just a few days!
- Draw a "before and after" picture of your garden — what has changed from winter?

### Growing Detectives (Ages 7–11)

- Start a proper growing diary with date, weather, and observations for each entry
- Sow two sets of seeds — one on a windowsill, one outside — and compare their progress
- Map where the sun falls in your garden at different times of day — which spots are sunniest?

### Expert Detectives (Ages 11+)

- Design and begin a month-long experiment comparing soil temperatures in sun vs shade
- Research the science of photosynthesis and explain why March light levels matter so much to seedlings
- Create a detailed March planting schedule with expected germination times based on seed packet data

## My March Growing Notes

Date I started: \_\_\_\_\_

What I planted: \_\_\_\_\_

What I noticed: \_\_\_\_\_

My favourite discovery this month: \_\_\_\_\_

My Notes



# April *Spring*

Sow Indoors	Sow Outdoors	Plant Out	Harvest
<ul style="list-style-type: none"> <li>• Squash</li> <li>• Runner beans</li> <li>• French beans</li> <li>• Sweetcorn</li> <li>• Pumpkins</li> <li>• Aubergines</li> <li>• Basil</li> <li>• More tomatoes and courgettes if needed</li> </ul>	<ul style="list-style-type: none"> <li>• Carrots</li> <li>• Beetroot</li> <li>• Parsnips</li> <li>• Peas</li> <li>• Spinach</li> <li>• Turnips</li> <li>• Rocket</li> <li>• Spring onions</li> <li>• Radish</li> <li>• Chard</li> </ul>	<ul style="list-style-type: none"> <li>• Broccoli and cabbage seedlings raised earlier</li> <li>• Onion sets</li> </ul>	<ul style="list-style-type: none"> <li>• Spring cabbages</li> <li>• Asparagus (from established beds)</li> <li>• Purple sprouting broccoli</li> <li>• Radishes</li> <li>• Overwintered lettuce</li> </ul>

## April Top Tip

Keep an eye on the weather in April — late frosts are still possible! Have some fleece or newspaper ready to protect tender seedlings on cold nights.

## The Frost Detective Mission

April can be tricky — warm days and then a sneaky frost at night! A good detective always keeps one eye on the sky.

### Little Detectives (Ages 4–7)

- Check the weather forecast every morning for a week and record if it was right!
- Gently feel the difference between a seedling that has been caught by cold and one that is healthy
- Make a simple frost cover from newspaper and test if it keeps your hand warmer underneath

### Growing Detectives (Ages 7–11)

- Research what a "last frost date" means and find the average for your region of the UK
- Record min/max daily temperatures for the whole month using a garden thermometer
- Experiment with frost protection: compare plants covered with fleece vs uncovered — what do you notice?

### Expert Detectives (Ages 11+)

- Investigate why frost damages plants at a cellular level — what happens to plant cells when water freezes?
- Create a risk assessment for your April planting schedule based on frost probability
- Research microclimates and explain how a south-facing wall or fence can create a warmer growing environment

## My April Growing Notes

Date I started: \_\_\_\_\_

What I planted: \_\_\_\_\_

What I noticed: \_\_\_\_\_

My favourite discovery this month: \_\_\_\_\_

My Notes



# May *Late Spring*

 Sow Indoors	 Sow Outdoors	 Plant Out	 Harvest
<ul style="list-style-type: none"> <li>• Last chance for tomatoes, courgettes, squash if not done</li> <li>• Basil</li> <li>• More salad crops for succession</li> </ul>	<ul style="list-style-type: none"> <li>• Beetroot</li> <li>• Carrots</li> <li>• Parsnips</li> <li>• French beans (end of month)</li> <li>• Runner beans (end of month)</li> <li>• Sweetcorn (end of month)</li> <li>• Courgettes (end of month)</li> <li>• Pumpkins (end of month)</li> <li>• Salad crops</li> <li>• Chard</li> <li>• Kale</li> </ul>	<ul style="list-style-type: none"> <li>• Tomatoes (after last frost, with protection)</li> <li>• Courgettes</li> <li>• Squash</li> <li>• Leeks</li> <li>• Brassicas</li> </ul>	<ul style="list-style-type: none"> <li>• Asparagus</li> <li>• Early salad leaves</li> <li>• Radishes</li> <li>• Spring onions</li> <li>• Spinach</li> <li>• Rhubarb</li> </ul>

## May Top Tip

May is Chelsea Flower Show month — brilliant inspiration! Most vegetables can safely go outside now, but harden them off gradually by putting them outside during the day for a week before leaving them overnight.

## The Hardening Off Mission

*Your indoor seedlings have been warm and cosy all spring — now it is time to introduce them to the great outdoors! This is an important detective challenge.*

### Little Detectives (Ages 4–7)

- Take your seedlings outside for a "day trip" and bring them back inside at night — do it for 5 days
- Compare an indoor plant and an outdoor plant: which has stronger, thicker stems?
- Find 3 bugs in the garden and try to find out if they are helpful or harmful to plants

### Growing Detectives (Ages 7–11)

- Design a 7-day hardening off schedule for your seedlings, gradually increasing outdoor time
- Observe and record stem thickness and leaf colour of hardened vs non-hardened plants
- Research companion planting and plan which vegetables to grow near each other in your plot

### Expert Detectives (Ages 11+)

- Investigate the science of why hardening off works — research stomata and plant stress responses
- Record and compare growth rates of hardened vs non-hardened plants over two weeks
- Research integrated pest management and plan a natural pest control strategy for your garden

 **My May Growing Notes**

Date I started: \_\_\_\_\_

What I planted: \_\_\_\_\_

What I noticed: \_\_\_\_\_

My favourite discovery this month: \_\_\_\_\_

My Notes



# June *Early Summer*

Sow Indoors	Sow Outdoors	Plant Out	Harvest
<ul style="list-style-type: none"> <li>• Autumn/winter salads (to plant out later)</li> <li>• Chicory</li> </ul>	<ul style="list-style-type: none"> <li>• French beans</li> <li>• Runner beans</li> <li>• Beetroot</li> <li>• Carrots</li> <li>• Courgettes</li> <li>• Cucumbers (outdoors)</li> <li>• Sweetcorn</li> <li>• Pumpkins</li> <li>• Salad leaves</li> <li>• Spring onions</li> <li>• Turnips</li> </ul>	<ul style="list-style-type: none"> <li>• Tomatoes (outdoors, with support)</li> <li>• Courgettes</li> <li>• Squash</li> <li>• Cucumber (in greenhouse)</li> <li>• Sweetcorn</li> <li>• Leeks</li> <li>• Broccoli</li> <li>• Kale</li> </ul>	<ul style="list-style-type: none"> <li>• Broad beans</li> <li>• Peas</li> <li>• Salad leaves</li> <li>• Radishes</li> <li>• Spinach</li> <li>• Spring onions</li> <li>• Asparagus (last picking)</li> <li>• Courgettes (first)</li> </ul>

## June Top Tip

Water is crucial in June! Water in the morning or evening — not in the heat of the day. Watering little and often encourages shallow roots, so water deeply once or twice a week instead.

## The Water Detective Mission

June can be hot and dry — your plants need a careful water detective on the case! How much water do your vegetables really need?

### Little Detectives (Ages 4–7)

- Check if your plants need watering by pushing your finger 2cm into the soil — wet, damp, or dry?
- Water some plants in the morning and some in the evening — do they look different the next day?
- Draw your favourite vegetable plant and label the parts you can see (leaves, stem, roots if possible)

### Growing Detectives (Ages 7–11)

- Set up a rainfall gauge and record rainfall every day in June — does it match weather forecasts?
- Research wilting: why do plants wilt and what is happening inside them when they do?
- Design a watering rota for your whole veg patch, working out which plants need most water and why

### Expert Detectives (Ages 11+)

- Investigate how different soil types (sandy, clay, loam) hold water differently using simple soil tests
- Research transpiration and calculate an estimate of how much water your plants lose each day
- Design a simple irrigation system using recycled materials and test its effectiveness

 **My June Growing Notes**

Date I started: \_\_\_\_\_

What I planted: \_\_\_\_\_

What I noticed: \_\_\_\_\_

My favourite discovery this month: \_\_\_\_\_

My Notes



# July *Midsummer*

Sow Indoors	Sow Outdoors	Plant Out	Harvest
<ul style="list-style-type: none"> <li>• Spring cabbages (for autumn)</li> <li>• Winter salads</li> </ul>	<ul style="list-style-type: none"> <li>• Beetroot (last sowing)</li> <li>• Carrots (last main sowing)</li> <li>• French beans</li> <li>• Runner beans</li> <li>• Turnips</li> <li>• Spring onions</li> <li>• Salad leaves</li> <li>• Kale (for autumn)</li> <li>• Chard</li> </ul>	<ul style="list-style-type: none"> <li>• Leeks</li> <li>• Kale</li> <li>• Spring cabbages</li> <li>• Autumn broccoli</li> </ul>	<ul style="list-style-type: none"> <li>• Broad beans</li> <li>• Early peas</li> <li>• Courgettes</li> <li>• Garlic</li> <li>• Onions (early)</li> <li>• Beetroot</li> <li>• Carrots (early)</li> <li>• Salad</li> <li>• Radish</li> <li>• Spring onions</li> <li>• Cucumbers (greenhouse)</li> </ul>

## July Top Tip

July is harvest time! Pick courgettes while they are small for the best flavour — if you leave them, they turn into marrows very quickly. Check every single day!

## The Great Harvest Mission

*The garden is bursting with food and it is time for the most exciting detective mission of all — the harvest investigation!*

### Little Detectives (Ages 4–7)

- Harvest something you grew and help cook it for dinner — amazing detective work!
- Weigh or count your harvest and record it — keep a harvest log all summer
- Draw a "before and after" — the seed you planted and the food you grew

### Growing Detectives (Ages 7–11)

- Keep a detailed harvest log: date, weight, and observations for everything you pick
- Research why garlic is harvested in July and how to cure and store it properly
- Taste-test a shop-bought carrot vs a home-grown one — write up your findings like a proper food scientist

### Expert Detectives (Ages 11+)

- Calculate the cost of growing your own vegetables vs buying them — is it worth it?
- Research seed saving: which of your vegetables can you save seeds from and how?
- Investigate the connection between harvest timing and nutrition — does it matter when you pick vegetables?

## My July Growing Notes

Date I started: \_\_\_\_\_

What I planted: \_\_\_\_\_

What I noticed: \_\_\_\_\_

My favourite discovery this month: \_\_\_\_\_

My Notes



# August *Late Summer*

Sow Indoors	Sow Outdoors	Plant Out	Harvest
<ul style="list-style-type: none"> <li>• Nothing needed this month</li> </ul>	<ul style="list-style-type: none"> <li>• Spring onions</li> <li>• Salad leaves</li> <li>• Radishes</li> <li>• Turnips</li> <li>• Peas (for shoots)</li> <li>• Winter spinach</li> </ul>	<ul style="list-style-type: none"> <li>• Spring cabbages</li> <li>• Winter lettuce (under cover)</li> <li>• Garlic (late varieties from end of August)</li> </ul>	<ul style="list-style-type: none"> <li>• Tomatoes</li> <li>• Courgettes</li> <li>• Runner beans</li> <li>• French beans</li> <li>• Sweetcorn</li> <li>• Beetroot</li> <li>• Carrots</li> <li>• Cucumbers</li> <li>• Onions</li> <li>• Garlic</li> <li>• Peas</li> <li>• Potatoes</li> <li>• Shallots</li> </ul>

## August Top Tip

August is the most bountiful harvest month! If you have a glut of courgettes or tomatoes, try simple preservation: make soup, freeze it, or give some to neighbours. This is brilliant maths — measuring, weighing, and calculating!

## The Glut Management Mission

*You have done such brilliant growing detective work that now you have MORE food than you can eat! What do you do with a courgette the size of a submarine?*

### Little Detectives (Ages 4–7)

- Count how many courgettes or tomatoes you harvest in one week — are you surprised?
- Help make a simple soup or salad using only things from the garden
- Draw and label every vegetable you harvested this month

### Growing Detectives (Ages 7–11)

- Research different food preservation methods: freezing, pickling, drying — which works for which vegetables?
- Calculate the total weight of your harvest for August and compare it to previous months
- Design a recipe using only your home-grown vegetables and rate it out of 10 after tasting

### Expert Detectives (Ages 11+)

- Investigate the science of food preservation — why does freezing or pickling stop food going bad?
- Create a spreadsheet tracking your whole season's harvest with totals, trends, and reflections
- Research food miles and calculate the environmental impact of shop-bought vs home-grown food

 **My August Growing Notes**

Date I started: \_\_\_\_\_

What I planted: \_\_\_\_\_

What I noticed: \_\_\_\_\_

My favourite discovery this month: \_\_\_\_\_

My Notes



# September *Early Autumn*

Sow Indoors	Sow Outdoors	Plant Out	Harvest
<ul style="list-style-type: none"> <li>• Salad leaves for windowsill growing through winter</li> </ul>	<ul style="list-style-type: none"> <li>• Winter salads</li> <li>• Spinach</li> <li>• Spring onions</li> <li>• Land cress</li> <li>• Corn salad</li> </ul>	<ul style="list-style-type: none"> <li>• Spring cabbages</li> <li>• Winter lettuce</li> <li>• Garlic (from mid-September onwards)</li> </ul>	<ul style="list-style-type: none"> <li>• Sweetcorn</li> <li>• Runner beans</li> <li>• French beans</li> <li>• Tomatoes (last pickings)</li> <li>• Pumpkins and squash</li> <li>• Onions (finishing off)</li> <li>• Leeks</li> <li>• Beetroot</li> <li>• Courgettes (last)</li> <li>• Kale (start)</li> <li>• Broccoli</li> </ul>

## September Top Tip

September is the perfect time to harvest pumpkins and squash. They are ready when the stem starts to cork and the skin feels very hard. Leave them somewhere warm and sunny to cure for a few weeks — this helps them keep through winter.

## The Autumn Change Mission

*Autumn is a season of brilliant detective clues. Everything is changing — and a sharp-eyed detective notices every single one.*

### Little Detectives (Ages 4–7)

- Collect 5 different leaves and sort them by size, colour, or shape
- Look for 3 signs that summer is ending in your garden — draw what you find
- Help harvest a pumpkin or squash — what does the stem feel like when it is ready?

### Growing Detectives (Ages 7–11)

- Research why leaves change colour in autumn — what is really happening in the leaf?
- Document the last harvest of each vegetable type and note whether the season met your expectations
- Plan what to do with your empty beds — research green manures and why gardeners use them

### Expert Detectives (Ages 11+)

- Investigate the role of auxins and chlorophyll breakdown in autumn leaf colour change
- Write a full end-of-season review: what worked, what didn't, what you would do differently next year
- Research composting science — what happens in a compost heap and why does it get warm inside?

## My September Growing Notes

Date I started: \_\_\_\_\_

What I planted: \_\_\_\_\_

What I noticed: \_\_\_\_\_

My favourite discovery this month: \_\_\_\_\_

My Notes



# October *Mid Autumn*

Sow Indoors	Sow Outdoors	Plant Out	Harvest
<ul style="list-style-type: none"><li>• Salad leaves on a bright windowsill</li></ul>	<ul style="list-style-type: none"><li>• Garlic</li><li>• Winter spinach</li><li>• Broad beans (for overwintering)</li><li>• Spring onions (under cover)</li></ul>	<ul style="list-style-type: none"><li>• Garlic</li><li>• Overwintering onion sets</li></ul>	<ul style="list-style-type: none"><li>• Pumpkins</li><li>• Squash</li><li>• Kale</li><li>• Leeks</li><li>• Beetroot</li><li>• Carrots</li><li>• Parsnips (after first frost)</li><li>• Celeriac</li><li>• Brussels sprouts (first)</li><li>• Chard</li><li>• Chicory</li></ul>

## October Top Tip

Parsnips taste sweeter after the first frost — the cold converts their starch to sugar. It is brilliant plant science that also makes them delicious! Wait until after a cold night to harvest them.

## The Root Vegetable Investigation

*Underground detective work! October is root vegetable month — and there are wonderful scientific mysteries waiting beneath the soil.*

### Little Detectives (Ages 4–7)

- Dig up a carrot or parsnip — what do the roots look like? Draw them in detail
- Taste a parsnip before and after a frost — can you taste the difference in sweetness?
- Sort your harvest by colour, size, and shape — make a display and photograph it

### Growing Detectives (Ages 7–11)

- Research why frost makes parsnips sweeter — explain the starch-to-sugar conversion in simple terms
- Compare the roots of different vegetables: carrot, parsnip, beetroot, radish — what is different and why?
- Plan your garlic planting: measure your space, calculate how many cloves you can plant, and mark out your rows

### Expert Detectives (Ages 11+)

- Investigate how plants store energy in roots and tubers — research the role of starch as an energy reserve
- Design an experiment to test whether frost treatment genuinely increases sugar content in root vegetables
- Research the history of root vegetable storage and explain why root cellars were so important before refrigeration

 **My October Growing Notes**

Date I started: \_\_\_\_\_

What I planted: \_\_\_\_\_

What I noticed: \_\_\_\_\_

My favourite discovery this month: \_\_\_\_\_

My Notes



# November *Late Autumn*

Sow Indoors	Sow Outdoors	Plant Out	Harvest
<ul style="list-style-type: none"> <li>• Microgreens on a windowsill</li> <li>• Salad leaves in a grow-bag indoors</li> </ul>	<ul style="list-style-type: none"> <li>• Broad beans (early November, if not done)</li> <li>• Garlic (last chance)</li> </ul>	<ul style="list-style-type: none"> <li>• Bare-root fruit trees and bushes</li> <li>• Garlic</li> </ul>	<ul style="list-style-type: none"> <li>• Leeks</li> <li>• Brussels sprouts</li> <li>• Kale</li> <li>• Parsnips</li> <li>• Celeriac</li> <li>• Swede</li> <li>• Chard</li> <li>• Winter cabbages</li> <li>• Chicory</li> </ul>

## November Top Tip

November is a great time to improve your soil for next year. Add compost or well-rotted manure to empty beds and let the worms do the digging for you over winter. It is free soil science!

## The Soil Science Mission

*The best detectives know that healthy vegetables start with healthy soil. November is the perfect time for a deep soil investigation!*

### Little Detectives (Ages 4–7)

- Dig a small hole and count how many worms you find — worms are brilliant for soil!
- Collect a handful of soil and look at it closely with a magnifying glass — what can you see?
- Draw a diagram showing what you think is living underground in your garden

### Growing Detectives (Ages 7–11)

- Conduct a simple soil test: pour water onto a tablespoon of soil — does it absorb slowly, quickly, or run off? What does this tell you?
- Research the NPK nutrients (nitrogen, phosphorus, potassium) and what each one does for plants
- Add compost to one bed and leave another bare — plan to compare plant growth in both next spring

### Expert Detectives (Ages 11+)

- Research soil food web — map all the organisms involved and explain how they interact
- Conduct a soil jar test to identify your soil type (sand, clay, silt, loam) and research what this means for growing
- Calculate the carbon footprint of your garden by researching how soil stores carbon and what you can do to improve it

## My November Growing Notes

Date I started: \_\_\_\_\_

What I planted: \_\_\_\_\_

What I noticed: \_\_\_\_\_

My favourite discovery this month: \_\_\_\_\_

My Notes



# December *Winter*

 Sow Indoors	 Sow Outdoors	 Plant Out	 Harvest
<ul style="list-style-type: none"><li>• Microgreens — brilliant windowsill project for children</li><li>• Sprouting seeds (mung beans, chickpeas, lentils) in jars</li></ul>	<ul style="list-style-type: none"><li>• Nothing to sow — give the garden a rest</li></ul>	<ul style="list-style-type: none"><li>• Nothing this month</li></ul>	<ul style="list-style-type: none"><li>• Brussels sprouts</li><li>• Leeks</li><li>• Kale</li><li>• Parsnips</li><li>• Celeriac</li><li>• Winter cabbages</li><li>• Stored pumpkins, squash, and root vegetables</li></ul>

## December Top Tip

December is a brilliant month for indoor growing! Microgreens take just 7-14 days from seed to harvest and are packed with nutrients. Children love seeing results so quickly — and they taste wonderful in sandwiches and salads.

## The Indoor Growing Challenge

*Outside the garden is sleeping — but a true growing detective never stops! December is the month for brilliant indoor investigations.*

### Little Detectives (Ages 4–7)

- Grow cress or microgreens on a damp sponge — harvest and eat within two weeks!
- Sprout mung beans in a jar (rinse twice a day) — watch them grow in just 3 days
- Draw your favourite memory from the whole growing year

### Growing Detectives (Ages 7–11)

- Compare germination speed of 3 different microgreen seeds: which is fastest, which is slowest?
- Design and make a simple indoor growing kit from recycled materials
- Write a review of your whole growing year — what were your 3 biggest successes and 3 things to improve?

### Expert Detectives (Ages 11+)

- Research why microgreens are so nutritionally dense compared to mature vegetables
- Design an experiment comparing microgreen growth under different light sources (window vs grow light vs torch)
- Write a full annual garden report with data, graphs, reflections, and a plan for next year

## My December Growing Notes

Date I started: \_\_\_\_\_

What I planted: \_\_\_\_\_

What I noticed: \_\_\_\_\_

My favourite discovery this month: \_\_\_\_\_

My Notes and Plans for next year



## Well done, Growing Detective!

*You have worked your way through a whole year of growing adventures.*

### Continue Your Growing Journey

Looking for more? The Natural Wellness Play book series is packed with hands-on plant science activities, inclusive growing ideas for all children, and seasonal detective adventures for the whole family.

Find out more at [www.whyplaylearning.com](http://www.whyplaylearning.com)

Available on Amazon and as printable PDFs from the website.

**Why Play Learning**

[www.whyplaylearning.com](http://www.whyplaylearning.com)

© Why Play Learning. Free for personal and home education use.