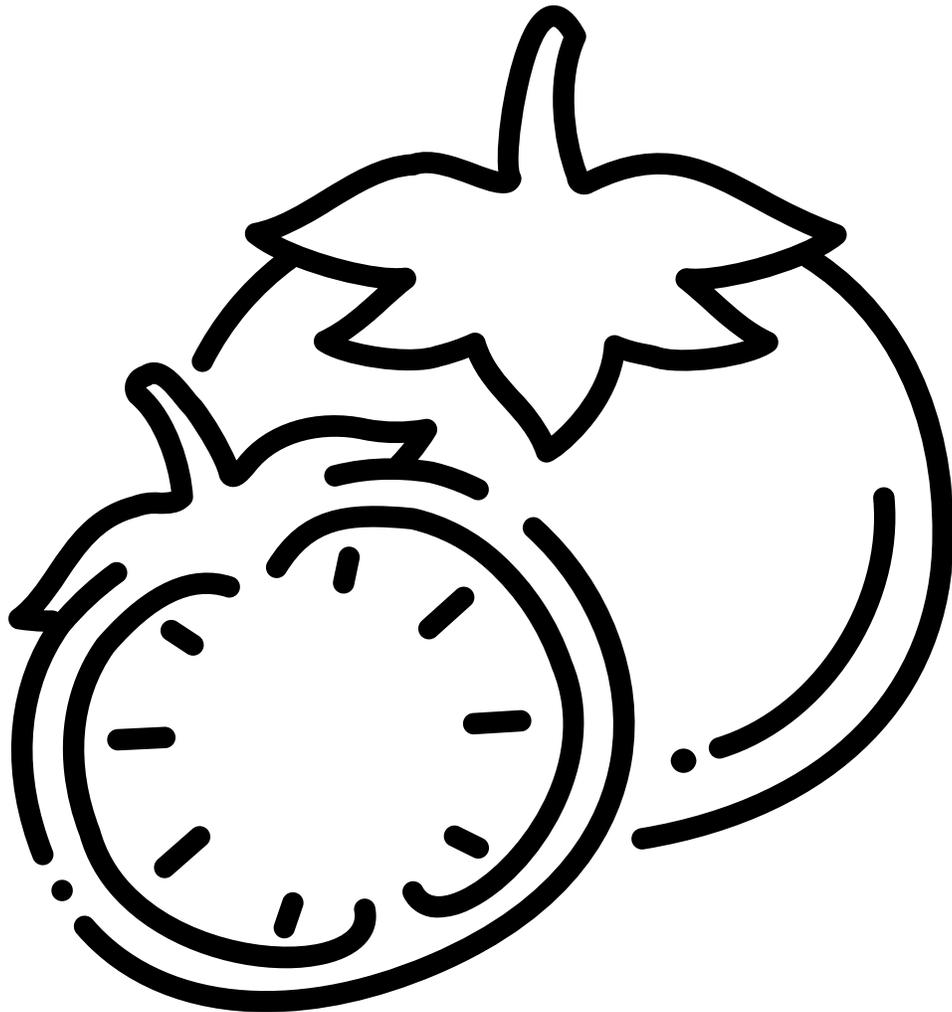


# Junior Master Gardener

A Fun Workbook For Young Gardeners



Learn Everything From Seed To Harvest

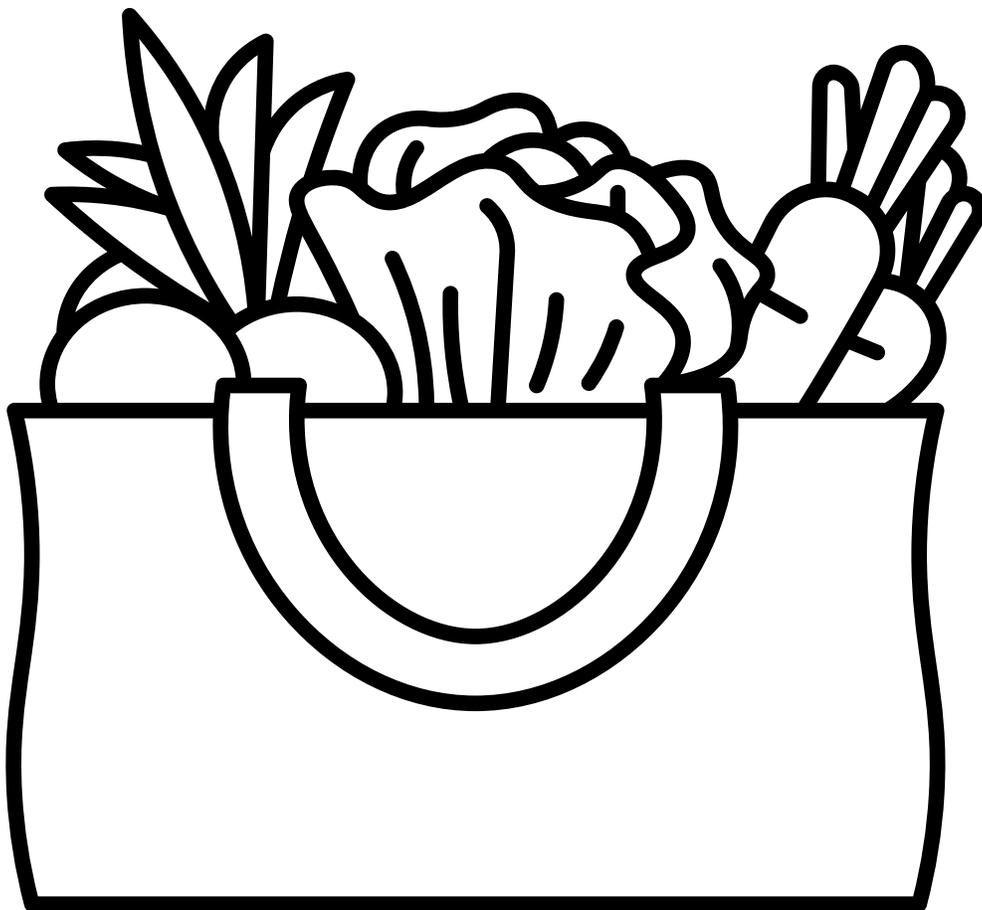
# Welcome To Your Gardening Master Course

Gardening is more than just planting seeds—it's a way to watch tiny plants grow into big strong plants, while you learn all about nature and science.

In this course, you'll discover what a garden is and why it's so important. Gardens give us healthy food, beautiful flowers, and a place for bees, butterflies, and other creatures to live.

You'll also learn that gardening helps you practice responsibility, patience, and problem solving because plants need care every day.

Let's explore all about growing your own garden from soil health to harvesting fresh ingredients at home. By the end of this workbook, you'll know that gardening isn't just about plants—it's about helping the world become more sustainable by growing your own garden!



## Garden Layout Planting Tips

Start small with 2-5 plants in a container garden, raised bed, or small section of ground.

Most vegetables need 6-8 hours of direct sunlight, so pick the sunniest spot in your yard.

Make large pathways that are wide enough for easy walking, weeding, and watering.

Group plants by watering needs and consider plant height placing taller plants on the North side, so they don't shade out smaller plants.

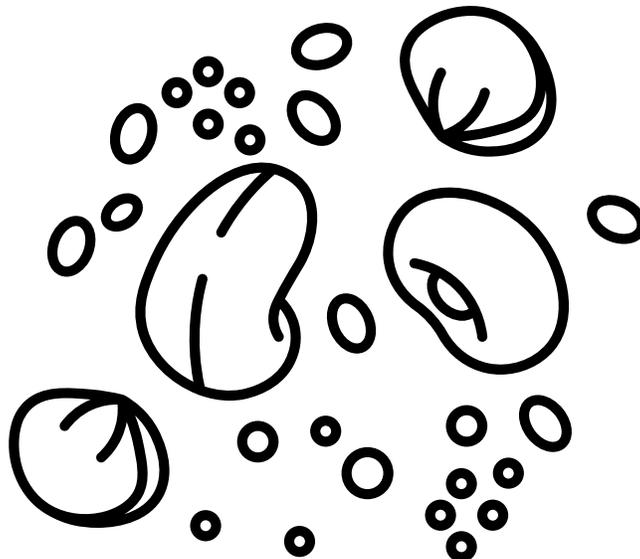
Use companion planting to pair crops that help each other like tomatoes with basil or carrots and onions.

Rotate your crops yearly to prevent pest issues and soil depletion by using succession planting.

Create perennial zones dedicated for plants that return yearly like strawberries, asparagus, or herbs.

Maximize vertical space using trellises, cages, and arches for vining crops and to save ground space.

Leave room for growth because overcrowding limits airflow, increases disease risk, and can reduce yields.



## **Gardening Vocabulary for Junior Gardeners**

**Seed** – The tiny part of a plant that can grow into a new plant.

**Seedling** – A young plant that just started growing from a seed.

**Soil** – The dirt where plants grow and gives plants water and nutrients.

**Compost** – Rotten or broken down food and garden waste that makes soil healthy.

**Watering** – Giving plants the water they need to grow.

**Sunlight** – Light from the sun that plants use to make food through photosynthesis.

**Fertilizer** – Natural or store bought material that gives plants extra nutrients to grow strong.

**Mulch** – Material like leaves, straw, or bark put on top of the soil to keep it moist and healthy.

**Transplanting** – Moving a plant from one place to another like a garden bed.

**Harvest** – Picking fruits or vegetables from your garden when they are ready to eat.

**Pest** – An insect or animal that can hurt plants.

**Companion Plants** – Plants that grow well together and help each other.

**Pruning** – Cutting off dead or extra parts of a plant to help it grow better.

**Crop Rotation** – Changing where plants grow each year to keep soil healthy.

**Tuber** – A thick underground part of a plant, like a potato, that stores food for the plant.

**Pollination** – When pollen moves from one flower to another helping plants make fruit or seeds.

**Weeding** – Removing unwanted plants called weeds that compete with your garden plants.

**Garden Bed** – A special area of soil where plants grow.

**Microgreens** – Young, small edible plants that are harvested soon after sprouting.

**Organic** – Plants grown without synthetic chemicals, like pesticides or chemical fertilizers.

**Write The Definition:**

Seed -

Seedling -

Soil -

Compost -

Watering -

Sunlight -

Fertilizer -

Mulch -

Transplanting -

Harvest -

**Write The Definition:**

Pest -

Companion Plants -

Pruning -

Crop Rotation -

Tuber -

Pollination -

Weeding -

Garden Bed -

Microgreens -

Organic -

# Lesson 1: Introduction Into Gardening

Imagine your dream garden what are three foods you would like to learn how to grow and harvest at home?

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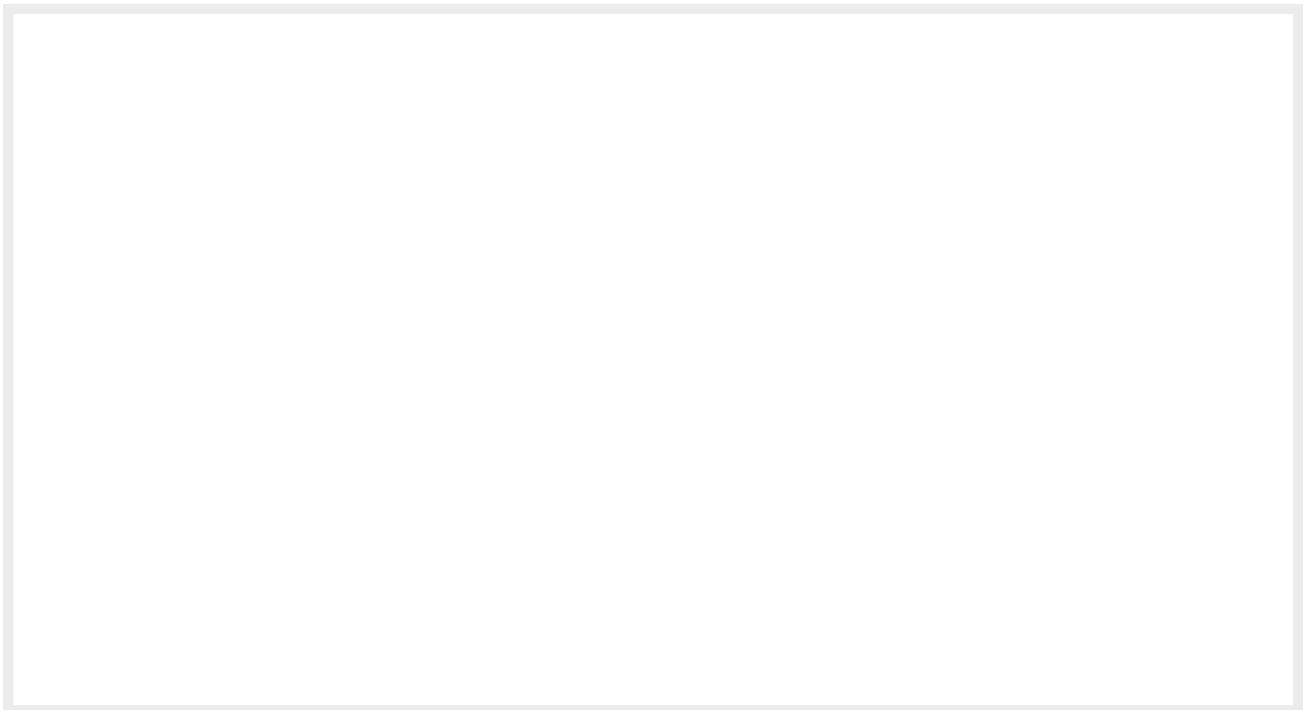
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Draw your favorite garden ingredients below like tomatoes, carrots, or cucumbers.













Gardening is an exciting way to watch nature work right in your own backyard. Plants start as tiny seeds, grow roots into the soil, sprout stems and leaves, and eventually produce fruits or flowers.

Gardens are important because they give us healthy food to eat, flowers to smell and look at, and homes for animals like bees, butterflies, and birds. Gardening also helps the Earth by keeping soil healthy and water clean.

Gardening is like having a little world of your own. In a garden, plants grow from tiny seeds into strong plants that give us food, flowers, and homes for insects and animals. Every garden is a tiny ecosystem where everything works together.

All plants need four things to grow:

**Sunlight:** Plants use sunlight to make food in a process called *photosynthesis*. Without light, plants cannot make their own energy and will not grow properly.

**Water:** Water helps plants move nutrients from the soil into their roots. It also keeps plants hydrated, so they don't wilt.

**Nutrients:** Plants get nutrients from the soil like nitrogen, phosphorus, and potassium. These nutrients help plants grow strong stems, healthy leaves, and tasty fruits or vegetables.

**Air:** Plants need air around their roots and leaves. Roots take in oxygen from the soil and leaves take in carbon dioxide from the air for *photosynthesis*.

Describe Why Plants Need Sunlight?

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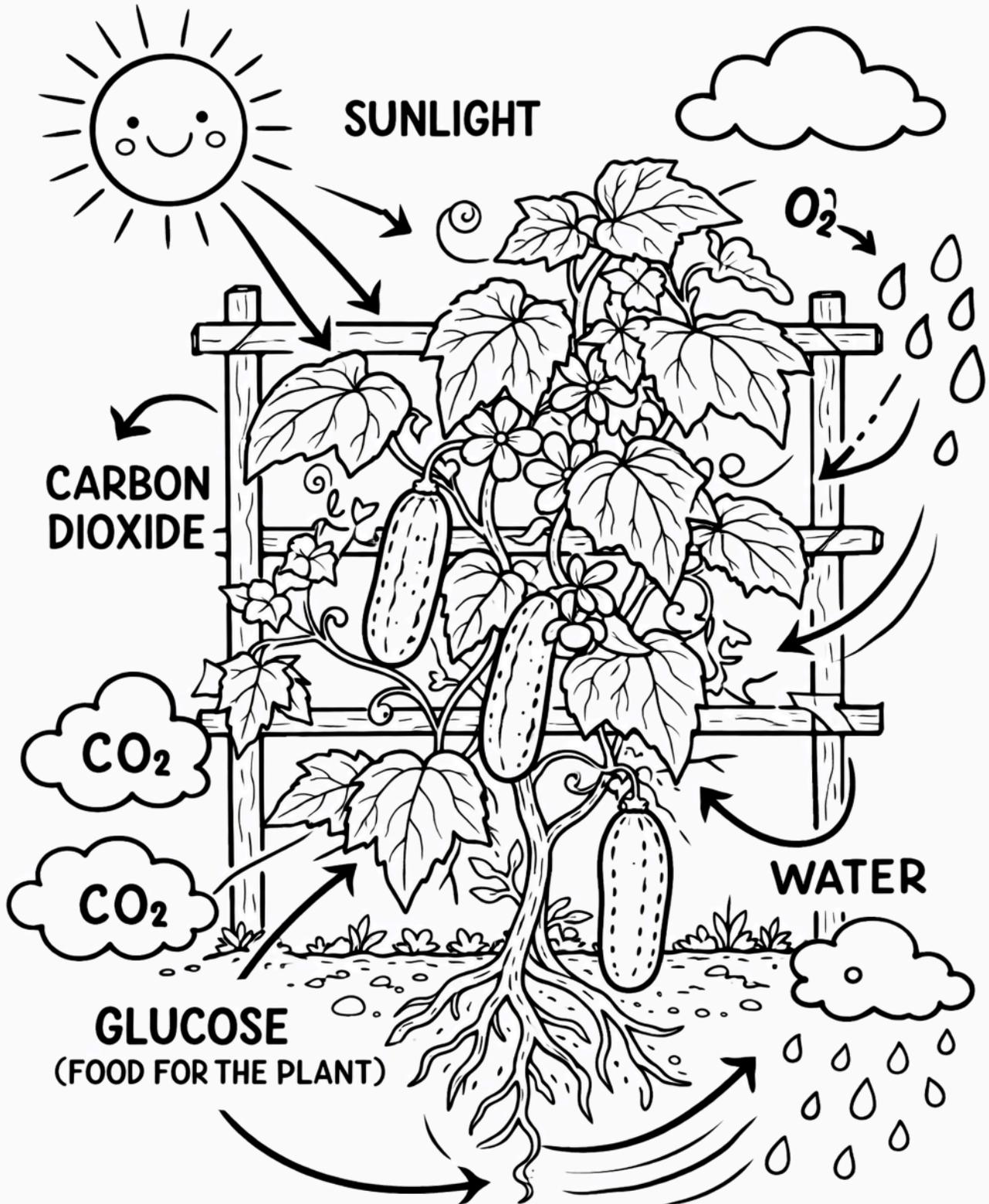
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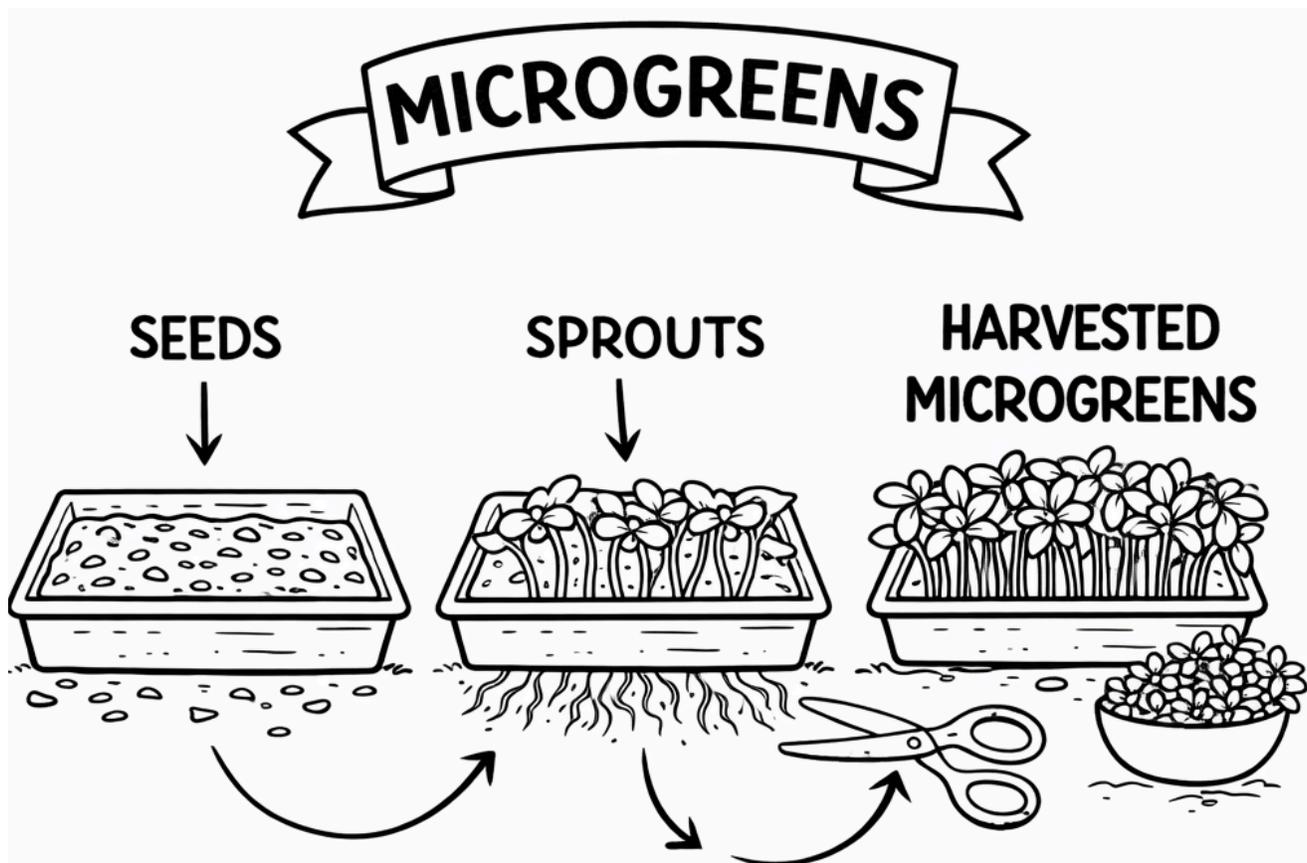
# PHOTOSYNTHESIS



There are many different types of gardens including:

- **Vegetable Garden:** Grow food you can eat like carrots, lettuce, tomatoes, and peppers.
- **Flower Garden:** Grow flowers for color and beauty attracting butterflies and bees.
- **Herb Garden:** Grow fresh herbs to use in your favorite dishes like parsley, cilantro, and mint.
- **Microgreen Garden:** Grow fresh microgreens in under two weeks filled with your favorite sprouts.

Let's take a peak at growing microgreens, which is a fun way to grow food indoors. When you grow microgreens you are harvesting plant sprouts. These tiny plants are packed with nutrition and quick to grow. Use the diagram and description to help you describe how to grow microgreens at home.

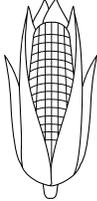


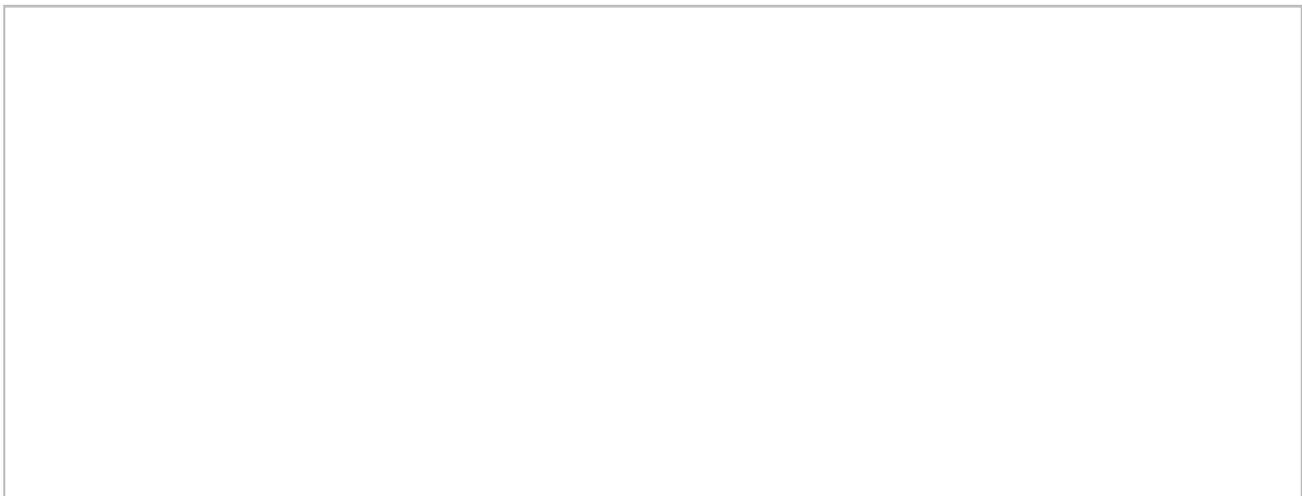
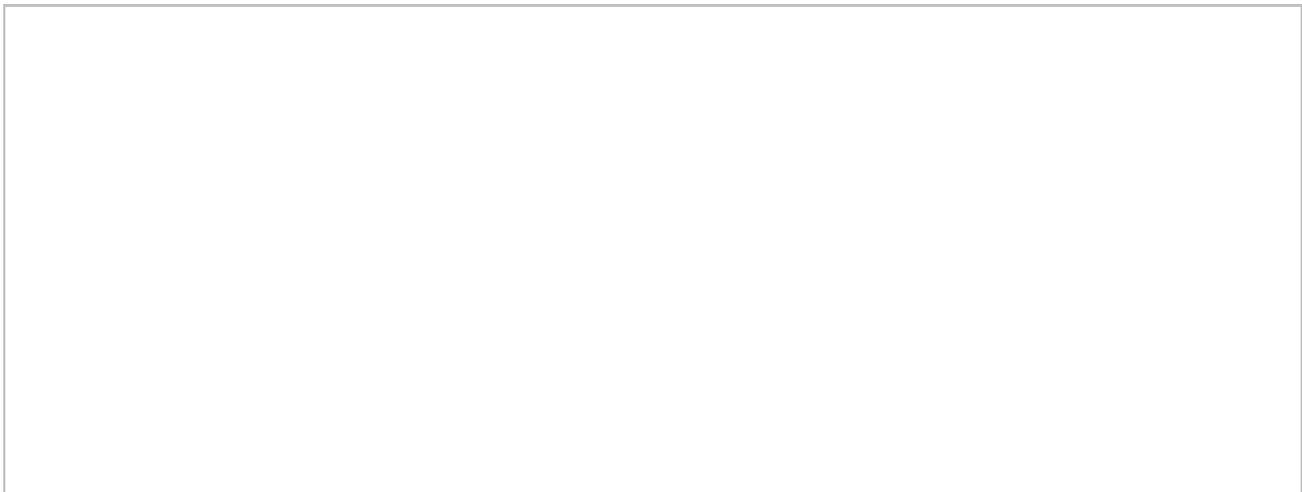




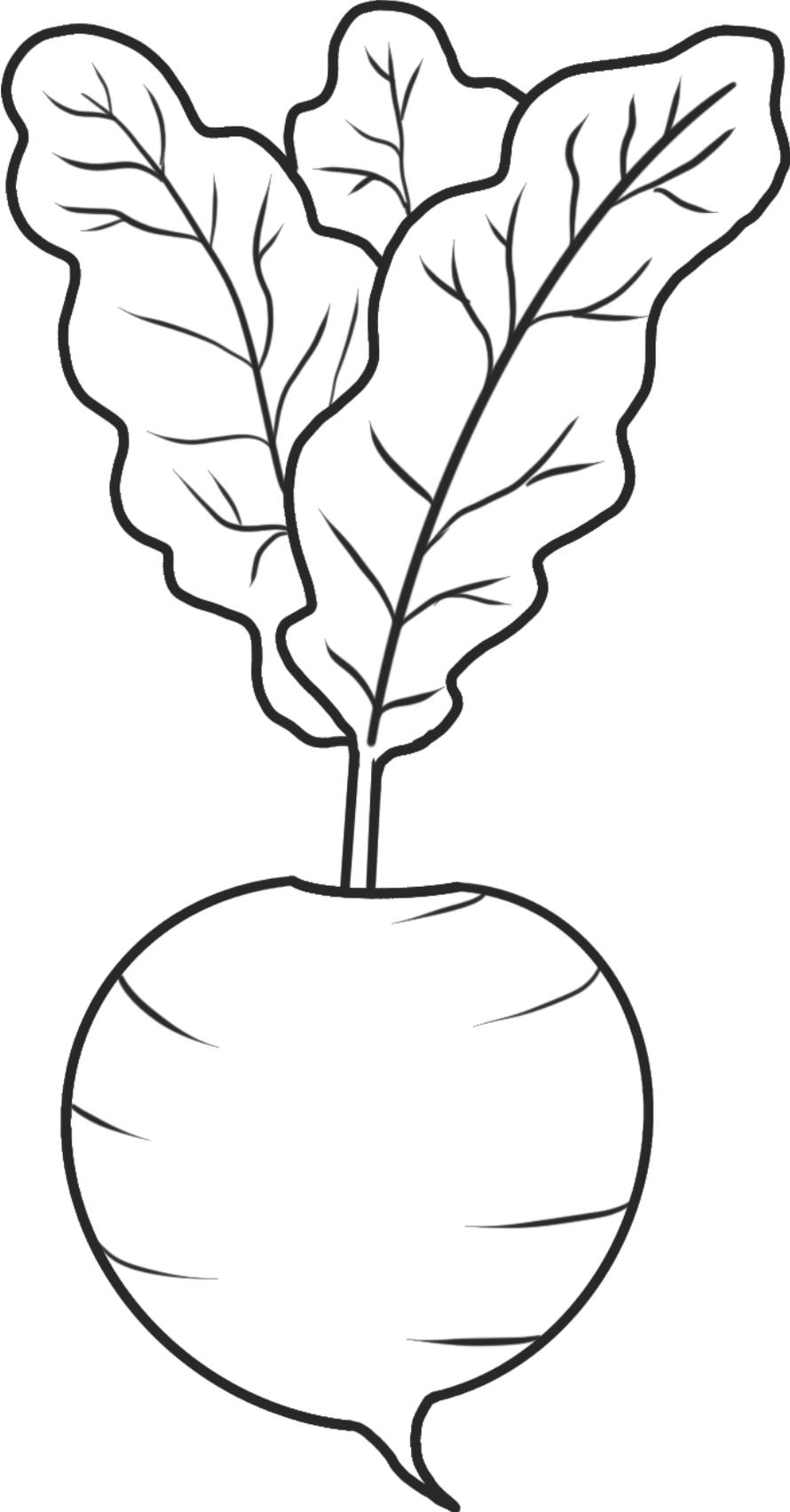


Square foot gardening is when each square foot can grow a certain number of plants. Divide up your raised beds to see how much food you can grow in a small space. Let's pretend this is a 2 x 4 ft. bed. That gives you 8 square feet of growing space.

 6	 1	 1	 2
 1	 4	 1	 16



Radishes are one of the easiest foods to grow in the garden let's color this one in!



## Lesson 2: Soil Health & Composting

Soil is more than just dirt—it is living, full of tiny creatures, and nutrients that help plants grow. Soil health is the most important factor in growing your own food at home.

### **Healthy soil is made of four main things:**

**Sand:** Small grains that help soil drain water.

**Silt:** Fine grains that hold moisture.

**Clay:** Tiny grains that hold nutrients.

**Organic Matter:** Dead plants, leaves, and compost give the soil nutrients and improves its texture.

### **Why Soil Matters?**

Good soil gives roots support, water, and nutrients.

Without healthy soil, plants cannot grow strong or produce healthy food.

### **What Is Composting?**

Composting is turning food scraps, leaves, and plant waste into nutrient rich soil.

This helps your garden grow because:

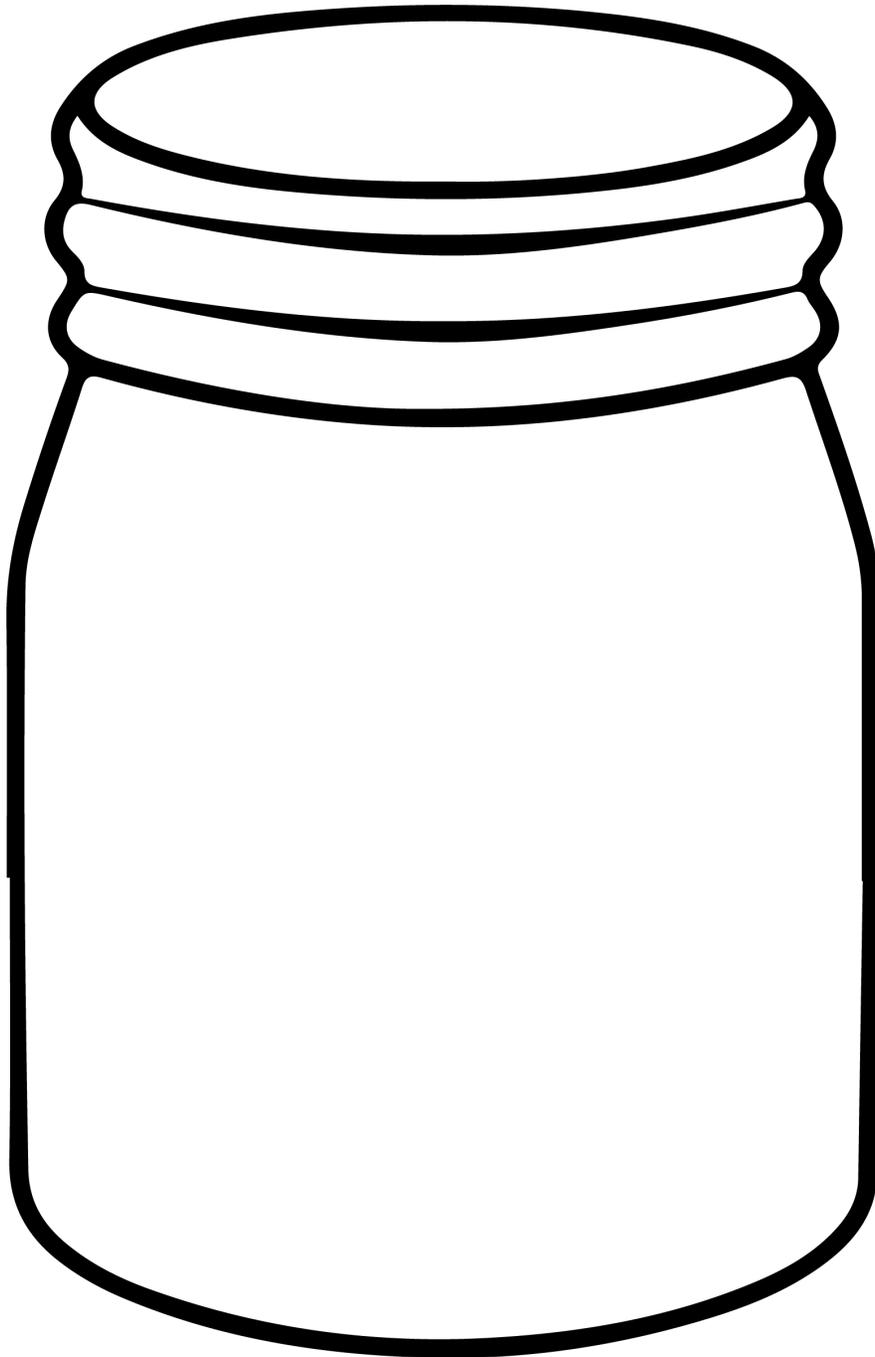
*Compost adds nutrients.*

*Compost helps soil hold water.*

*Compost attracts helpful creatures like worms that improve soil health.*

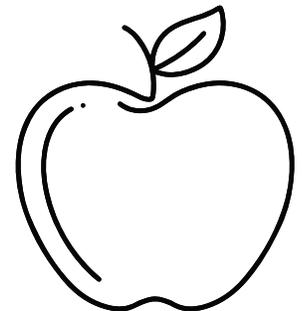
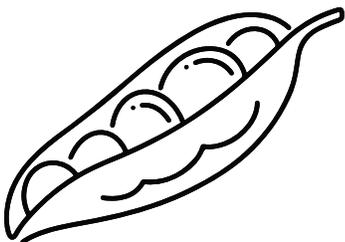
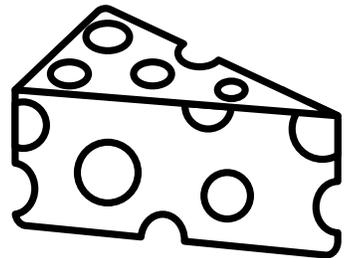
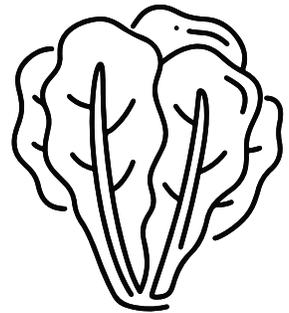
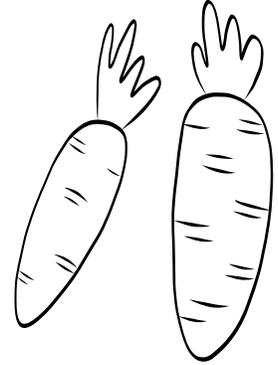
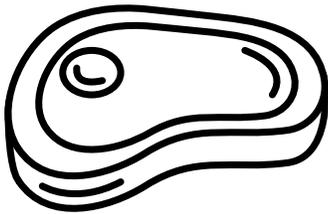
## Mini Composting Jar Activity

Put shredded leaves and veggie scraps in a jar then shake it daily. Watch how it changes over time breaking down. What you are left with is food for your plants. This is why composting is so important in gardening. Draw in the jar below kitchen scraps and leaves to model your jar compost system.

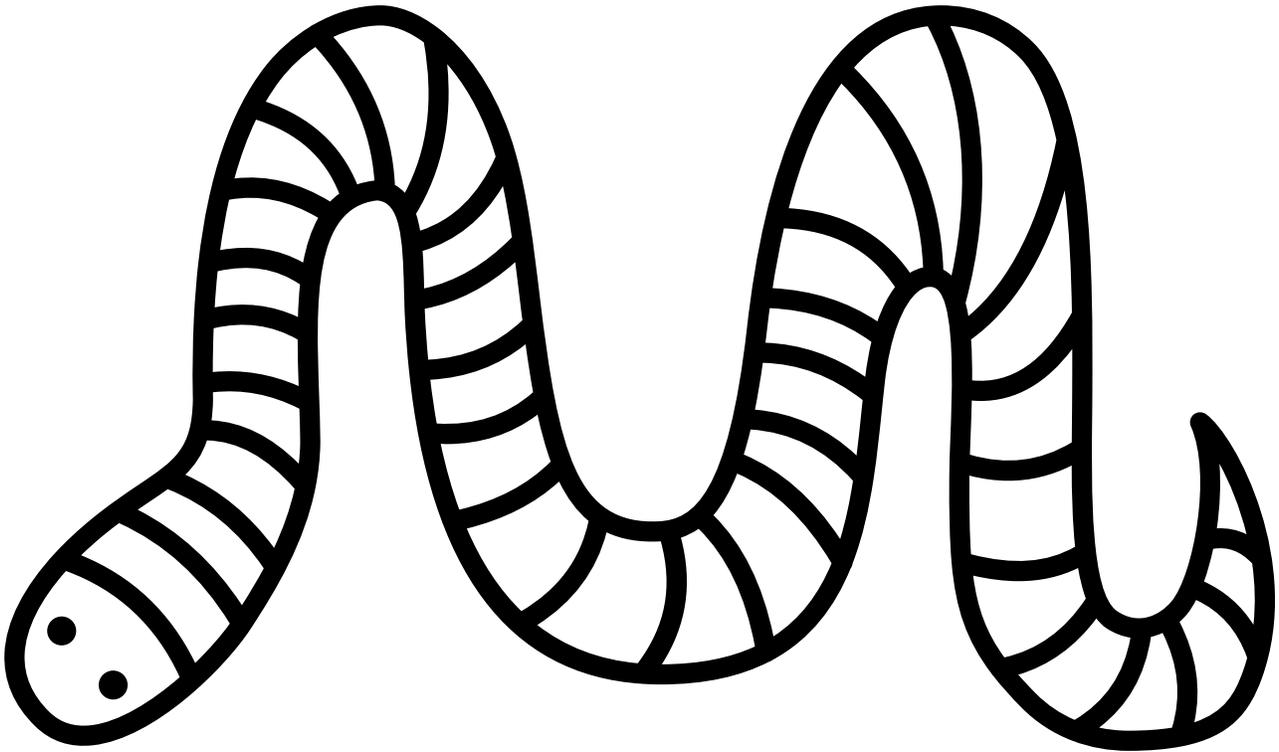


## What Foods Can You Compost?

Not all foods can be composted to use in your garden. For creating healthy soil in your garden focus on composting kitchen scraps like fruit and vegetable waste. You can also add in egg shells, but avoid things like meat or processed foods. An easy way to think about it is to compost just plant materials. Below check off what foods are suitable for composting.



What foods are best for composting to create healthy garden soil and why?



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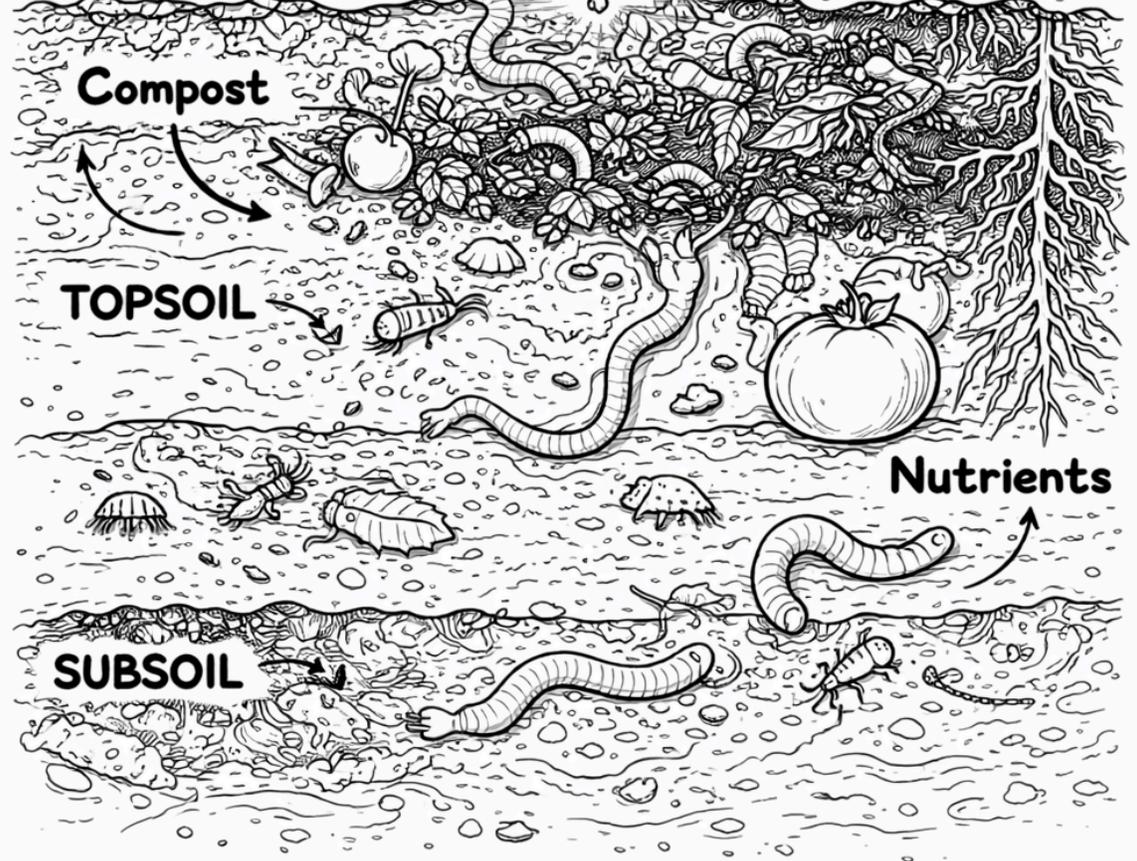
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**Vermicomposting** is a special kind of composting that uses worms to turn food scraps into rich healthy soil called worm castings.

Worm castings are worm poop. Even though that sounds funny, it is one of the best natural fertilizers for plants!

### **How Vermicomposting Works:**

Red wigglers are a type of composting worm that eats fruit and vegetable scraps like apple cores, banana peels, and lettuce leaves.

As worms eat, they break food down inside their bodies. What comes out is nutrient rich compost that helps plants grow strong roots, green leaves, and healthy fruits.

### **What Worms Need to Live:**

- Food: Fruit and vegetable scraps (no meat, dairy, or greasy foods).
- Bedding: Shredded paper, cardboard, or dry leaves to keep them cozy.
- Moisture: Bedding should feel like a wrung-out sponge.
- Air: Worms breathe through their skin, so air is very important.

### **Why Vermicomposting Is Important:**

- It keeps food waste out of landfills
- It makes amazing fertilizer for gardens and houseplants
- It helps soil hold water and nutrients
- It teaches responsibility and care for living creatures

### **Fun Worm Fact:**

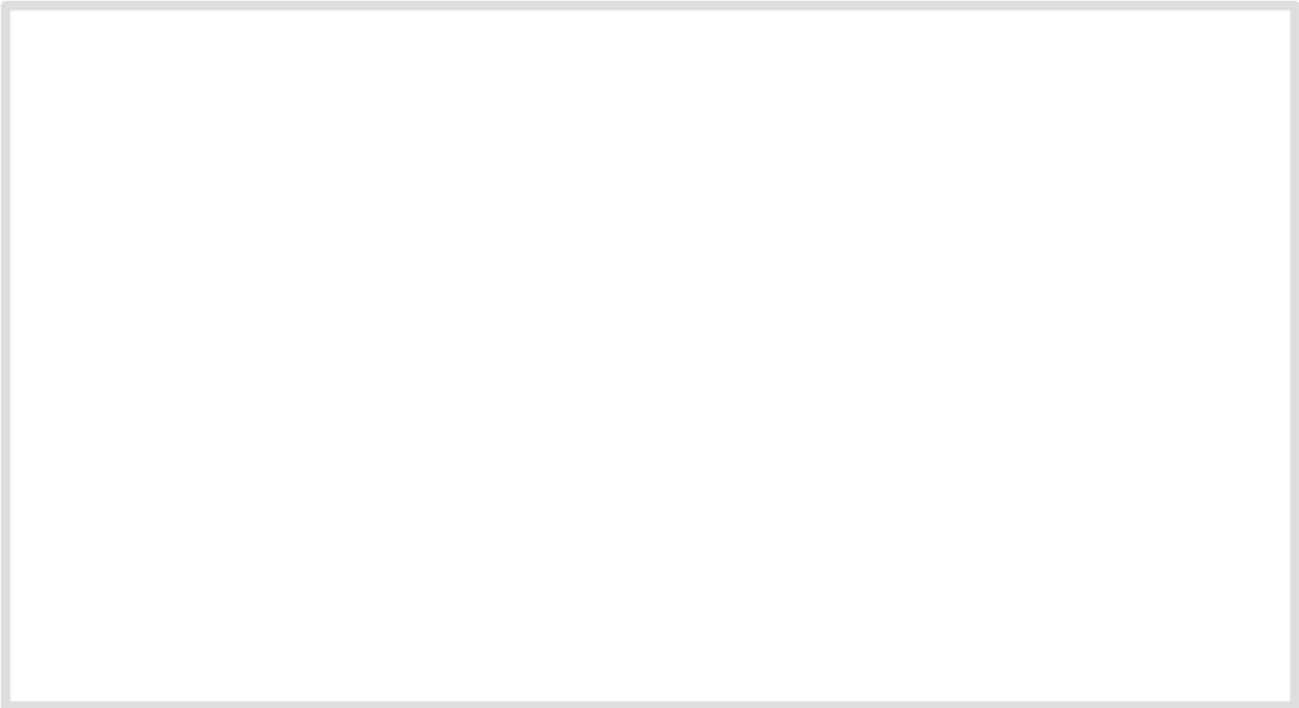
Worms can eat about half their body weight in food every day!

### **The Big Idea to Remember:**

Vermicomposting turns kitchen scraps into plant food using worms. Healthy worms make healthy soil and healthy soil grows healthy plants!

## Draw Your Vermicomposting System

Draw out your vermicomposting system below by showing the different materials and layers you need to create a happy home for your worms. You can also detail what kind of foods are good for feeding your composting worms.



Why is vermicomposting important and how can it help your garden?

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Use These Words To Fill In The Blank:

- Worms
- Compost
- Soil
- Nutrients
- Bedding
- Air
- Moisture
- Plants
- Leaves
- Organic

Healthy \_\_\_\_\_ is full of nutrients, water, air, and tiny living creatures that help plants grow.

\_\_\_\_\_ is the process of turning kitchen scraps and garden waste into rich soil.

\_\_\_\_\_ eat food scraps and turn them into nutrient rich worm castings.

Worms need \_\_\_\_\_ like shredded paper, cardboard, or dry leaves to live comfortably.

Worms also need \_\_\_\_\_ in the soil to breathe and stay healthy.

Keeping the worm bin slightly damp provides the right amount of \_\_\_\_\_ for the worms.

Fruit and vegetable scraps, eggshells, and leaves are examples of \_\_\_\_\_ matter used in composting.

Adding \_\_\_\_\_ to your compost pile helps it break down faster and improves soil texture.

Plants grow stronger when they get nutrients from \_\_\_\_\_ and compost.

A healthy compost pile and soil help \_\_\_\_\_ grow big, strong, and green.

## Lesson 3: Warm Verses Cool Season Plants

Did you know that not all plants like the same weather? Some plants love warm sunny days, while others grow best when it's cooler. Learning which plants grow in which season will help you plan a garden that is healthy and productive all year long!

### What Are Warm Season Plants?

Warm season plants grow best when the weather is hot and there's no frost. Frost can damage or kill them. These plants usually need lots of sunlight and warm soil to thrive. These include plants like tomatoes, peppers, zucchini, and cucumbers.

**Fun Fact:** Warm season plants grow faster in hot weather because their enzymes and metabolism work better in warmth.

### What Are Cool-Season Plants?

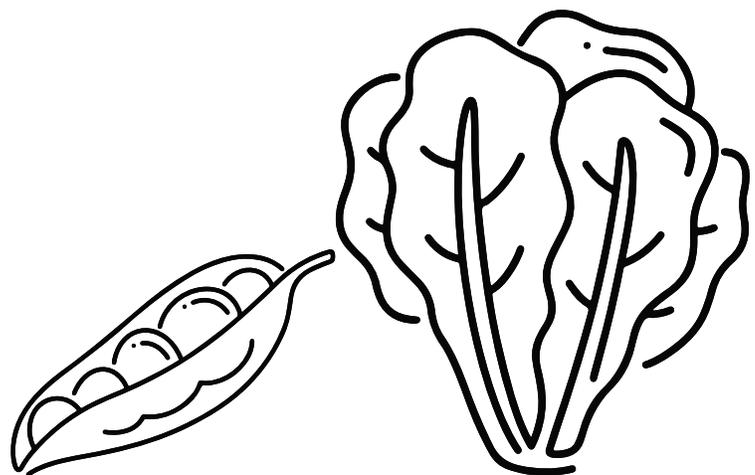
Cool season plants grow best in cool weather and can sometimes survive a little frost. These plants like soil that isn't too hot and they grow slowly in warm temperatures. Plants like lettuce, spinach, carrots, radishes, and peas enjoy cool temperatures.

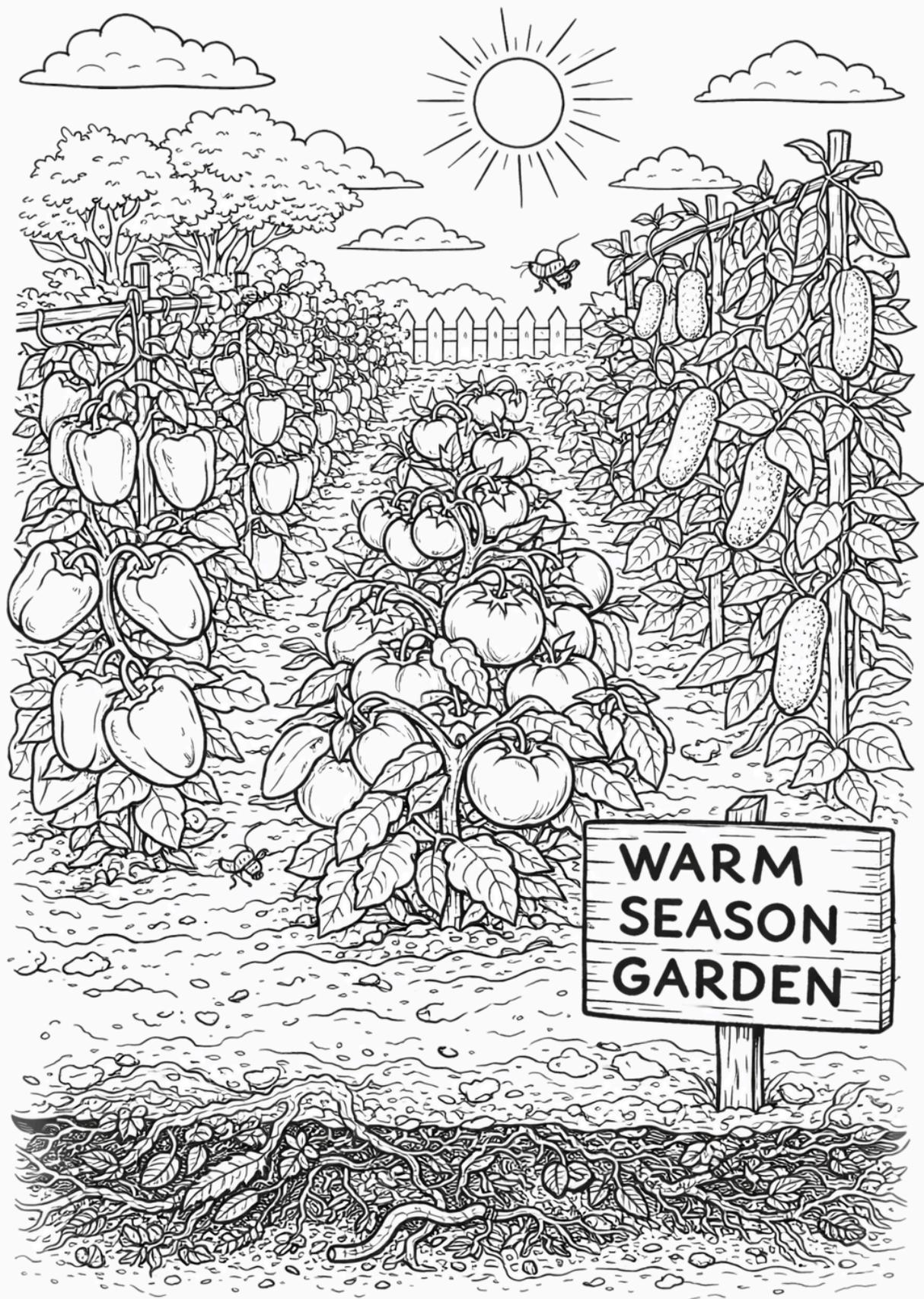
**Fun Fact:** Cool season plants can tolerate light frost because they evolved to survive in colder conditions.

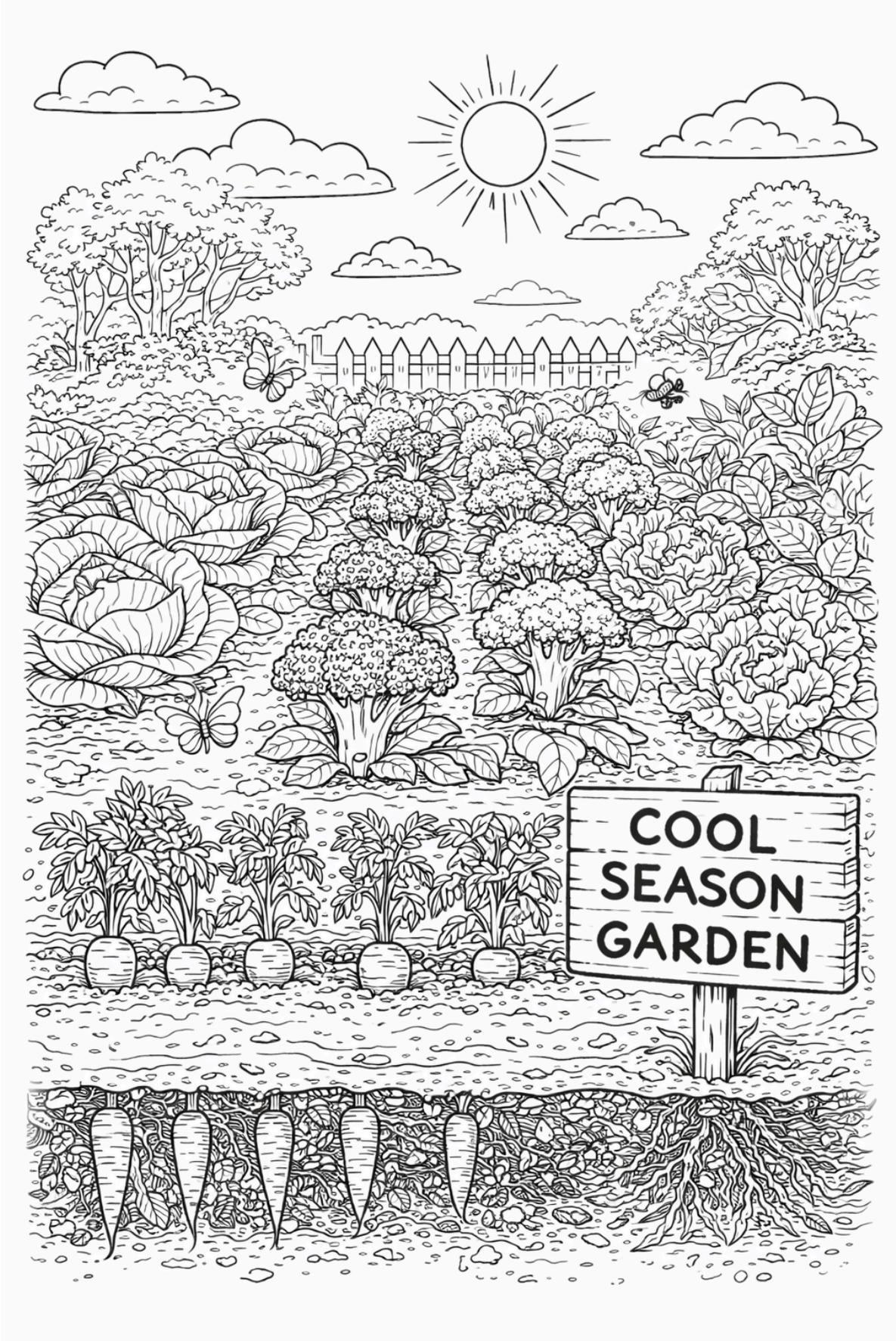
### Why This Matters

Growing plants in the wrong season can make them grow slowly, get sick, or even die. By learning which plants belong to which season you can:

- Harvest more food
- Keep plants healthy
- Avoid wasted seeds and time









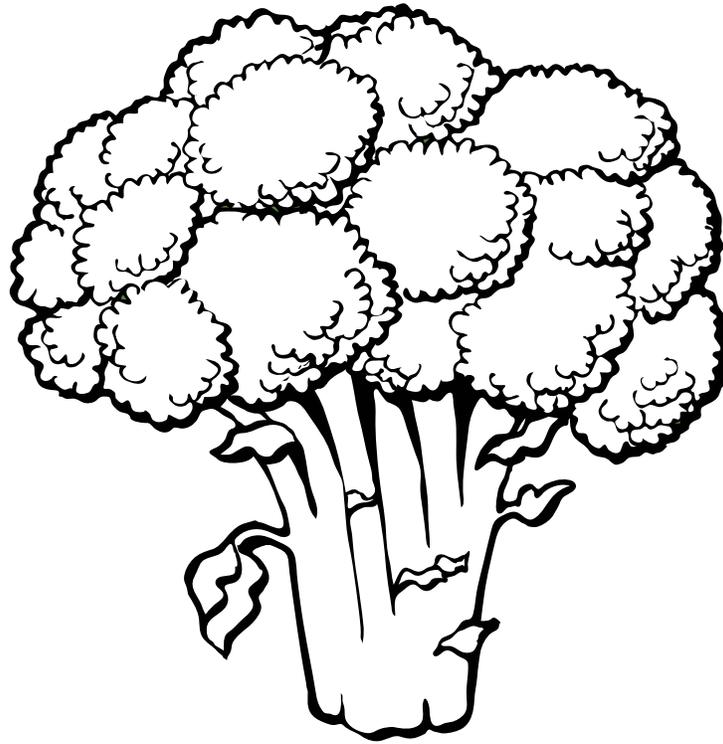








Plan out a cool season vegetable garden describe what kinds of plants you could grow in colder conditions like broccoli, cabbage, carrots, collards, radishes, kale, lettuce, and peas.



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## Mini Plant Growing Experiment

Objective: See how temperature affects plant growth by growing two plants in separate environments.

### Materials:

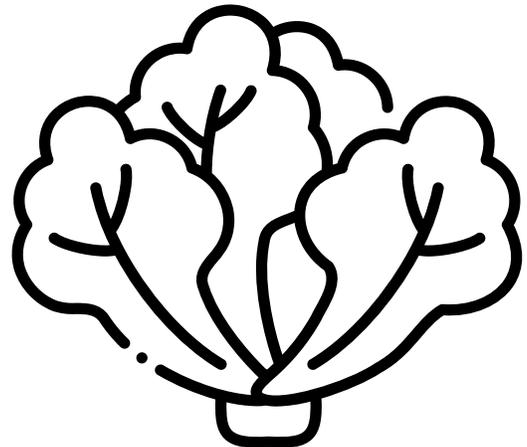
- Two small pots or seed trays
- Soil
- Seeds (radish or lettuce works well)
- Water
- Sunny window or grow light

### Follow These Steps:

1. Fill both pots with soil.
2. Plant seeds in each pot at the same depth.
3. Place one pot indoors near a window or grow light.
4. Place the other pot outside in a shaded area (cooler).
5. Water both the same amount.
6. Observe daily for two weeks.

### What to Watch For and Record:

- Which seeds sprout first?
- Which leaves are bigger or greener?
- Are either struggling to grow?



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## Track Your Plants To See How The Environment Affects Their Growth

### Plant Growth Tracker Instructions:

Use this tracker to watch your plants grow!

**Sprout Check:** Look at each plant every day and check off which one sprouts first.

**Measure Growth:** Use a ruler to measure how tall each plant is and record it in the tracker.

**Draw a Conclusion:** After two weeks compare your measurements. Write a short explanation of why one plant grew faster or stronger than the other. Think about factors like sunlight, temperature, soil, and water.

Seed Name	Sprouted First	Growth Week 1	Week 2

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# Lesson 4: Planning Your New Garden

Planning a garden is like designing your own little world. A well planned garden grows healthier plants, produces more food, and is easier to take care of.

Before planting, it's important to think about where each plant will go, what it needs to grow, and how it interacts with other plants.

## **Main Things to Remember When Planning a Garden**

**Sunlight:** Most vegetables need at least 6–8 hours of sunlight a day. Place tall plants where they won't shade smaller plants.

**Plant Height & Spacing:** Tall plants like corn or sunflowers can block sunlight if they are in the wrong spot. Always leave enough space for each plant to grow big and strong. Crowding plants can make them weak or sick.

**Season of Growing:** Remember which plants are warm season (like tomatoes, peppers, zucchini) and which are cool season (like lettuce, spinach, radishes). Plant them at the right time for the best growth.

**Companion Planting:** Some plants help each other grow better by keeping pests away.

**Water Access:** Make sure all plants can get water easily. Plants with similar water needs should be near each other.

**Garden Type:** Decide if you are planting in raised beds, containers, or in the ground. Raised beds have good drainage and containers are perfect for small spaces.

**Write Out How Each of These Elements Affects Your Garden Plants:**

Sunlight:

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Plant Height and Spacing:

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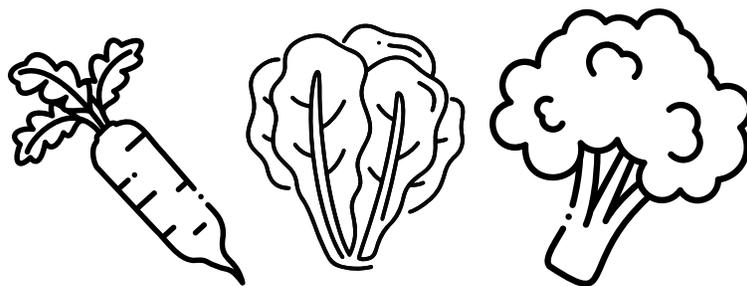
Season of Growing:

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**Write Out How Each of These Elements Affects Your Garden Plants:**

Companion Planting:

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Water Access:

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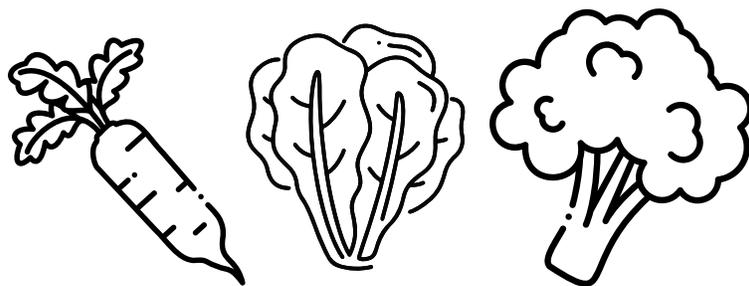
Garden Type:

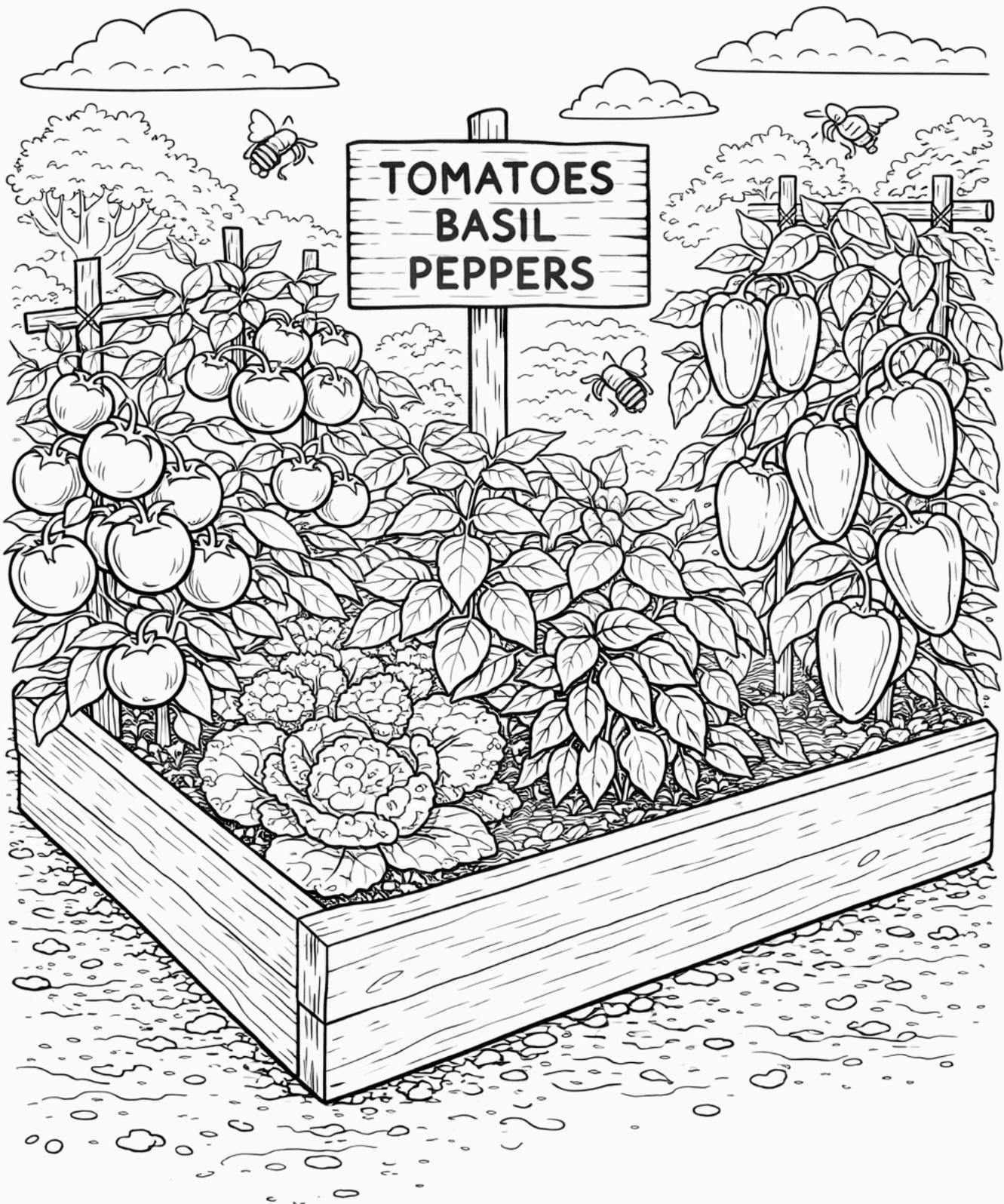
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# Companion Planting

Companion planting is all about pairing plants that are beneficial to one another. When you're growing veggies, fruits, and herbs the right combos can boost harvests, keep pests away, and make your garden easier to care for.

## Tomatoes

Basil  
Marigolds  
Garlic  
Carrots

## Peppers

Basil  
Onions  
Oregano

## Cucumber

Dill  
Rashish  
Nasturtiums

## Beans

Corn  
Squash  
Marigolds

## Carrots

Onions  
Rosemary  
Chives  
Lettuce  
Kale

## Lettuce

Radish  
Chives  
Marigolds  
Carrot  
Kale

## Squash

Pole Beans  
Nasturtiums  
Marigolds  
Corn

## Potatoes

Beans  
Cabbage  
Marigolds  
Basil

## Corn

Beans  
Squash  
Peas  
Cucumbers  
Radish



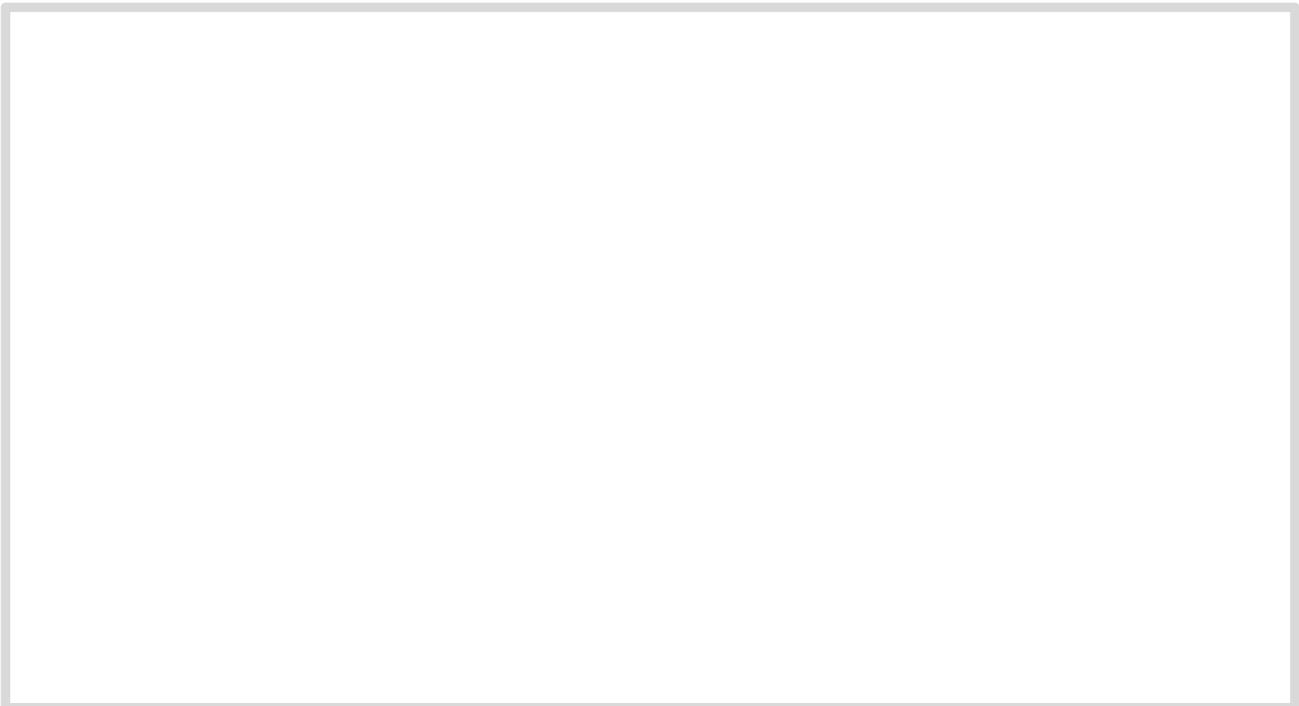




## Follow These Garden Rules To Map Out Your First Garden Below

1. Draw a Garden Map: sketch your garden layout showing where each plant will go.
2. Group Plants by Height: put taller plants at the back or North side, so they don't shade shorter plants.
3. Group Plants by Season: decide if you are growing a warm or cool season plant.
4. Consider Companions: place plants that help each other close together. Keep incompatible plants apart.
5. Leave Walking Paths: make sure you can reach all plants for watering, weeding, and harvesting.
6. Plan for Growth: plants will get bigger, so don't crowd them! Leave enough space between each one.

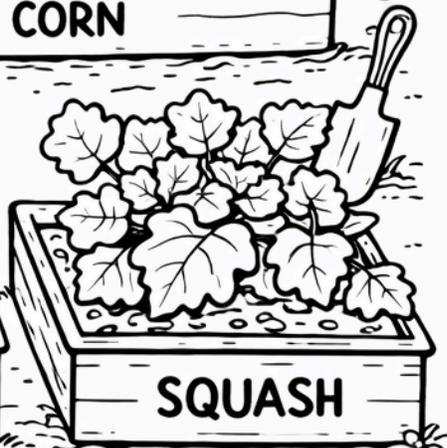
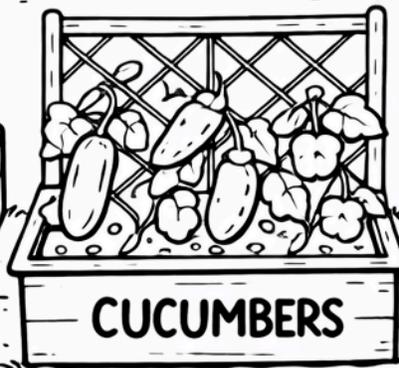
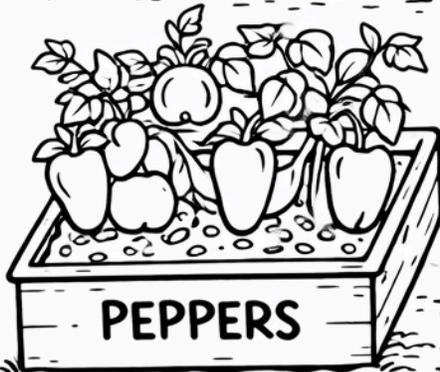
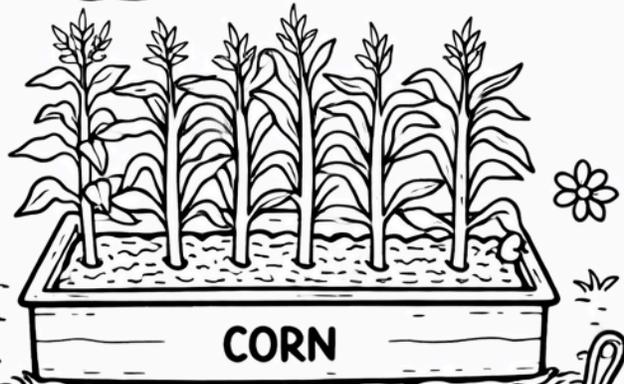
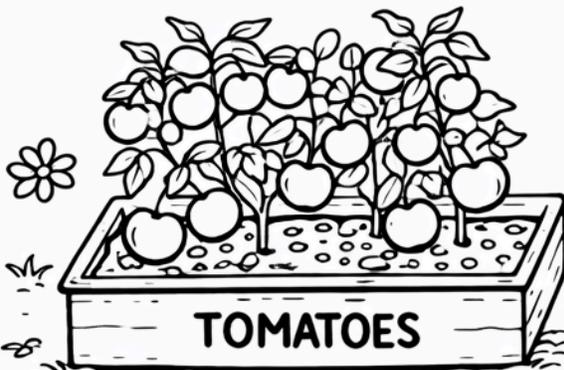
Draw layouts of your dream garden then describe at least one garden rule you are following for each.

A large, empty rectangular box with a thin grey border, intended for drawing a garden layout and describing the rules followed.

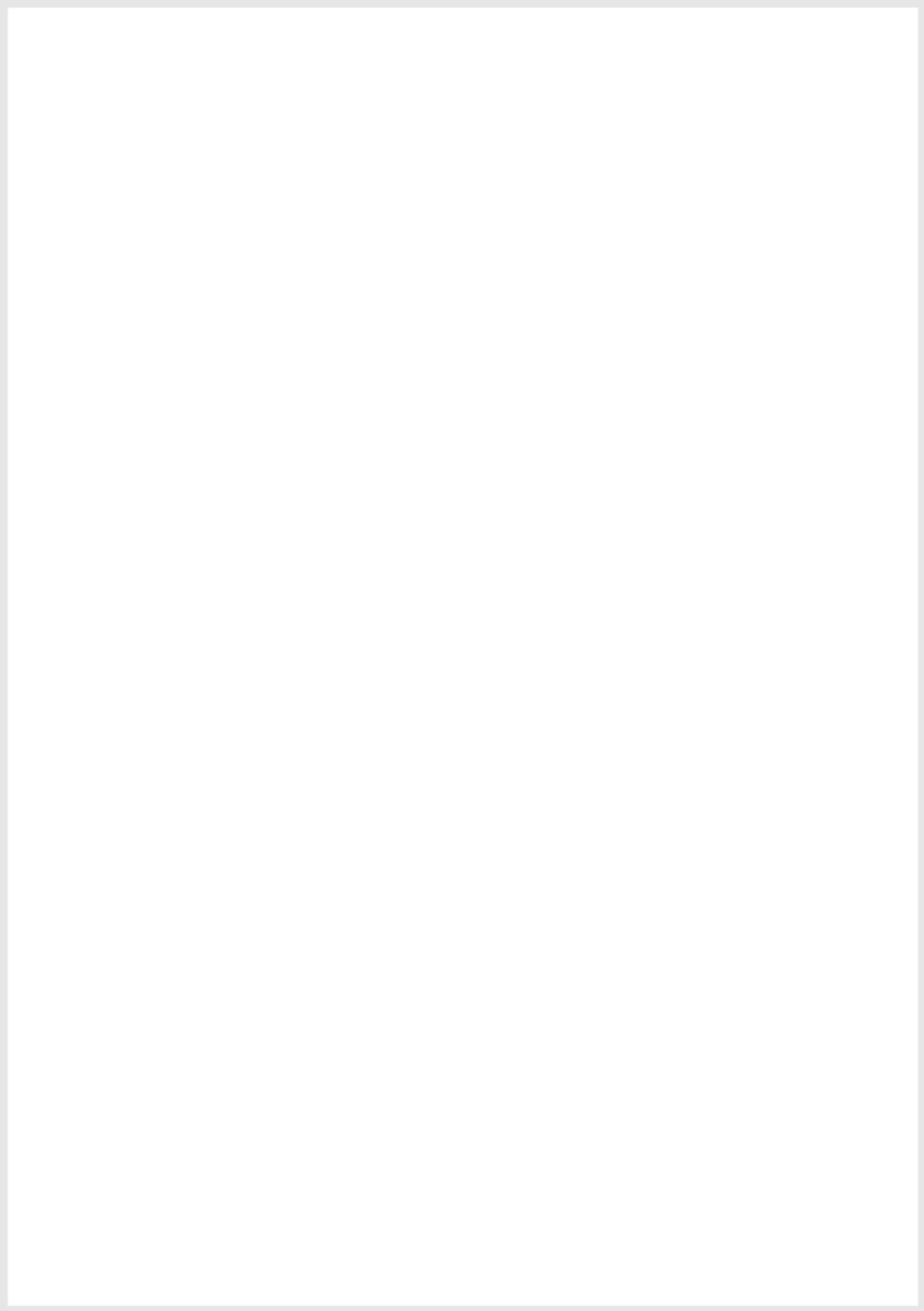




# WARM-SEASON VEGETABLE GARDEN



Draw a warm season garden. Include plants like tomatoes, peppers, and zucchini.



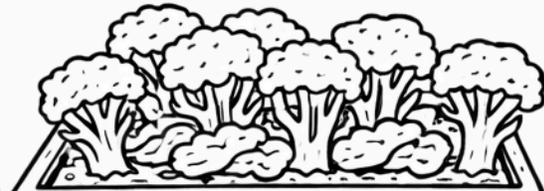




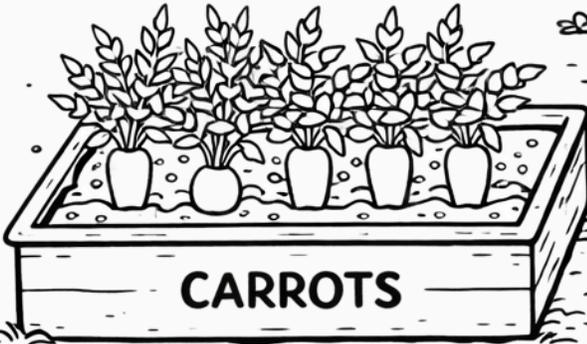
# COOL-SEASON VEGETABLE GARDEN



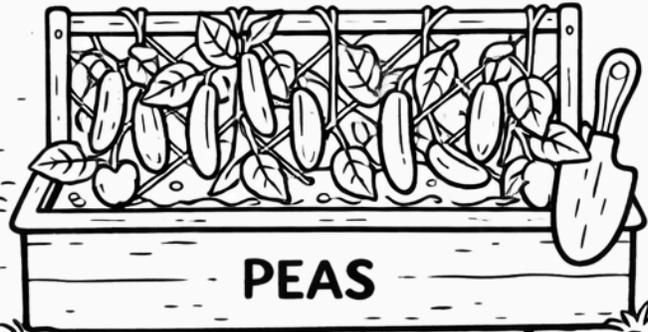
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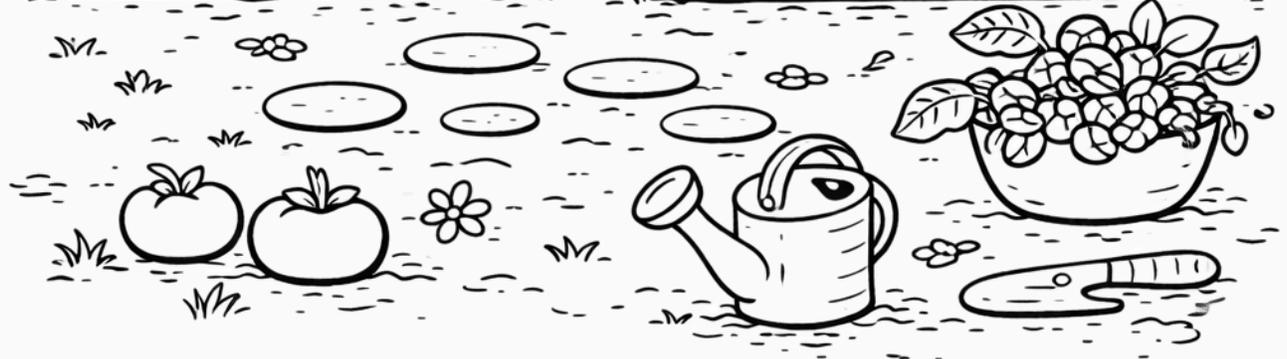
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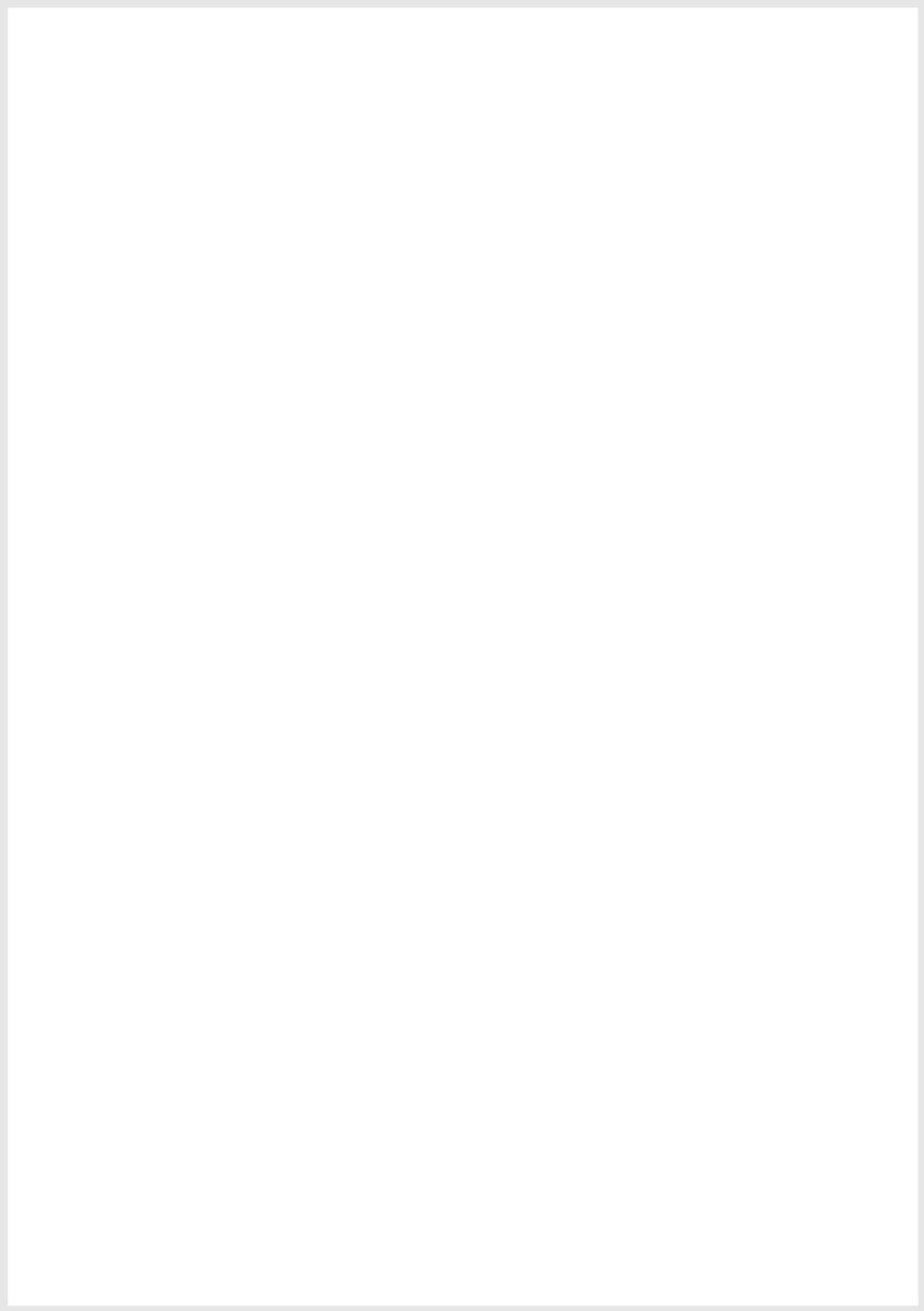
CARROTS



PEAS



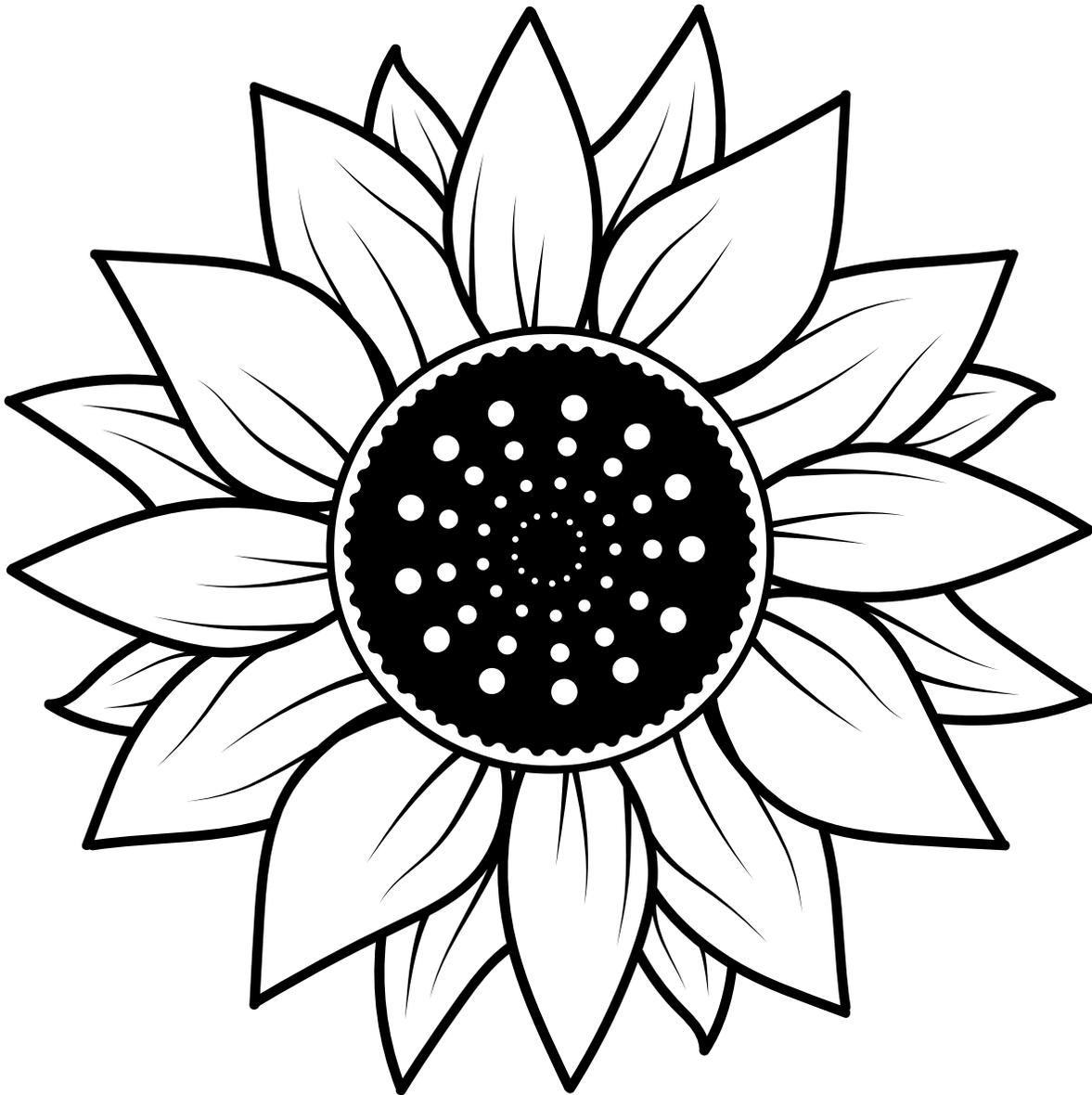
Draw a cool season garden. Include plants like lettuce, spinach, radishes, or peas.







Did you know that sunflowers can “follow” the sun? This is called heliotropism. During the day, young sunflowers turn their heads to face the sun moving from East to West! At night, they return to face East, ready to greet the morning sun.



Mammoth Sunflowers grow tall knowing this where would you place them in your garden and why?

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## Lesson 5: Starting Your Garden From Seed

Starting seeds is one of the most fun parts of gardening because it lets you watch tiny seeds grow into big strong plants!

Every seed has everything it needs to become a plant, but it needs the right care. First, you need to pick the right seeds for the season and your garden. Some seeds like warm weather, like tomatoes and peppers, and some like cooler weather, like lettuce and spinach.

Always check the seed packet—it tells you how deep to plant the seeds, how far apart to space them, and how long it will take for them to sprout.

Next, choose a container with holes in the bottom for drainage, like a seed tray, small pot, or even an egg carton. Then fill it with seed-starting mix, which is soft and light so roots can grow easily.

Plant each seed at the right depth, cover it lightly with soil, and water gently until the soil is moist, but not too wet. Place your seeds in a warm sunny spot or under a grow light, so they get lots of energy to grow.

Soon, tiny green leaves called cotyledons will pop up—these are the first leaves of your new plant! As the seedlings grow, they will develop real leaves, and they need sunlight, water, and gentle care every day.

Don't forget to label your seeds with the plant name and planting date so you remember what you planted. Some seeds sprout faster than others, so you can even do a mini experiment to see how temperature or sunlight affects germination.

Once your seedlings are big and strong enough, it's time to move them outside into your garden. Before planting them in the garden, you need to "harden them off" by slowly getting them used to sunlight, wind, and cooler temperatures.

Seed starting teaches patience, responsibility, observation skills, and it's so exciting to see your tiny seeds grow into healthy plants that will give you delicious vegetables, herbs, or flowers!



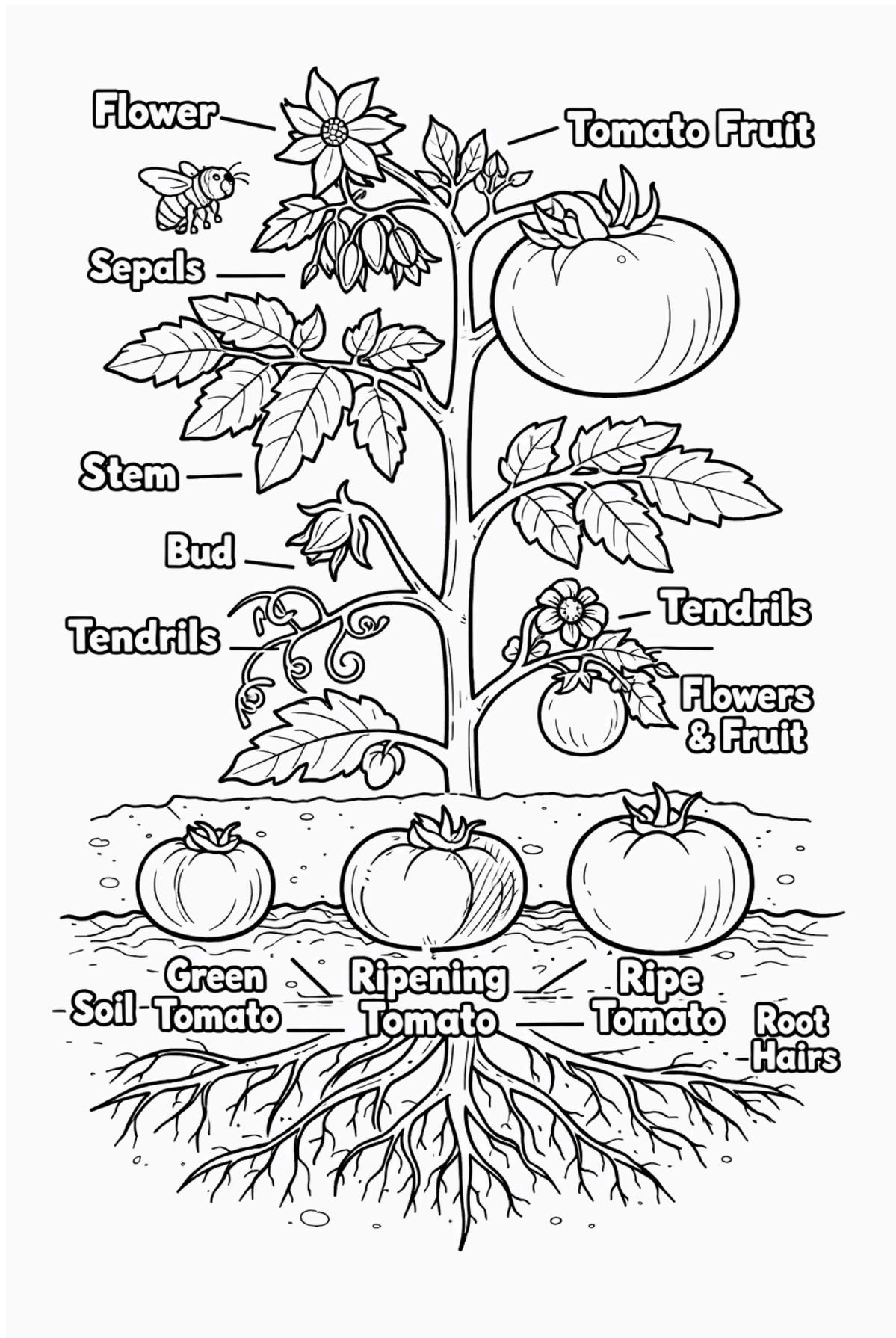


Use These Words To Fill In The Blank:

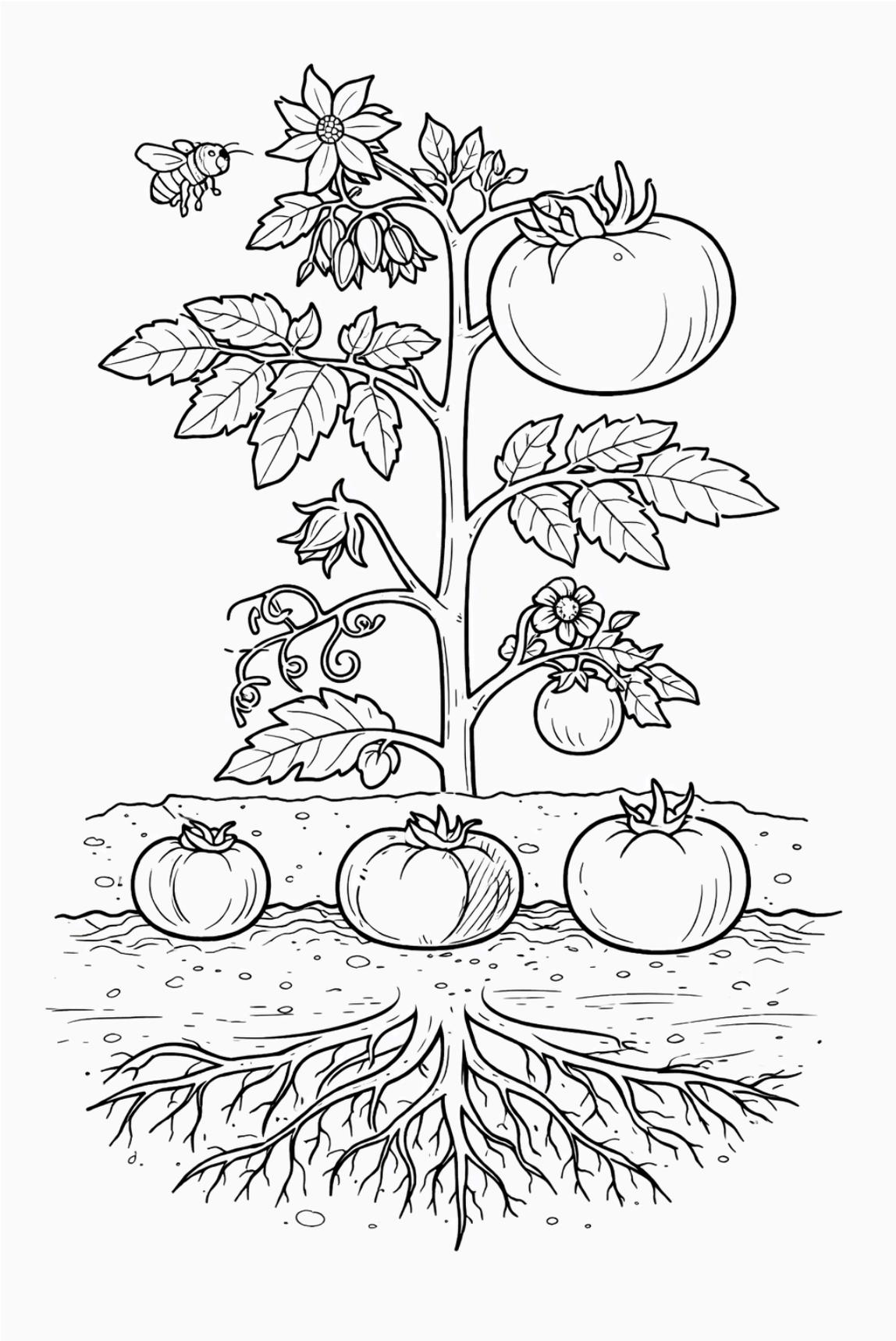
- Seeds
- Warm
- Cool
- Cotyledons
- Seed packet
- Seed-starting mix
- Drainage
- Moist
- Label
- Germination

1. Every \_\_\_\_\_ has everything it needs to grow into a plant.
2. Some seeds grow best in \_\_\_\_\_ weather, like tomatoes and peppers.
3. Some seeds grow best in \_\_\_\_\_ weather, like lettuce and spinach.
4. The first tiny leaves that appear on a new plant are called \_\_\_\_\_.
5. Check the \_\_\_\_\_ to know how deep to plant your seeds and how long they take to sprout.
6. Use \_\_\_\_\_ to plant your seeds because it is light and soft for roots to grow.
7. Make sure your container has \_\_\_\_\_ holes so water doesn't stay at the bottom and rot your seeds.
8. Water your seeds so the soil is \_\_\_\_\_ but not soggy.
9. Always \_\_\_\_\_ your seeds with the plant name and planting date so you know what you planted.
10. The process of a seed sprouting and starting to grow is called \_\_\_\_\_.

Check out all the parts of a tomato plant:



Label all the parts of a tomato plant:









Look closely at the tomato plant you colored. Write a paragraph explaining what is happening above the soil and below the soil. Describe how the roots help the plant, how the stem and leaves work together, and how flowers turn into tomatoes. Imagine you are the plant—what do you need each day to grow strong and healthy?



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# Lesson 6: Transplanting Seedlings Into The Garden

When your seedlings are big and strong enough, it is time to move them from their pots into the garden. This is called transplanting.

Transplanting means carefully moving a plant from one place to another, so it can keep growing. Seedlings need to be healthy before transplanting. A strong seedling has several real leaves, a sturdy stem, and roots that are not tangled or broken.

If you transplant a seedling too early, it may not survive, so patience is important.

Before planting your seedlings outside, they must get used to outdoor life. This process is called hardening off.

Inside your home, seedlings are protected from strong sunlight, wind, and cold nights. Outside, the weather is very different!

To harden off your plants, place them outside for a short time each day. Start with 1–2 hours in the shade, then slowly increase the time and sunlight over 7–10 days. This helps your seedlings grow stronger stems and prevents shock, which can cause plants to wilt or stop growing.

Once your plants are ready, it's time to prepare the garden. First, choose a sunny spot with healthy soil. Use your hands or a small shovel to dig a hole that is about the same size as the seedling's root ball. Make sure the hole is deep enough so the roots can spread out comfortably.

Each plant needs space to grow, so follow spacing rules. If plants are too close together, they will compete for sunlight, water, and nutrients.

Gently remove your seedling from its container by holding the soil—not the stem. The stem is fragile and can break easily. Place the seedling into the hole and make sure it is standing straight.

Fill in the hole with soil and gently press the soil down to remove air pockets. Do not pack the soil too tightly—roots need air to grow!

After transplanting, watering is very important. Give your plant a deep drink of water, so the soil settles around the roots. This helps the plant feel safe in its new home. For the first few days, check your seedlings daily.

Did you know some plants are perfect for starting indoors because they transplant easily into your garden later?

These plants grow strong roots in their pots and can handle being moved without getting hurt. Starting seeds indoors gives them a warm, safe place to grow before they face the wind, sun, and cooler soil outside. When you transplant these seedlings, they usually grow faster and produce more vegetables, herbs, or flowers because they had a head start.

Plants that transplant well usually have sturdy stems, healthy roots, and they aren't too delicate. With a little care and the right soil, your seedlings will survive their move and keep growing happily in your garden!

### **List of Seeds That Transplant Well**

Vegetables:

- Tomatoes – Grow strong roots in pots and handle moving to the garden easily.
- Peppers – Like a warm start indoors and transplant well into sunny soil.
- Eggplants – Benefit from a long indoor start and transplant easily.
- Broccoli – Sturdy seedlings can handle being moved outdoors.
- Cabbage – Can grow strong roots indoors before moving to cooler soil.

Herbs:

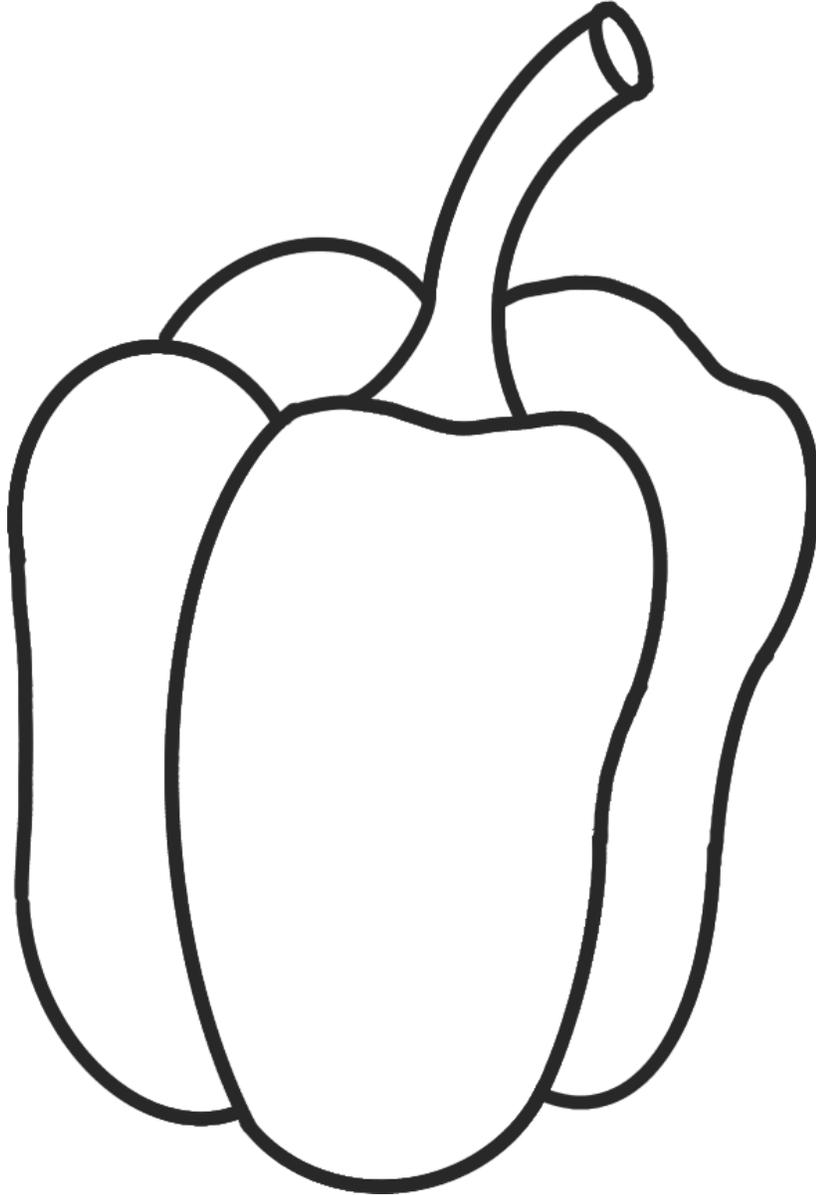
- Basil – Easy to start in small pots and transplant into the garden.
- Parsley – Seeds sprout slowly, but transplant well once they have a few leaves.
- Chives – Handle transplanting easily and grow quickly in the garden.

Flowers:

- Marigolds – Strong seedlings that move well into garden beds.
- Zinnias – Easy to start indoors and transplant after frost risk passes.

**Tip:** Plants like lettuce, carrots, or radishes do not transplant well because they have fragile roots. These are better planted directly in the garden.

Bell peppers are very sensitive to cold! When you transplant them outside, it's important to wait until the soil and air are warm. If they get too cold, they might stop growing or even get damaged. That's why gardeners always harden off peppers slowly before giving them a sunny spot in the garden.



Why do gardeners wait to transplant bell peppers until the soil and air are warm?

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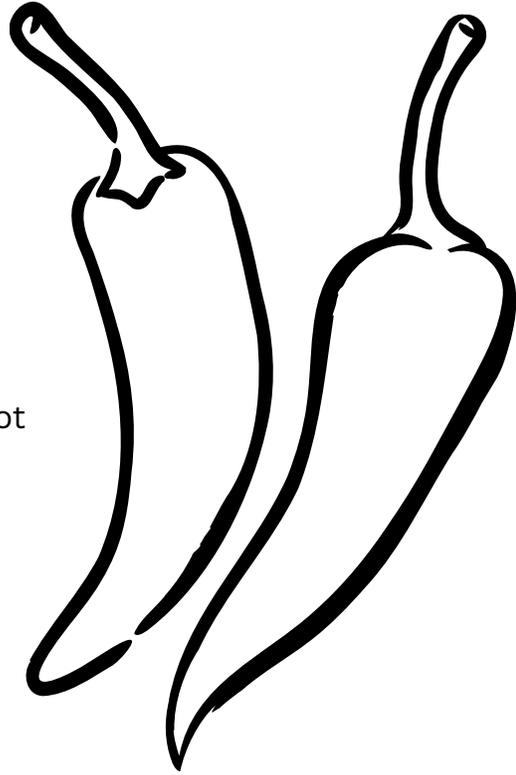
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## Label The Correct Order For Transplanting Your Seedlings Into The Garden

- Dig a hole in the garden
- Water the plant
- Harden off the seedling
- Gently remove the seedling from its pot
- Place the seedling in the hole
- Press soil around the roots



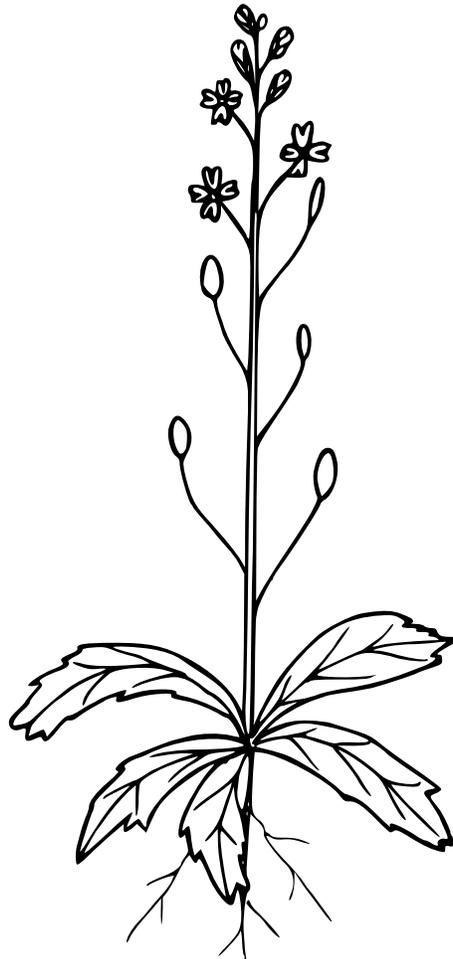
### Did You Know?

When you transplant seedlings, gently handling the roots and stem is very important.

If you pull or bend them too much, the plant can get shocked and stop growing for a while.

That's why gardeners always say, "Handle with care!" your tiny plant needs a smooth ride to its new garden home.

Imagine you are a tiny seedling being moved from your pot into a big garden. Write a story about your adventure! Describe how it feels to be gently lifted from the soil, carried to your new home, and planted in the garden. What do you see around you? What do you hope will happen as you start growing in your new space?



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## Lesson 7: Caring For Your Garden

A garden is like a living project—it needs care every day! When you take care of your plants, you help them grow strong, tall, and healthy.

One of the most important jobs is watering. Plants need just the right amount of water—too little and they get thirsty, too much and their roots can get soggy. You can check the soil with your fingers: if it feels dry, it's time to water!

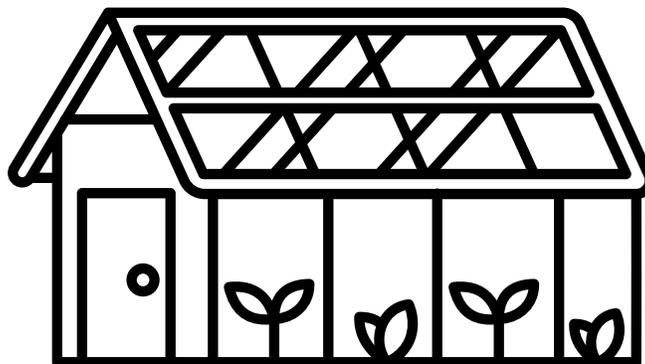
Another helpful trick is mulching. Mulch is a soft layer of leaves, straw, or tiny wood chips that goes on top of the soil. It keeps the soil moist, stops weeds from growing, and protects plant roots from getting too hot or cold. Speaking of weeds, weeding is super important too. Weeds are plants that grow where we don't want them and they steal water and nutrients from your garden plants. Pulling them out gives your garden plants more access to everything they need.

Sometimes plants need a little extra help to grow straight and tall. Pruning means cutting off old or extra leaves, so the plant can use its energy to grow new ones. Staking or using supports is another way to help tall plants like tomatoes and peppers to stand up straight, so they don't fall over or break.

Taking care of a garden also teaches you to be patient, observant, and responsible. Plants can't tell you when they're thirsty or sick, so you need to watch carefully.

Look for clues like yellow leaves, drooping stems, or little holes from insects. By noticing these things, you can help your plants feel better and grow strong.

When you care for your garden every day, you get to see the results of your hard work! Flowers bloom, vegetables grow, and fruits ripen. Just like people, plants thrive when they are given love, attention, and care.





# Create A Gardening Plant Log

Plant Name: \_\_\_\_\_

Circle Plant Type: Annual / Biennial / Perennial

Days To Harvest: \_\_\_\_\_

Date Planted: \_\_\_\_\_

Location: \_\_\_\_\_ Sunny  Partial Sun  Shade

Fertilizer / Soil Amendment Requirements: \_\_\_\_\_

\_\_\_\_\_

Pests / Disease / Concerns: \_\_\_\_\_

\_\_\_\_\_

Watering Schedule: \_\_\_\_\_

\_\_\_\_\_

Harvest Date: \_\_\_\_\_

\_\_\_\_\_

Harvest Amount:

\_\_\_\_\_

Notes:

\_\_\_\_\_

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# Create A Gardening Plant Log

Plant Name: \_\_\_\_\_

Circle Plant Type: Annual / Biennial / Perennial

Days To Harvest: \_\_\_\_\_

Date Planted: \_\_\_\_\_

Location: \_\_\_\_\_ Sunny  Partial Sun  Shade

Fertilizer / Soil Amendment Requirements: \_\_\_\_\_

\_\_\_\_\_

Pests / Disease / Concerns: \_\_\_\_\_

\_\_\_\_\_

Watering Schedule: \_\_\_\_\_

\_\_\_\_\_

Harvest Date: \_\_\_\_\_

\_\_\_\_\_

Harvest Amount:

\_\_\_\_\_

Notes:

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\_\_\_\_\_

# Create A Gardening Plant Log

Plant Name: \_\_\_\_\_

Circle Plant Type: Annual / Biennial / Perennial

Days To Harvest: \_\_\_\_\_

Date Planted: \_\_\_\_\_

Location: \_\_\_\_\_ Sunny  Partial Sun  Shade

Fertilizer / Soil Amendment Requirements: \_\_\_\_\_

\_\_\_\_\_

Pests / Disease / Concerns: \_\_\_\_\_

\_\_\_\_\_

Watering Schedule: \_\_\_\_\_

\_\_\_\_\_

Harvest Date: \_\_\_\_\_

\_\_\_\_\_

Harvest Amount:

\_\_\_\_\_

Notes:

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\_\_\_\_\_

# Monthly Planner

DATE: \_\_\_\_\_

Write a Gardening Goal:

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## TO DO LIST

<input type="checkbox"/>	

## NOTES

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# Monthly Planner

DATE: \_\_\_\_\_

Write a Gardening Goal:

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## TO DO LIST

<input type="checkbox"/>	

## NOTES

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# Monthly Planner

DATE: \_\_\_\_\_

Write a Gardening Goal:

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## TO DO LIST

<input type="checkbox"/>	

## NOTES

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# Monthly Planner

DATE: \_\_\_\_\_

Write a Gardening Goal:

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## TO DO LIST

<input type="checkbox"/>	

## NOTES

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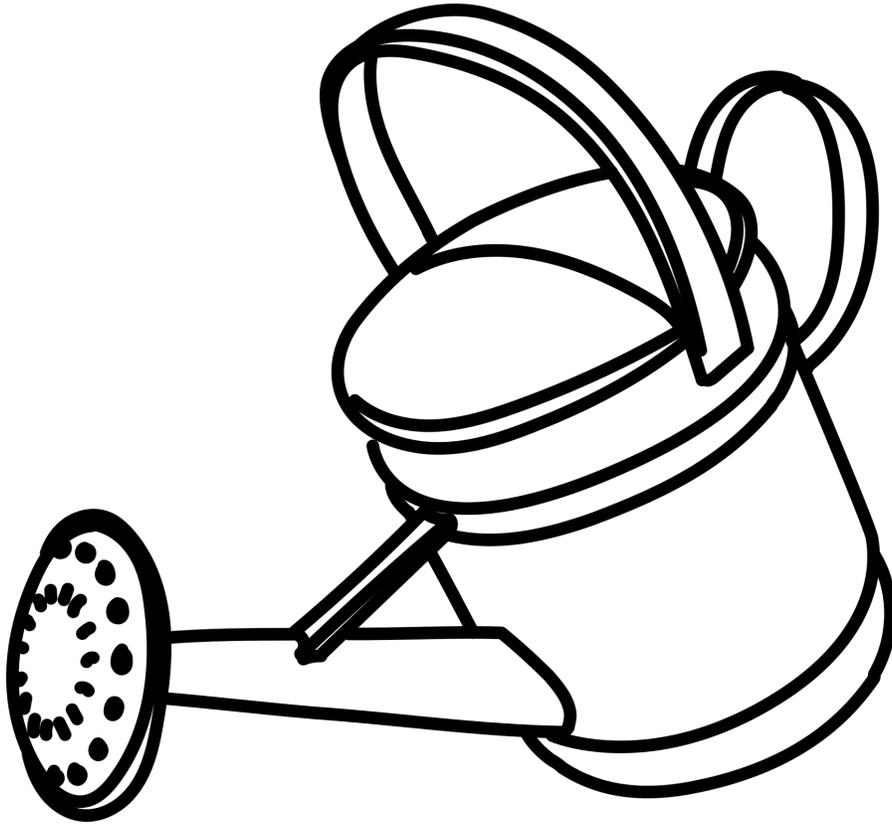
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In your own words, describe how to take care of a garden?



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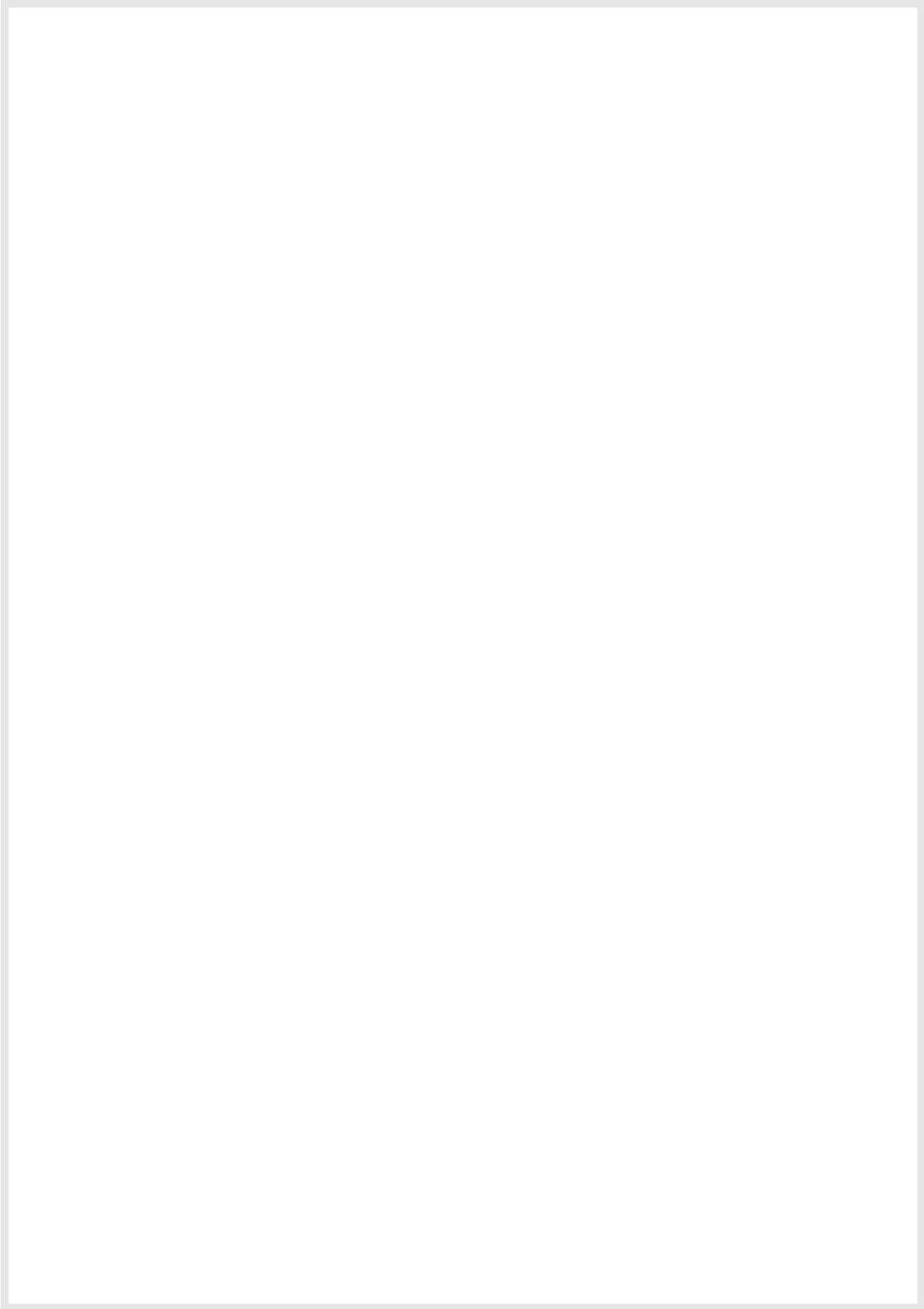
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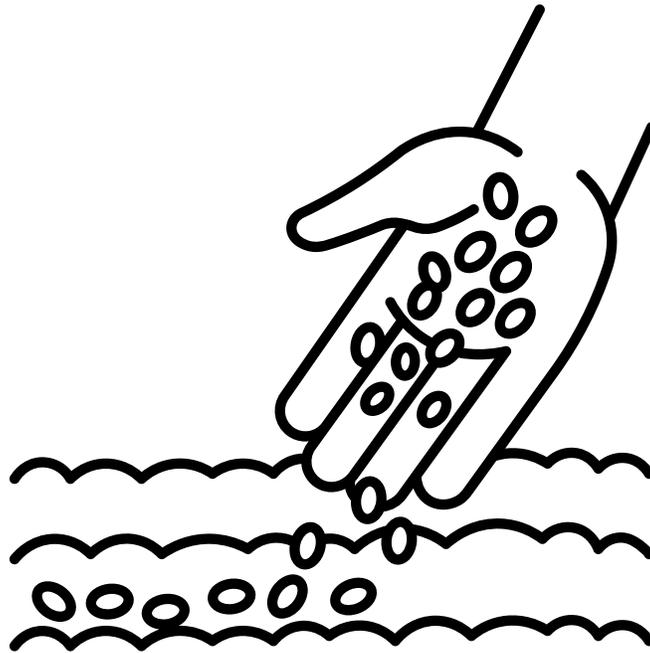


Draw a picture of yourself taking care of the garden.



Use the words to fill in the blanks. Each word is used once.

- Water
- Weeds
- Mulch
- Prune
- Staking
- Sunlight
- Observation
- Leaves
- Responsibility
- Care



1. Plants need \_\_\_\_\_ to drink, so they don't dry out.
2. \_\_\_\_\_ are plants that grow where we don't want them and steal nutrients.
3. \_\_\_\_\_ is a layer of leaves or straw that helps keep soil moist and cool.
4. \_\_\_\_\_ means cutting off old or extra stems and leaves, so the plant can grow better.
5. \_\_\_\_\_ helps tall plants like tomatoes stand up straight.
6. Plants need \_\_\_\_\_ to make energy and grow strong.
7. Paying attention to your plants every day is called \_\_\_\_\_.
8. Yellow or drooping \_\_\_\_\_ can tell you a plant needs help.
9. Taking care of your garden teaches patience and \_\_\_\_\_.
10. Plants grow best when you give them attention and \_\_\_\_\_.

Did you know flowers attract helpful pollinators like butterflies and bees to your garden?



# Lesson 8: Harvest Your Garden

Harvest time is one of the most exciting parts of gardening! This is when you get to enjoy all of your hard work.

Knowing when and how to pick your plants is important, so they taste their best.

## **Every plant has its own “perfect time” to be harvested:**

- Tomatoes – Pick when they are fully colored and slightly soft.
- Peppers – Pick when they reach full color (green, red, yellow, or orange depending on the type).
- Cucumbers – Pick while they are small and firm not large.
- Lettuce – Pick the outer leaves as they grow or the whole head when it’s full.
- Carrots and Radishes – Pull when they reach the size you want and the tops peek above the soil.

Pay attention to your plants every day. If you wait too long, vegetables can get too big, overripe, or even spoil.

## **Why Harvest Planning is Important**

Harvesting at the right time does more than give you delicious food:

1. Keeps Plants Productive: Picking fruits and vegetables regularly encourages plants to produce more.
2. Prevents Waste: Overripe fruits can rot and attract pests.
3. Teaches Responsibility: Watching your garden and picking at the right time helps you learn patience and care.

## Easy Tips for Harvesting:

- Use clean hands or scissors to pick delicate fruits and vegetables.
- Harvest in the morning for the freshest flavor.
- Leave some vegetables on the plant if they aren't ready yet.
- Wash your harvest before eating or cooking.

## What Is Crop Rotation?

Crop rotation is a smart way to keep your garden healthy from year to year. Plants are grouped into families like:

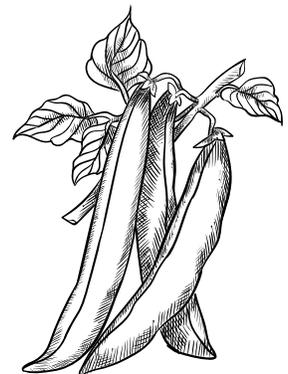
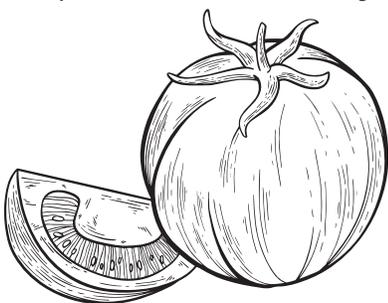
- Nightshades: Tomatoes, peppers, eggplants
- Legumes: Beans, peas
- Brassicas: Broccoli, cabbage, cauliflower

Moving plant families to different beds each season prevents pests and diseases from building up in the soil and keeps nutrients balanced.

## How To Save Your Own Seeds:

Some plants produce seeds you can collect for next year. For example:

- Tomatoes, peppers, beans, and peas are easy to collect and save.
- Collect seeds from fully ripened fruits, dry them, and store them in a cool dry place. Next season, you can plant the same varieties again!



## **THIS IS HOW MANY DAYS IT TAKES TO GROW FROM SEED**

### **Leafy Greens**

- Lettuce (looseleaf): 40–55 days
- Spinach: 35–50 days
- Kale: 55–75 days
- Swiss Chard: 50–60 days
- Arugula: 30–40 days
- Mustard Greens: 30–50 days

### **Roots**

- Radishes: 25–35 days
- Carrots: 60–80 days
- Beets: 45–65 days
- Turnips: 35–60 days
- Rutabaga: 80–100 days

### **Brassicas**

- Broccoli: 70–100 days
- Cauliflower: 70–100 days
- Cabbage: 80–110 days
- Brussels Sprouts: 90–120 days
- Kohlrabi: 55–70 days

### **Peas**

- Shelling Peas: 60–70 days
- Snow Peas: 55–65 days
- Snap Peas: 55–65 days

### **Alliums**

- Green Onions: 50–60 days
- Bulb Onions (from seed): 100–120+ days
- Leeks: 120–150 days

## **THIS IS HOW MANY DAYS IT TAKES TO GROW FROM SEED**

### **Fruit Vegetables**

- Tomatoes (transplants): 60–85 days
- Peppers (transplants): 60–90 days
- Eggplant: 70–90 days
- Tomatillos: 75–90 days

### **Cucurbits**

- Cucumbers: 50–65 days
- Zucchini: 45–55 days
- Yellow Squash: 50–60 days
- Pumpkins: 90–120 days
- Watermelon: 70–100 days
- Cantaloupe/Melon: 70–90 days

### **Legumes**

- Bush Beans: 50–60 days
- Pole Beans: 60–75 days
- Lima Beans: 65–80 days

### **Roots (Warm-Adapted)**

- Sweet Potatoes: 90–120 days

### **Corn**

- Sweet Corn: 60–100 days (variety dependent)

### **Herbs**

- Basil: 60–75 days
- Dill: 40–60 days
- Cilantro: 50–60 days (bolts early in heat)
- Parsley: 70–90 days

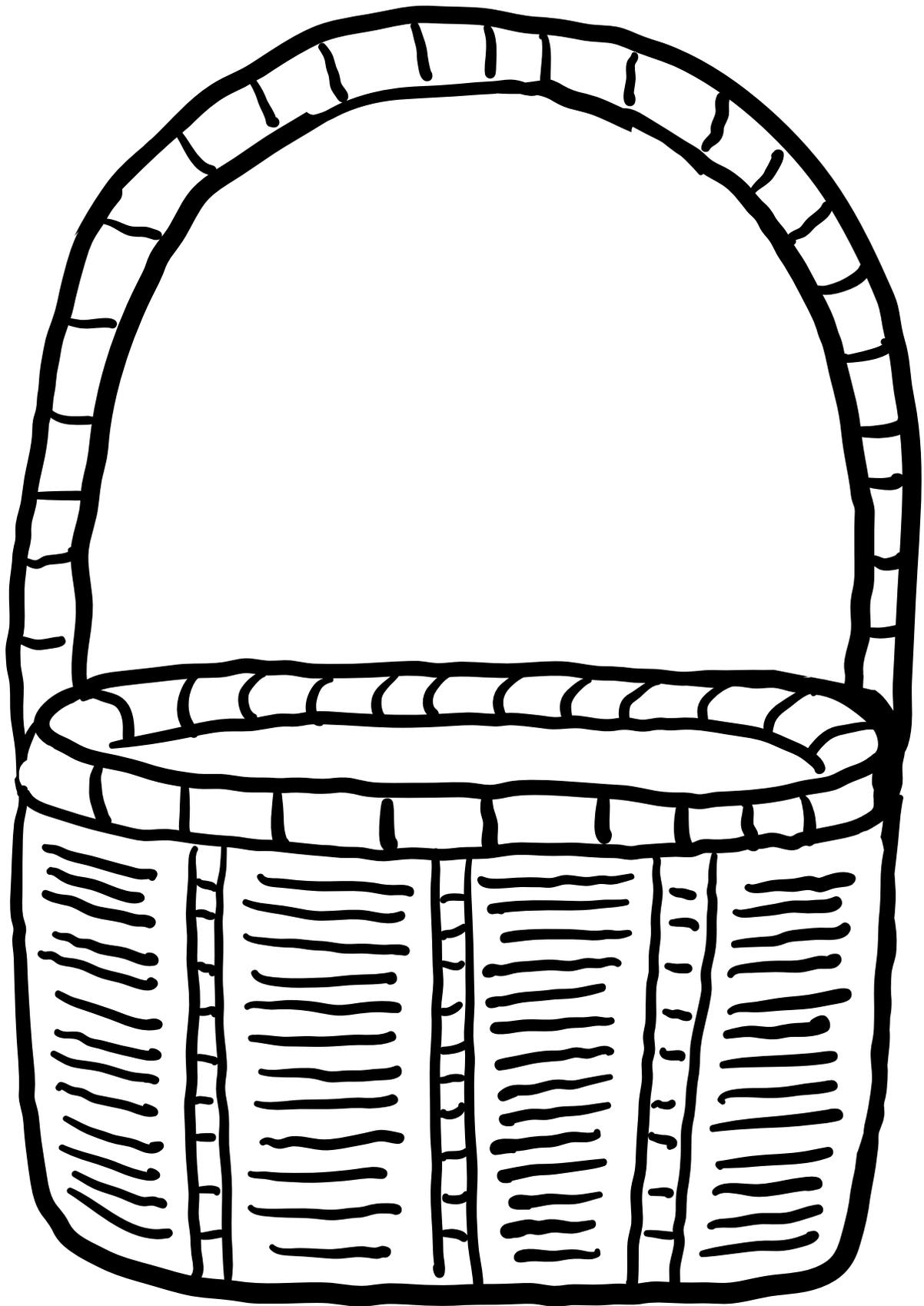
MARK WHAT YOU WOULD PLANT AND WHEN YOU WOULD HARVEST

JANUARY	FEBRUARY	MARCH
APRIL	MAY	JUNE
JULY	AUGUST	SEPTEMBER
OCTOBER	NOVEMBER	DECEMBER

WRITE THE PLANTS AND DAYS TO HARVEST



Draw all the things you can harvest from the garden.



## **Mini Growing Experiment: Grow Your Own Potatoes**

Objective: Grow your own potatoes in a 5 gallon bucket to understand how to grow this cool plant in a small space.

### **Materials:**

- 5 gallon bucket
- Soil
- One old potato with two “eyes”
- Water
- Sunny location

Potato “eyes” are the small bumps on a potato where new shoots can grow. Chitting your potatoes by placing them in the sun before planting helps them grow better.

### **Follow These Steps:**

1. Fill your bucket with soil a quarter of the way.
2. Plant potato with “eyes” facing upward deep in the bucket then cover with soil.
3. Place in a sunny location.
4. Water regularly.
5. Add more soil “hilling” the plant as it grows.
6. Harvest when the leaves have fully died back.

### **Record What Happened:**

- What color are the potato leaves today? Are they bright green, pale, or yellowing?
- How tall are your potato plants? Measure them and write down the height.
- Are there any signs of pests on the leaves or stems? What do you notice?
- Look at the soil—does it feel dry or damp? Does the soil need watering?

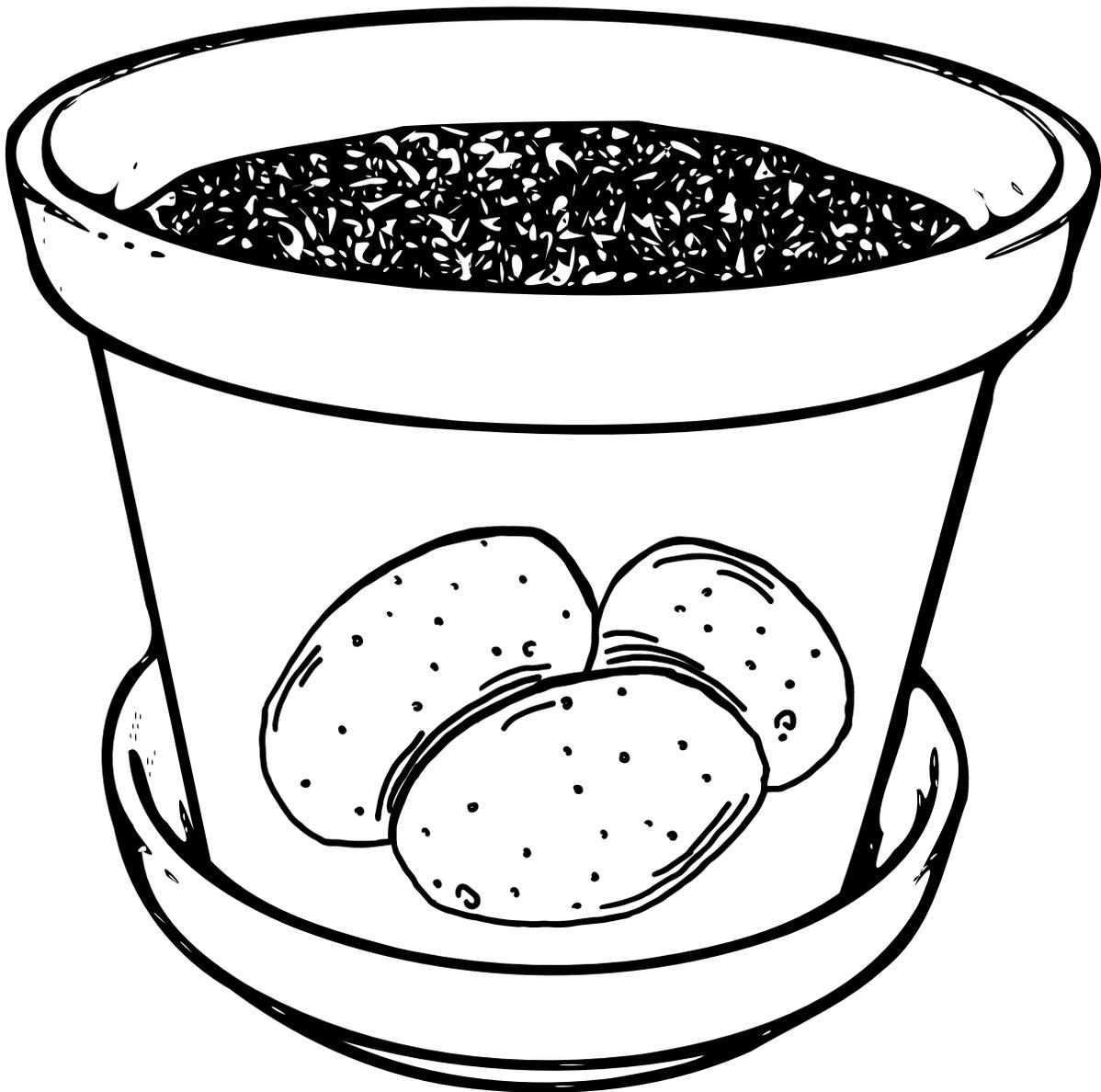




Potatoes grow underground as part of a plant called a tuber. The little “eyes” on a potato are special spots that can sprout into new stems and leaves above the soil.

Those stems grow into a potato plant and under the ground new potatoes start to form along the roots! Potatoes like loose cool soil and need plenty of water and sunlight for their leaves above ground to make energy.

By the end of the growing season, each plant can produce many new potatoes ready to harvest. So every potato you eat started as a tiny sprout from another potato!



# Lesson 9: Common Garden Pests and Diseases

Gardening is fun, but sometimes plants can have problems that make it hard for them to grow.

Common problems include pests, diseases, and environmental issues. Learning how to notice these problems and fix them is part of being a great gardener!

## **Common Garden Pests:**

Pests are insects or animals that eat or damage your plants. Some common garden pests are:

- Aphids – Tiny bugs that suck the juice from leaves and stems.
- Caterpillars – Worm like insects that chew holes in leaves.
- Slugs and Snails – Leave slime trails plus eat soft leaves and seedlings.
- Whiteflies – Small white flying insects that can make plants weak.

## **How to Spot Pests:**

- Look for holes in leaves.
- Check for sticky residue or tiny bugs on stems and leaves.
- Watch for chewed fruits or leaves.

## **Common Garden Problems:**

Besides pests, plants can have other problems:

- Yellow leaves – Could be a sign of too much or too little water and a lack of nutrients.
- Wilting – The plant isn't getting enough water or is too hot.
- Spots or mold on leaves – Could mean a fungal or bacterial disease.

## **How to Help Plants:**

- Remove pests by hand or use safe natural treatments like soapy water or neem oil.
- Make sure plants get the right amount of water and sunlight.
- Remove diseased leaves to stop problems from spreading.



Imagine you are a garden superhero whose job is to protect plants from pests and problems. One day, you see insects or a plant disease affecting the garden. You think about how to save the plants, what steps to take to protect them, and how to help other gardeners take care of their plants too.



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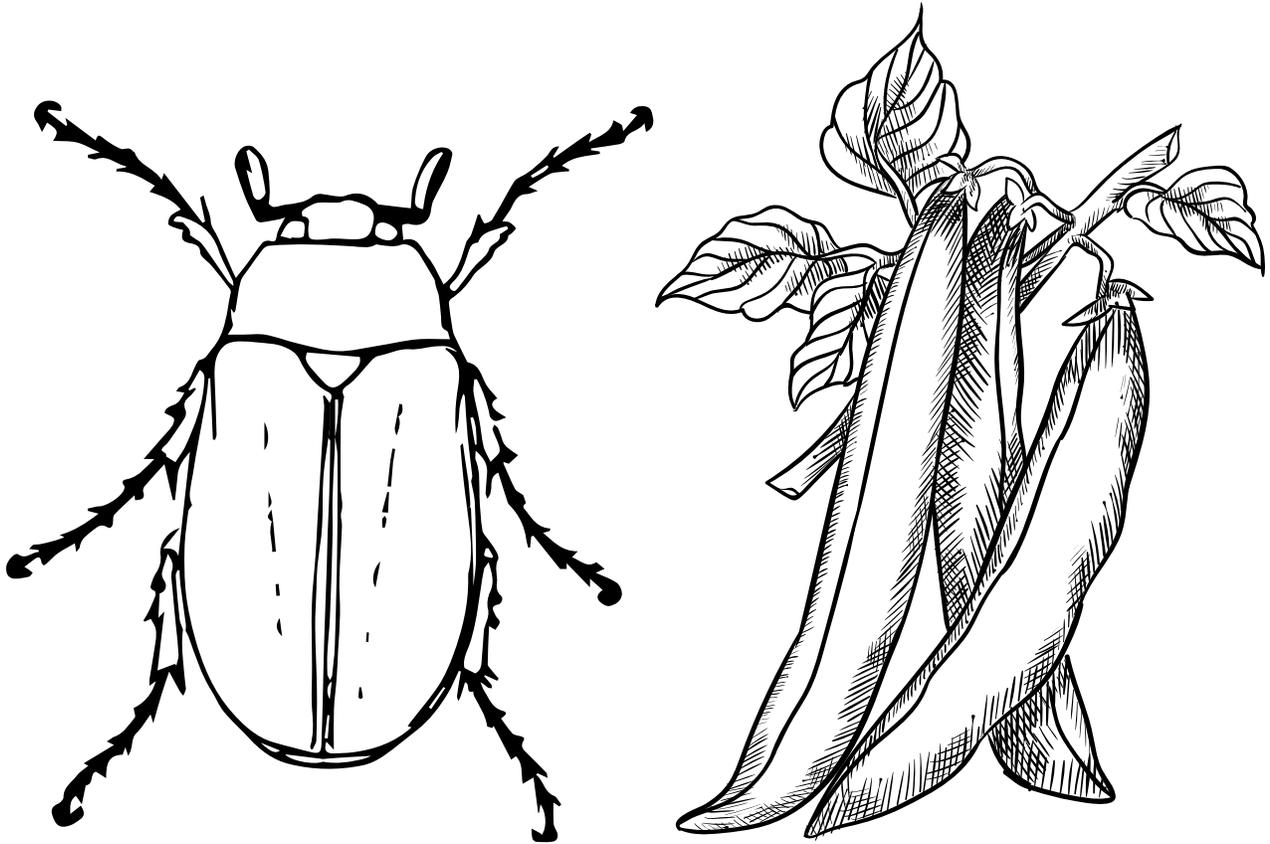
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Japanese beetles are tiny shiny insects that love to eat the leaves of many garden plants. One of their favorite foods is pole beans. These beetles chew holes in the leaves, which can make it harder for the plant to grow strong and produce beans. Gardeners often need to check their bean plants and carefully remove or deter these pests.



Why do Japanese beetles cause problems for pole beans and what can a gardener do to help the plants?

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**Match The Common Garden Problem To It's Source:**

- |                  |   |
|------------------|---|
| Aphids           | a) Small white flying bugs that weaken plants |
| Caterpillars     | b) Suck juice from leaves and stems           |
| Slugs and Snails | c) Holes in leaves                            |
| Yellow Leaves    | d) Leaves turning yellow                      |
| Whiteflies       | e) Slimy trails and eaten leaves              |

How can you tell if a plant has been affected by pests like aphids or caterpillars?

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What do Japanese beetles like to eat on pole bean plants and why can this be a problem for the plant?

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What are two things you can do to help a plant stay healthy if you notice pests or other problems?

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## Did You Know?

Some bugs are helpful! Not all insects are bad—ladybugs eat aphids, which are tiny pests that can hurt your plants. By letting ladybugs live in your garden you can naturally protect your plants.

Plants can tell you when they're sick. Yellowing leaves, holes in leaves, or wilting are signs that a plant might have too much or too little water, a disease, or pests. Observing your plants closely helps you catch problems early.

Rotation keeps the garden healthy. Moving plant families to different garden beds each year can stop pests and diseases from coming back. This simple trick keeps the soil strong and your plants happy.

Some pests like slugs and snails only come out at night or when it's wet. By checking your garden in the morning, you can spot their trails and remove them before they eat too many leaves. This helps your plants stay strong and healthy!



# Lesson 10: Garden To Table Recipe Ideas

Growing your own fruits and vegetables is exciting, but the fun doesn't stop in the garden! Garden to table means taking the food you grow and turning it into delicious meals you can eat. When you pick your own vegetables and fruits, you know they are fresh, healthy, and full of flavor. You also learn how to prepare, cook, and enjoy the food you grew with your own hands.

## **Why Garden to Table Matters:**

1. **Freshness and Taste:** Food picked from your garden tastes better than store bought because it hasn't traveled far or sat on a shelf.
2. **Nutrition:** Fresh vegetables and fruits keep more vitamins and nutrients than food that has been stored for a long time.
3. **Learning Skills:** You learn how to wash, chop, and cook vegetables safely, as well as, how to plan meals using what's in season.
4. **Responsibility:** You get to see how your hard work in the garden turns into something you can enjoy at the table.

## **Steps For Garden to Table:**

1. **Harvest:** Pick vegetables and fruits when they are ripe and ready.
2. **Wash:** Clean your produce under running water to remove dirt or insects.
3. **Prepare:** Chop, slice, or peel your vegetables depending on the recipe.
4. **Cook or Serve:** Some vegetables are great raw in salads and others are yummy cooked in soups, stir-fries, or roasted.
5. **Eat and Enjoy:** Taste the reward of your hard work and share it with family or friends!

# My New Garden To Table Recipe

Write A Recipe Idea:

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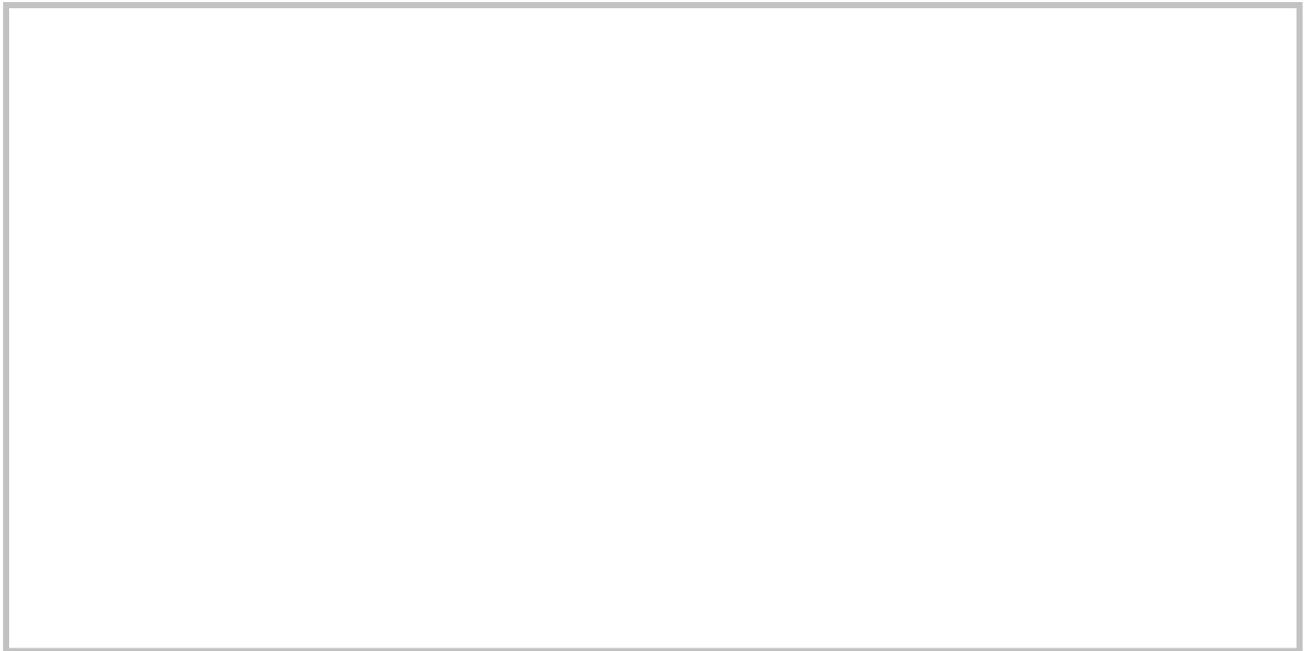
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Draw Your New Dish:



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# My New Garden To Table Recipe

Write A Recipe Idea:

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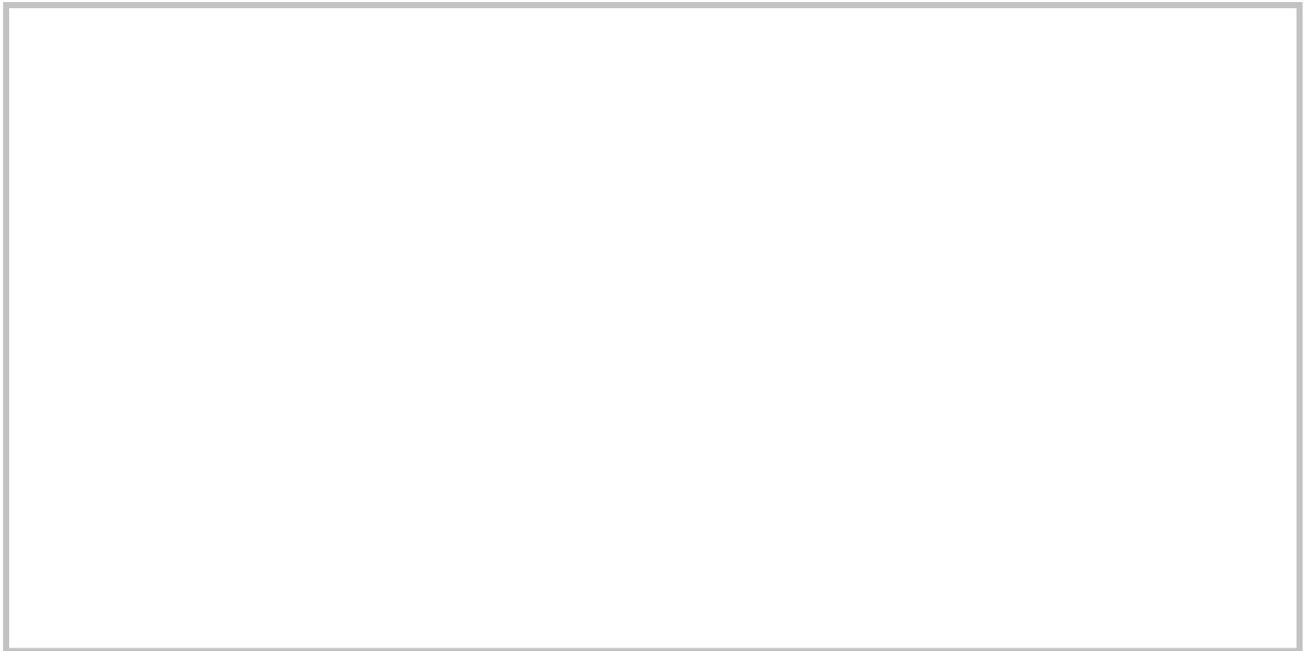
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Draw Your New Dish:



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# My New Garden To Table Recipe

Write A Recipe Idea:

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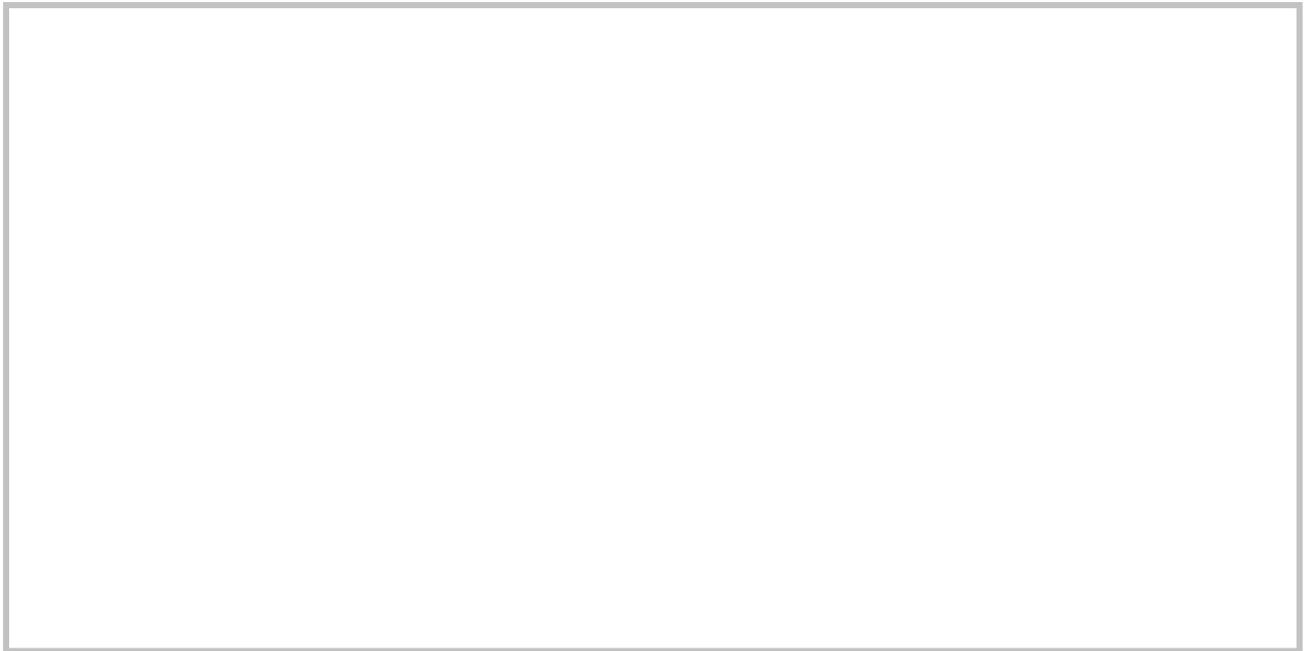
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Draw Your New Dish:



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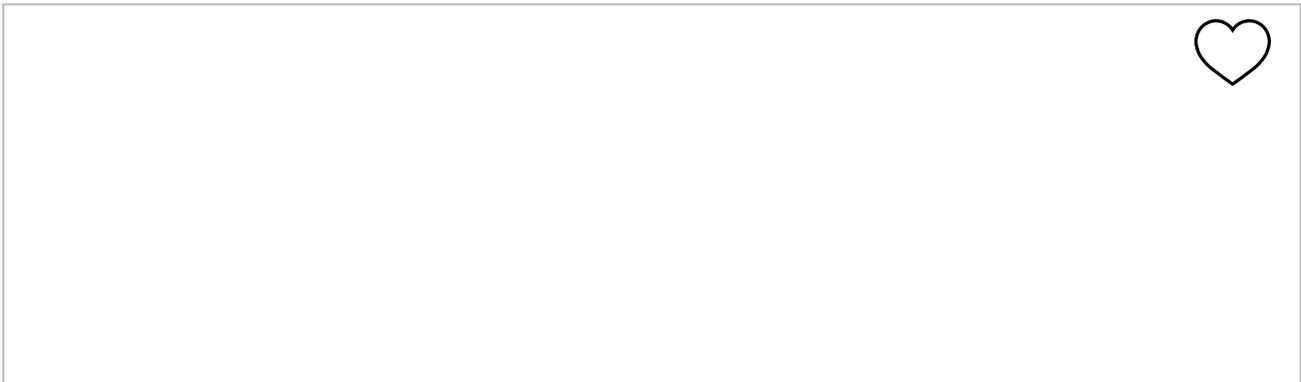


Pick one vegetable from your garden this week. Try three ways to eat it—raw, cooked, or in a new recipe. Draw and color which way you liked best and why.

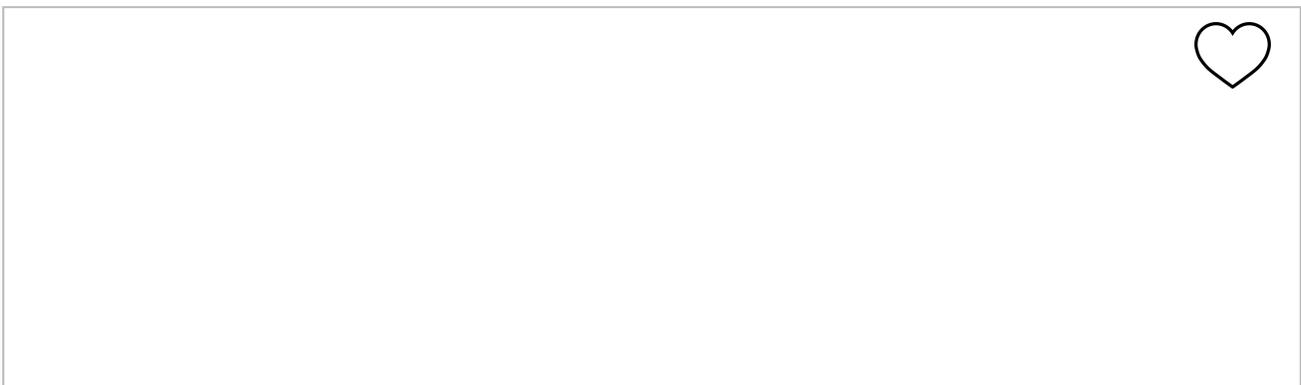
I picked \_\_\_\_\_ to try and my favorite recipe was...



A large empty rectangular box for drawing and coloring, with a small heart icon in the top right corner.



A large empty rectangular box for drawing and coloring, with a small heart icon in the top right corner.



A large empty rectangular box for drawing and coloring, with a small heart icon in the top right corner.

## Easy Garden To Table Recipe Ideas To Make

Garden to Table is all about taking the fruits and vegetables you grow in your garden and turning them into tasty meals and snacks. When you pick your own produce, you know it is fresh, healthy, and full of flavor.

Garden to Table teaches you how to wash, prepare, and cook your vegetables, while also learning to enjoy the food you grew with your own hands. It's a fun way to connect with your garden, be creative in the kitchen, and eat healthy foods.

### Easy Garden-to-Table Recipe Ideas

#### Raw & Simple Recipes

- Garden salad with lettuce, tomatoes, and cucumbers
- Carrot sticks or celery sticks with hummus
- Sliced cucumbers and bell peppers with ranch dip
- Fresh Salsa with tomatoes, green onions, cilantro, and jalapenos

#### Cooked Recipes

- Roasted carrots, potatoes, and zucchini with olive oil
- Stir-fried bell peppers and broccoli
- Tomato soup using fresh tomatoes
- Vegetable omelet with garden vegetables

#### Fun Kid-Friendly Recipes

- Veggie wraps with lettuce, tomato, and cucumbers
- Homemade cucumber salad with cucumbers, onion, and tomatoes
- Smoothies with garden herbs like mint and fruits like berries
- Mini pizzas topped with fresh tomatoes, basil, and peppers

Think about the fruits and vegetables you grow in your garden. Write about why it's important to eat the food you grow yourself. How does eating fresh garden food help you stay healthy and strong? How does it taste different from store bought food? Can eating your own garden food make you feel proud of the work you did in the garden? Write about your favorite garden produce and how you like to eat it!



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Imagine you are opening your very own farm market stand! Write about what fruits, vegetables, or garden goodies you would sell. Describe how your stand would look—would it have a colorful sign, baskets of fresh produce, or flowers for decoration? Who would visit your stand and what would you say to tell them why your fruits and veggies are the best? Describe your stand and your yummy garden harvest too!



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Think about how growing your own fruits and vegetables at home can help the environment, your family, and your community. Write about the ways your garden can make a difference. Can it help reduce waste, save money, or provide healthy food for your family? Can you share your harvest with neighbors or donate extra vegetables to someone in need? Write how your garden is making the world a better place!



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