

# SPRING BREAK ACTIVITY KIT

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# PHYSICAL ACTIVITY BINGO

**Instructions:** Make it a goal to complete each activity on this card by the end of your Spring Break. As you complete each activity cross them off on the card, to help you keep track of your progress. Be sure to always let an adult know when you go to play outside.

<p>5 Burpees</p> 	<p>Take a Bike Ride</p> 	<p>Jump Rope</p> 	<p>30 seconds Wall Sit</p> 	<p>Play Basketball</p> 
<p>10 Squats</p> 	<p>Practice Yoga</p> 	<p>Play at a Park</p> 	<p>10 Star Jumps</p> 	<p>10 Push Ups</p> 
<p>Go for a jog/run</p> 	<p>10 Jumping Jacks</p> 	<p>Dance to your favorite song</p> 	<p>Meditate</p> 	<p>10 High Knees</p> 
<p>Play Tag</p> 	<p>10 Lunges</p> 	<p>10 Mountain Climbers</p> 	<p>Play Frisbee</p> 	<p>Take a Walk</p> 
<p>Plank for 15 seconds</p> 	<p>Try a new sport</p> 	<p>10 side lunges</p> 	<p>Play Catch</p> 	<p>10 Sit Ups</p> 

# PAPER HELICOPTERS

## OBJECTIVE

In this activity children explore how some things fall and how varying the size of the rotor blades, the shape of the rotor blades and the weight of a paper helicopter affect the way a helicopter spins.



## ACTIVATE BACKGROUND KNOWLEDGE

So, what would happen if you dropped a hammer and a feather at the same time, from the same height? Well, the hammer would hit the ground first, right? But why? You might think it's because the hammer is heavier, or has more mass than the feather. But it's actually not because of that at all.

Watch this video for more info:

<https://www.youtube.com/watch?v=dxcx35x5L9Y>

## GATHER MATERIALS

- Paper
- Paperclips
- Scissors (not included)
- Helicopter Templates

## BIG QUESTIONS

- What makes a good helicopter?
- Can you make some different helicopters and decide which one is best?
- What do we mean by best? Is it the one that spins the most?
- Or is it the one that takes longest to fall to the ground?

## WARM UP ACTIVITY

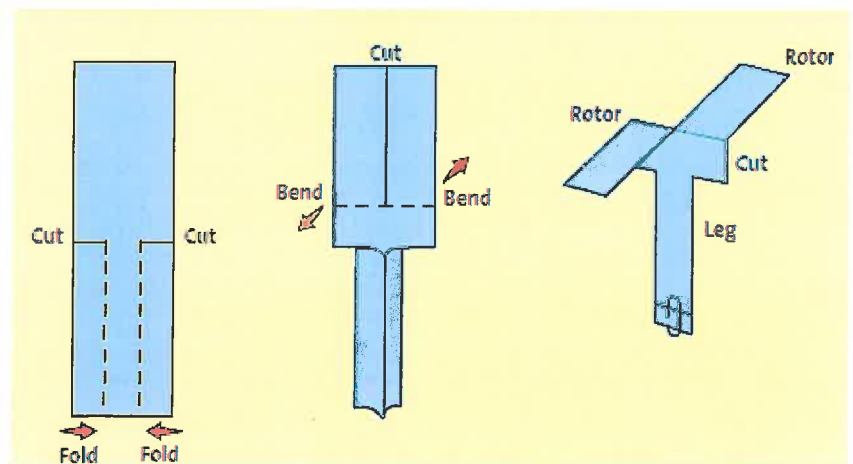
Drop different things from a height and observe how they fall.

Compare and contrast a flat piece of paper to a wadded up piece of paper. Do these objects fall at the same rate? Make a hypothesis on why you think they fall at different rates.

## PREPARE YOUR HELICOPTERS

Use scissors to cut along the solid lines of your helicopter template.

Fold along the dotted lines.



## TEST YOUR HELICOPTERS

1. Begin by using the templates to make paper helicopters and watching them spin as they are dropped.
2. Bend the rotor blades the other way around and watch again. Is it any different this time?
3. Add a paperclip to the bottom of your helicopter. Notice if this changes the way the helicopter falls.

## REVIEW

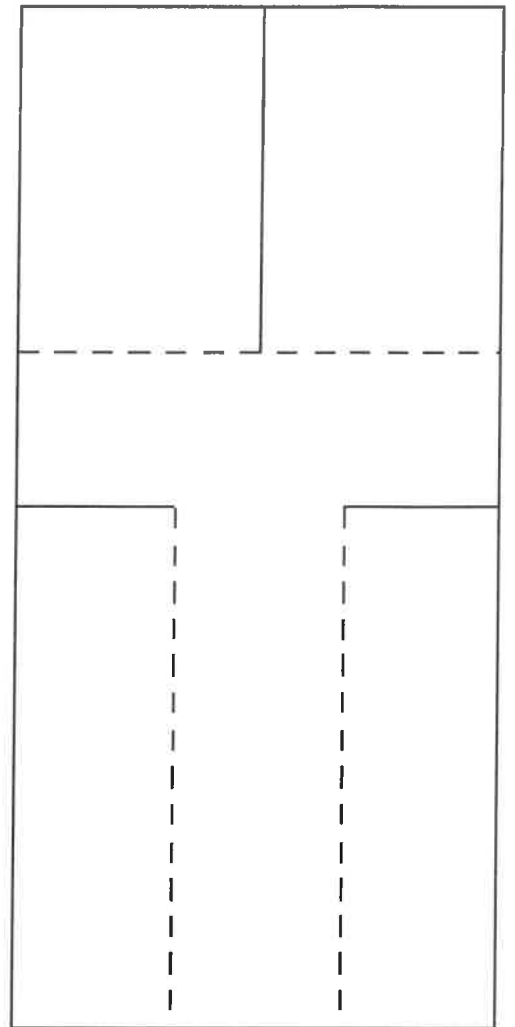
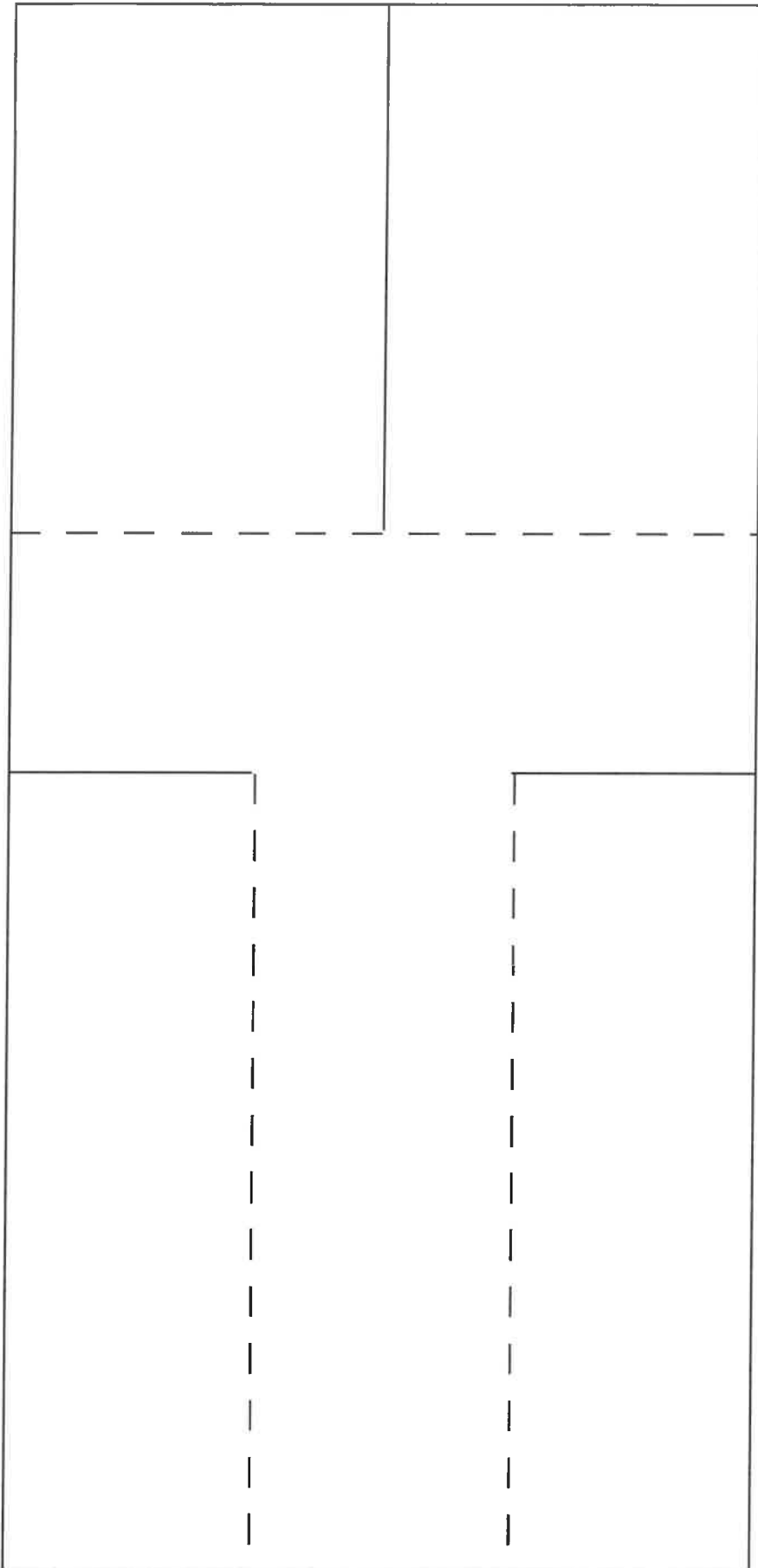
1. What did you notice about the spins for each helicopter?
2. Did they spin clockwise or counter clockwise?
3. How can you change the spin?
4. Does the weight (the number of paper-clips on the stem) change the spin?
5. Which combination made the best spinning helicopter?

## REFLECTION

Write and or Draw what you observed during this activity in the space below.



Use the templates to make paper helicopter



# Canister Rocket

Which kind of forces are involved in the process of a rocket launch?  
What processes cause a rocket to launch?  
How does a rocket launch occur?

Rockets rely on Newton's 3rd law to propel themselves into space. Newton's 3rd law states that every force has an opposite and equal force. For example, if you push on a wall, the wall pushes back on you with the same force. Similarly, as rockets ignite and expel fuel the engine applies a force pushing the fuel out of the rocket.

With this activity, you can make your own rocket-propelled film canister with a few household items.

## What you need:

- 1/2 Alka Seltzer tablet
- Water (not provided)
- A film canister
- Construction paper (not provided)
- Protective Eyewear (not provided)



Scan to watch an  
actual rocket launch

Scan to watch a video about  
making a canister rocket



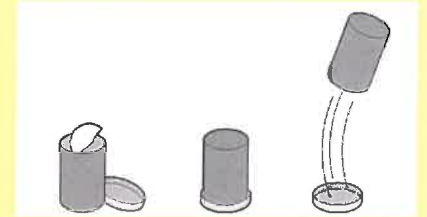
## WHAT TO DO:

### ***Design your rocket!***

- Roll a piece of construction paper around the film canister so that it makes a long cylinder.
- Make sure that the open end of the film canister points away from the paper body of your rocket.
- Add fun designs and color to personalize your rocket

### ***Get your Rocket Ready & Blast off***

- Put on your safety goggles
- Fill the film canister about 2/3 full with water
- Place the 1/2 Alka Seltzer tablet in the lid of the canister.
- Seal the lid onto the canister
- Place the rocket on the ground (cap pointing toward the ground) and stand back
- Watch the rocket explode off the ground and launch into the air!



**If the rocket does not launch, wait at least 30 seconds before examining the canister. Usually the cap is not tight enough and the buildup of gas leaked out.**

---

### Questions

Is there a minimum amount of water needed in the canister to make it launch off the ground?

Do you think a whole Alka Seltzer would create more force?

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**To learn more about Rocketry, visit Sedgwick County 4-H at  
[www.sedgwick.k-state.edu](http://www.sedgwick.k-state.edu)**





# Marshmallow Catapult

You'll need a good aim and a faithful lab assistant (or at least a willing buddy) to take on this sweet experiment. Perhaps don't mention that their role will mainly involve having marshmallows fired at them... Heads up, Sweet Pepper!

**THE RECORD:** Most marshmallows caught in the mouth with a home-made catapult in one minute

**THE CHALLENGE:** Construct your own catapult out of everyday items, such as lolly sticks and building clips, then use it to hurl marshmallows at a friend (or enemy). How many sweets can your pal/ner/catch in their mouth in a minute?

**Be warned -** this trick is, well, tricky. Really tricky. You're going to need a lot of practice to nail the right technique.

No surprise, science is the key. Wrap your head around how energy works and you'll be hitting your target every time. Well, sometimes... Even if you don't, at least you can console yourself with marshmallows. Siege warfare never tasted so good!

### GUIDELINES

- The details - and diagrams - of your proposed design must be submitted to GWR for approval before you make the catapult.
- The marshmallows can be cuboid or cylindrical, but each must be at least 2.5 cm (1 in) in all dimensions.
- The person catching the marshmallows must be standing at least 2 m (6 ft 6 in) from the catapult at all times.
- Only one marshmallow can be fired at a time. It's up to the challenger whether they set or spit out a marshmallow once it's been caught in the mouth.

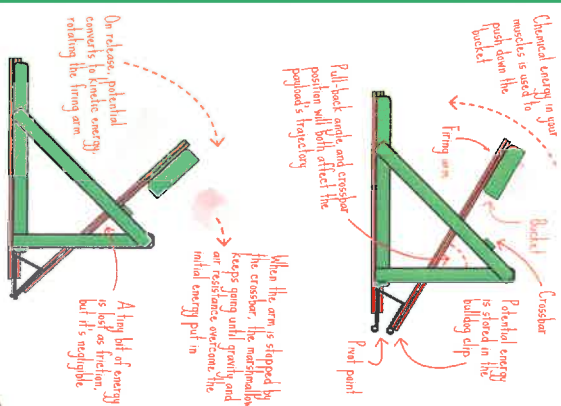
### SHOPPING LIST



**WE USED**  
• BILDDOG CLIP  
• BOTTLE CAPS  
• LOLLY STICKS (AND STICKS)  
• MARSHMALLOWS

We made our catapult with two lolly sticks, a bilddog clip and a bottle cap. Other items from a kind of 'toybox' kit, such as a lolly stick, are very useful for harnessing that crucial potential energy that clothes pegs, springs and elastic bands

### HOW DOES IT WORK?



The first law of thermodynamics states that energy can neither be created nor destroyed - only transferred. This experiment is a perfect demonstration of that law in action. When the catapult is sitting on a table at rest, it's in an energy-neutral state. You use chemical energy (which we get from the food we eat - including marshmallows, incidentally) to depress the arm. Once the levered section is down, it's under tension, with energy stored in the compressed bilddog clip. As soon as you let go of the end, the potential energy converts into kinetic energy, swinging the arm until it hits the crossbar, at which point the payload is propelled forward. The marshmallow will travel in an arc at the same speed the arm moved, until other forces counteract it: the velocity of the sweet and how far it will travel are both determined by how much energy you put in, i.e., how far you pull back the arm.



### FOR THE RECORD

Working on the same principle of rapidly converting stored energy into kinetic energy was this record-setting trebuchet. These medieval weapons (see 'TL' below left) actually had a far greater range than catapults. They get their power from a counterweight attached to a long arm, with the payload suspended from the opposite end with a sling. When the weight is released, the arm rotates and the projectile is flung forward. **The most powerful trebuchet (20+ kg projectile)**, built by Nova FM - Partridge (AUS) in 2011, tossed a VW Beetle car weighing 765 kg (1,688 lb) a distance of 76.9 m (252 ft).



Goggles are also recommended - because no one likes getting a marshmallow in the eye!

Probably best not to do this with your parent's car

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# Marshmallow Catapult (continued)



1 No matter what you use to make your catapult, you're going to need a way of sticking things together. A glue gun is the fastest and most secure way of doing this. Take care when working with hot glue as it's very... burn-y. Not quite as hot as "blue lava" (see pp.34-35), but it feels close! In fact, you might want to ask a responsible adult to help you with this bit.



2 With the glue gun loaded and ready, the first thing to do is build the base. Whatever shape you go with, the main thing you want it to be is sturdy. With this in mind, we went for a square design, with a reinforced strip in the middle to hold the firing arm.



3 Now we turn our attention to the firing arm. This is the bit that will launch the marshmallow. We made ours from four more lolly sticks. Carefully cut one end off each stick, and make sure that they're all the same length!



4 Glue the four sticks on to the bulldog clip, sandwiching the metal arms between the sticks. Don't be shy with the glue at this stage as you want the firing arm to be solid. Remember to set it aside to dry for a few minutes before you continue.



5 Attach one side of the firing arm to the central plate on the base. While that's setting, you can start making the two side panels. We created two right-angles out of six smaller lolly sticks (see Top Tip, right, before you begin).



6 The catapult is really starting to take shape now. Glue the two triangular struts either side of the firing arm. It's worth leaving these to dry, and then applying some additional glue to make sure the joints are strong. This will help extend the life-span of your candy chucker.



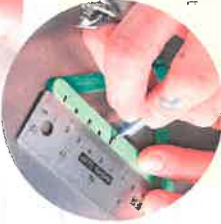
8 The final step is to add the "bucket" that will hold your tasty projectile. You want something deep enough so that the marshmallow won't keep falling out, but not so snug that the payload might get stuck when firing. Before sticking, lightly score the base of the lid for extra grip.



## TOP TIPS FROM PROFESSOR CBABX

One of the hardest parts about this record is consistency. Even when you've aimed a marshmallow into your partner's mouth once, it's pretty much as difficult the second time, and the third... A trick to help with this

(which is completely within the rules!) is to measure and mark out some lines on the catapult framework, so you know you're putting the same energy into each launch. You could even use geometry equipment such as a protractor or set-square as part of your catapult's design.



7 It doesn't look like much, but this small piece of lolly stick - or whatever you opt to use - is crucial. Without a crossbar, the arm keeps swinging and your marshmallow is doomed to a mediocre flight.



I've goteeeeeHh marshalling

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2021



# Spring Break Kit Snow Recipe

[lizb@ksu.edu](mailto:lizb@ksu.edu)



**K-STATE**  
Research and Extension

Sedgwick County

## Relaxation @ the table. Let's make snow!

**Ingredients:**  
16 oz. Baking soda  
12 oz. Shaving cream



**Directions: Snowman**  
Pour the baking soda in a recipient. Add shaving cream. Mix it. Keep adding shaving cream until you get the consistency of wet snow. Make three balls (head, belly).  
Decorate with the snowman pieces included in the snow kit. Or Be creative and use things around the house to decorate your snowman. I'm adding colored tissue paper. Twist it an wrap it around the snowman's neck as a scarf.

**Activity #2.** Flatten the "snow" and create snow sceneries with things around the house or with your toys.

**Activity #3.** Smear the left over shaving cream on a flat surface and write, draw and let your creativity flow!

Would you like to share pictures of your creations?  
Email [lizb@ksu.edu](mailto:lizb@ksu.edu)  
Please, give us your feedback through this link  
<https://tinyurl.com/springbreakeval>  
and participate in a drawing!



Scan the QR code

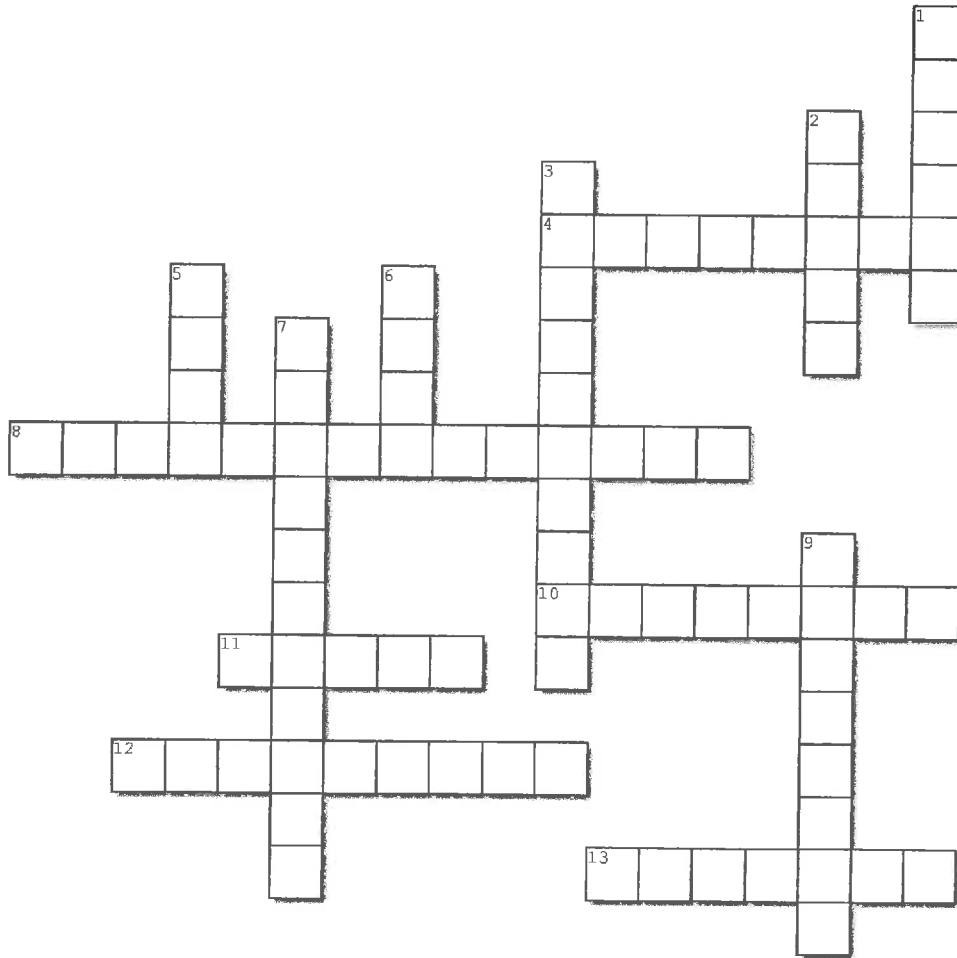
**Live in the Moment!** When you are fully engaged in activities, your mind will escape on what you are doing. Your mind will have a break from your concerns about the past and the future.



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

## Herbs from the 1870's-Then and Now Uses

Don't try these herbs unless an adult approves. For info only.



Created using the Crossword Maker on TheTeachersCorner.net

Basil Hollyhock Butterfly Bush Licorice Rosemary Oregano Anise Elderberry Marjoram Mint  
Mullen Marshmallow Dill

### Across

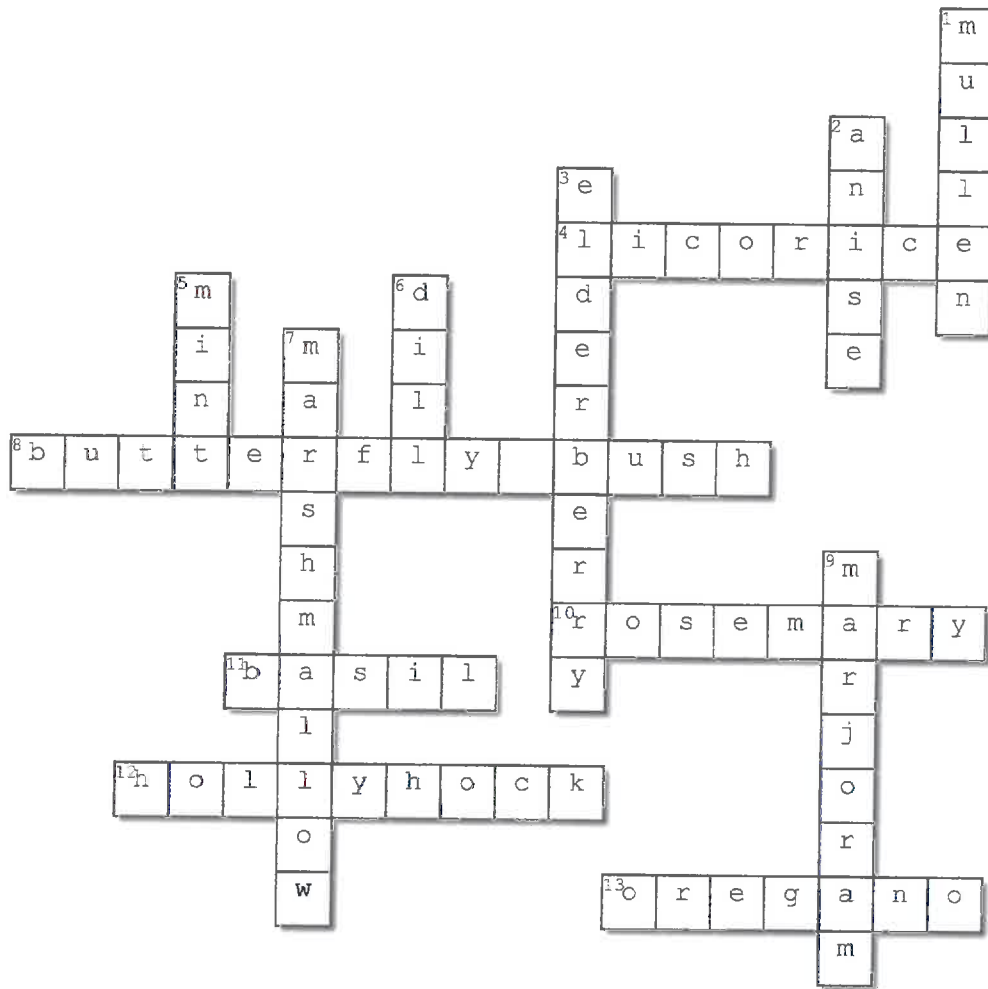
- Used in coughs and bronchial affections then, now a candy and flavoring.
- In the past used for dry cough and flu, now the root used for respiratory conditions.
- Smells like pine, historical uses include used to strengthen memory, now used as spice and in making soaps .
- Believed to have almost magical powers. It was used for snake bites in the past, now aids digestion, make pesto.
- Then for inflammation of bladder and afflictions of the kidneys, now an ornamental flower.
- No use in the 1870's, now for toothaches and lasagne.

### Down

- Flowers for blond hair dye. cure for warts in 1870's, now leaf for cough and flower for earache.
- Used for belching and preserving eyesight then, currently used as a flavor in foods.
- Then for rheumatism, gout, and mad dog bites, now for colds and flu.
- In the past, used to sooth insect stings, colic, now for flavoring and making tea.
- Stop hiccups then, now cooking, especially pickles!
- Then effective against dandruff and splinters, now indigestion and smores!
- Used in the past as remedy for water retention. Current use for relieving inflammation and pain when taken as a tea.

# Herbs from the 1870's-Then and Now Uses

Don't try these herbs unless an adult approves. For info only.



Created using the Crossword Maker on TheTeachersCorner.net

- Basil Hollyhock Butterfly Bush Licorice Rosemary Oregano Anise Elderberry Marjoram Mint  
Mullen Marshmallow Dill

### Across

- 4. Used in coughs and bronchial affections then, now a candy and flavoring. (**licorice**)
- 8. In the past used for dry cough and flu, now the root used for respiratory conditions. (**butterfly bush**)
- 10. Smells like pine, historical uses include used to strengthen memory, now used as spice and in making soaps. (**rosemary**)
- 11. Believed to have almost magical powers. It was used for snake bites in the past, now aids digestion, make pesto. (**basil**)
- 12. Then for inflammation of bladder and afflictions of the kidneys, now an ornamental flower. (**hollyhock**)
- 13. No use in the 1870's, now for toothaches and lasagne. (**oregano**)

### Down

- 1. Flowers for blond hair dye. cure for warts in 1870's, now leaf for cough and flower for earache. (**mullen**)
- 2. Used for belching and preserving eyesight then, currently used as a flavor in foods. (**anise**)
- 3. Then for rheumatism, gout, and mad dog bites, now for colds and flu. (**elderberry**)
- 5. In the past, used to sooth insect stings, colic, now for flavoring and making tea. (**mint**)
- 6. Stop hiccups then, now cooking, especially pickles! (**dill**)
- 7. Then effective against dandruff and splinters, now indigestion and smores! (**marshmallow**)
- 9. Used in the past as remedy for water retention. Current use for relieving inflammation and pain when taken as a tea. (**marjoram**)

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

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

# Medicinal Herb Search

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

Basil	Chamomile	Echinacea	Feverfew
Johnny-Jump-Up	Lavender	Lemonbalm	Marigold
Parsley	Peppermint	Rosemary	Sage
St. John's Wort	Thyme		



Basil (*Ocimum basilicum*)



Oregano (*Origanum vulgare*)



Marjoram (*Origanum marjorana*)





Rosemary (*Rosmarinus officinalis*)

## Let's Grow a Salad or Flowers

Plant lettuce or flower seeds and grow inside.

### Items included in kit:

- Potting soil
- Pot-self watering pot made according to instructions
- Seeds-lettuce and zinnia
- Rubber band

### Items needed from home:

- Large spoon to scoop soil
- Spray bottle filed with water
- Clear plastic wrap
- Container or seeds of your choice if desired

### Instructions:

1. Protect the surface you are working on with paper or plastic
2. Scoop soil into container of your choice almost to the top
3. Sprinkle the lettuce seeds in your hand and pinch them with your fingers. Place 5-10 seeds in the container. Try to not let them touch or get too close to the sides of the container. If using flower or other vegetable seeds, use only 2 seeds per container.
4. Push some soil on top of the seeds like tucking them under a blanket.
5. Use the spray bottle to mist the soil like a gentle rain. (or lightly sprinkle the soil with your fingers)
6. Put a small piece of clear plastic wrap over the container and place the rubber band around the plastic to keep it in place. Clean up your mess and wash your hands.
7. Place in a window with lots of light, usually a south window or grow light. Seeds should start to germinate (grow) in 5-7 days. When plants reach the plastic, remove plastic.
8. Keep soil damp but not soaked. You can keep the plants in the container or ask an adult to help you plant outside. When lettuce gets big enough to harvest, ask an adult to help you cut some of the leaves to make a salad.



# Newspaper Pots

Make a pot out of newspaper to plant your seeds.

## Items included in kit:

- Newspaper

## Items needed from home:

- 8 oz. can
- Masking tape or Scotch tape



## Instructions:

1. Fold a single sheet of newspaper in half lengthwise
2. Keeping the folded edge to the top, tightly roll the newspaper around 8 oz. can and tape the seam closed.
3. Make 3 folds to close the bottom of the pot and tape the bottom closed.
4. Turn the pot upside down to gently remove the can from the pot.





# Self Watering Bottle

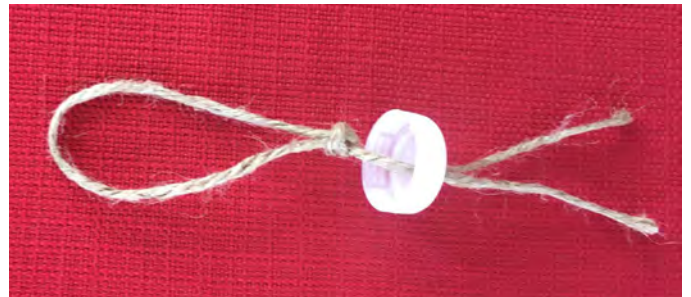
Make a self-watering planting pot from a plastic bottle.

## Items included in kit:

- Plastic Bottle cut in 2 pieces with hole drilled in the cap
- Twine-18 inches natural fiber

## Instructions:

1. Fold the twine in half, tie a knot in the middle
2. Remove cap and thread the strings through the hole in the cap.
3. Screw the cap back on the bottle and put the top half of the bottle upside down in the bottom half.
4. When you have finished putting soil and seed in the top half, put enough water in the bottom half to touch the cap.

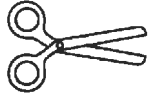


Name \_\_\_\_\_

# Beautiful Branches



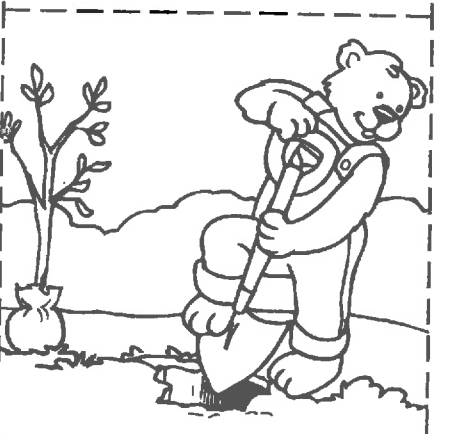
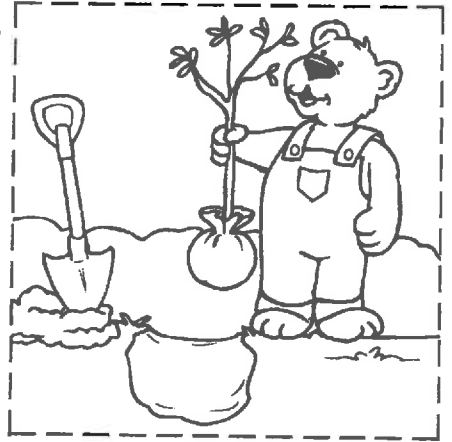
Color.



Cut.



Glue the pictures in order.



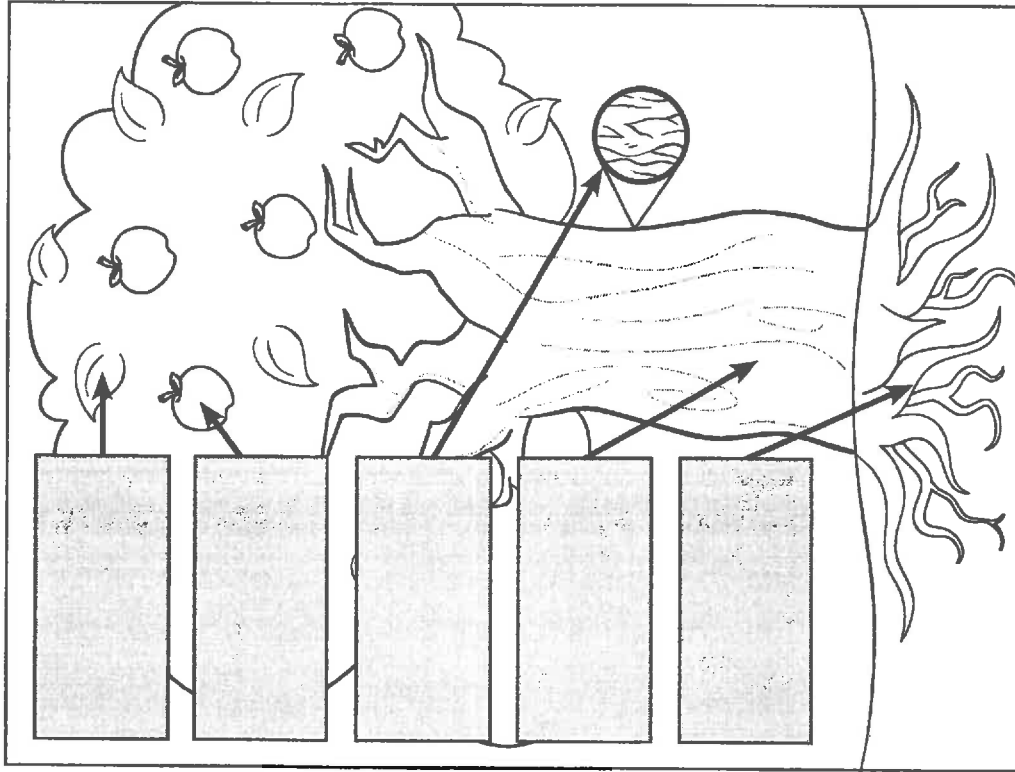
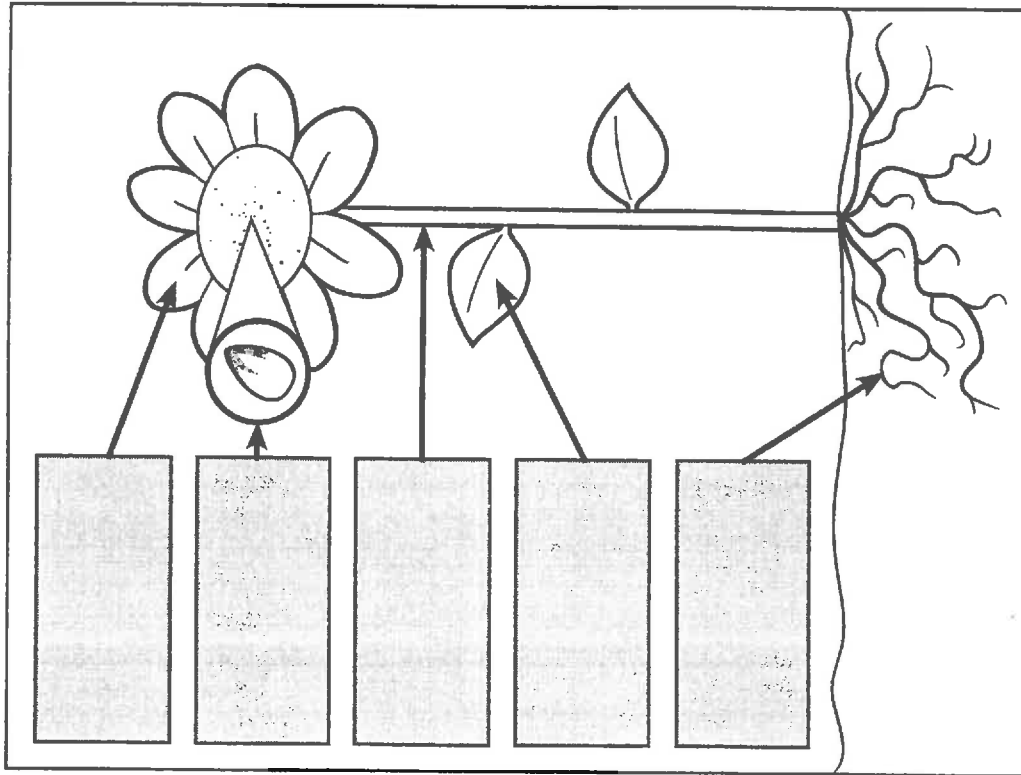
1	2
3	4

Name \_\_\_\_\_



# A Pair of Plants

Cut. Glue to match.



**Bonus:** Write how a tree and a flower are alike. Then write how they are different.

root

root

leaf

leaf

petal

stem

trunk  
(stem)

seed

fruit

bark



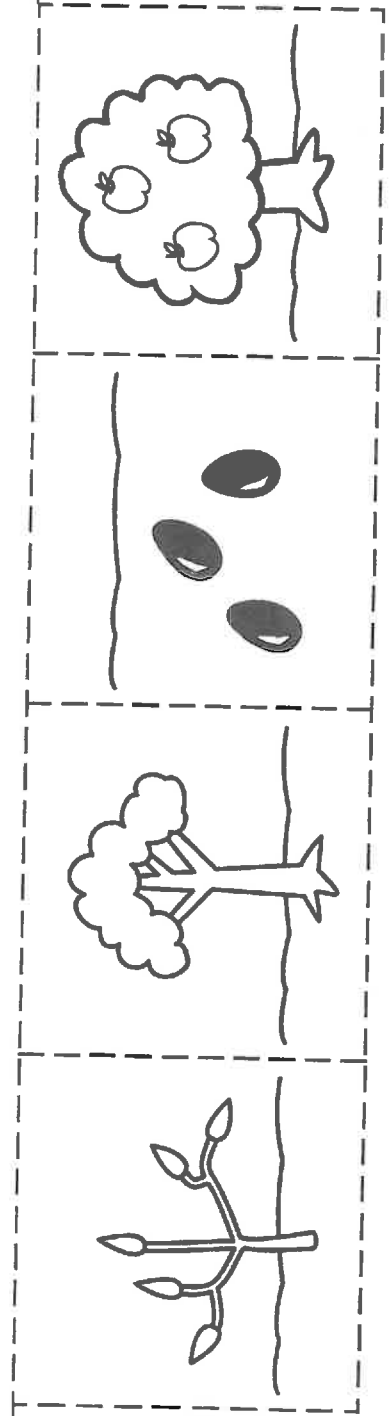
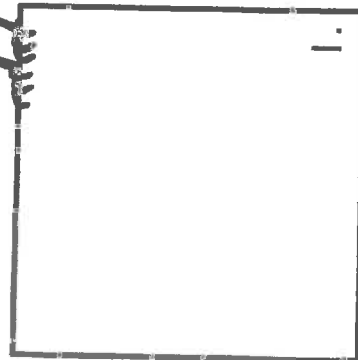
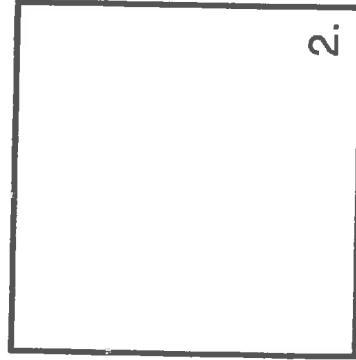
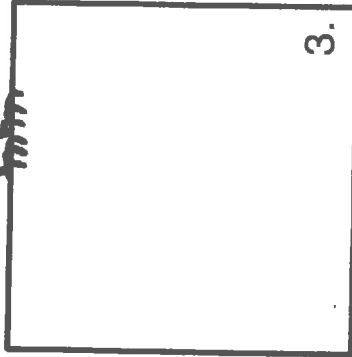
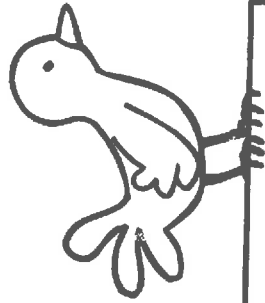
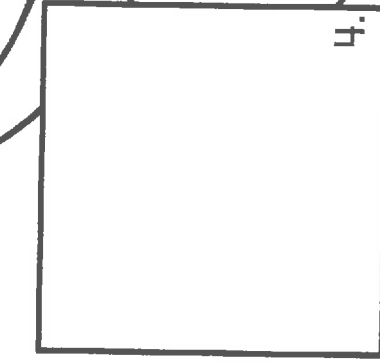
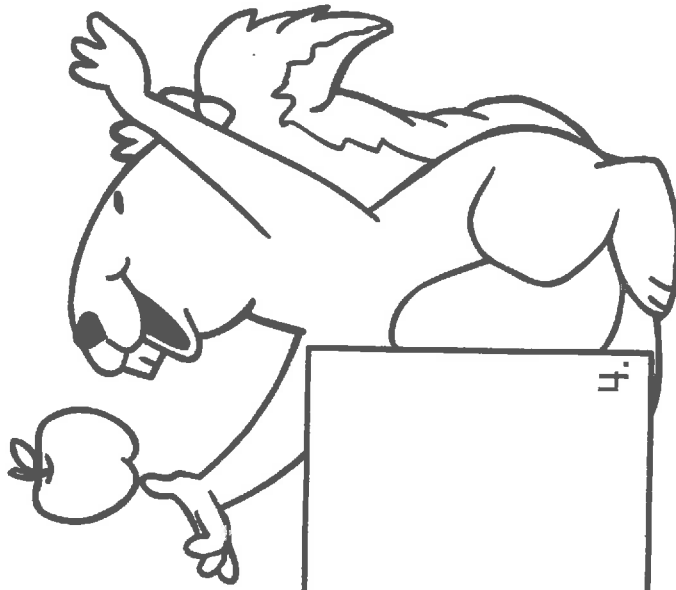
Name \_\_\_\_\_

Apples  
Growth and change

# Growing Up!



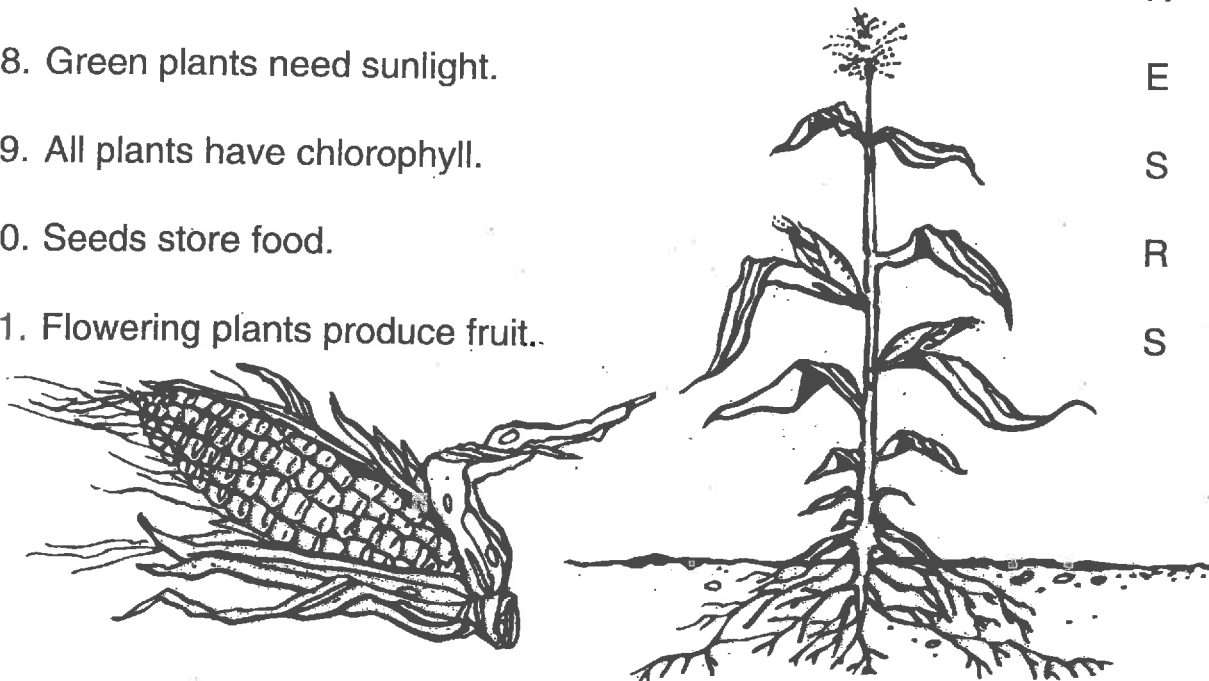
Glue the pictures in order.



# Plant Facts

Circle the letter in the correct column for each statement.

	True	False
1. Plants have three parts: the root, the stem, and carbon dioxide.	H	Y
2. Plants can live without water.	I	O
3. Roots hold a plant in the ground.	U	L
4. Plants and animals produce their own food.	O	H
5. Stems carry water from the roots to the leaves.	A	G
6. Food is made in the leaves of green plants.	V	F
7. All leaves look alike.	R	E
8. Green plants need sunlight.	E	C
9. All plants have chlorophyll.	S	A
10. Seeds store food.	R	S
11. Flowering plants produce fruit..	S	D



**What do you and a corn plant have in common?**

To find out, fill in the letters you circled above on the lines over the question numbers below.

.....  
 Answer: YOU HAVE EARS

# Journey to the Center of a Bean

Learn to dissect (take apart) a bean seed and study what's inside.

## **Items included in kit:**

- Dry bean seeds
- Magnifying glass
- Activity sheets (2)

## **Items needed from home:**

- Ruler
- Paper towel

Do you know when you eat a bean you are eating a baby plant? A bean is a seed. When they get everything they need, seeds grow into plants. Are seeds alive? Yes, but they remain inactive until conditions are right for them to start to grow. That process is called germination.

What are the parts of this little package called a seed?

- The outer covering, called the seed coat, protects the baby plant and keeps moisture inside.
- On larger seeds, like this bean, you can see a tiny scar where the seed was attached to the parent plant. This is called the hilum and is the seed's belly button!
- The young plant, called the embryo, has tiny leaves (epicotyl), a stem (hypocotyl) and roots (radicle).
- Food for the young plant is stored in the cotyledon. This food storage keeps the embryo alive until it germinates and begins to grow.

All seeds need oxygen, water and the proper temperature to germinate. Oxygen and moisture, initially taken in through the seed coat and later by the roots, help the seed get energy from its food supply. Some seeds need light to germinate. When the young plant sprouts above ground it can make its own food from the sun. This is called photosynthesis.

## **Instructions:**

1. Complete step 1 on the 'Dissecting a Seed' activity sheet.
2. Soak your seeds in water for about a day.
3. Complete steps 2 & 3 on the 'Dissecting a Seed' activity sheet.
4. Carefully remove the outer coating of the seed. Talk about how this coat is no longer protecting the young plant inside.
5. Place your fingernails in the seam along the edge and open the seed into two halves.

(Continued on back)

6. Lay the two seed halves on the table with the inside facing up.
7. Using the magnifying glass, can you see something that looks like a tiny tail? That is the stem and root of the young plant. Look harder. Can you see the two tiny leaves? Can you identify the stored food?
8. Complete your 'Parts of a Seed' activity sheet (beginner or advanced). This is a good time to review the parts of a seed.
9. Complete step 4 on the 'Dissecting a Seed' activity sheet.

For additional fun and information go to [www.youtube.com](http://www.youtube.com) and watch the video by SciShow Kids called "What's inside a bean?"

Further reading material:

From Seed to Plant by Gail Gibbons

The Tiny Seed by Eric Carle



## Dissecting a Seed Activity Sheet

(child may need supervision)

Step 1. Use the magnifying glass to observe the outside of your dry bean seed. Describe what you see. What color is it? How long is it? Is it soft or hard? Do you see the belly button or hilum?

---

---

---

Step 2. Measure the seed after soaking. Did soaking the seed change its size? Did the outside of the seed change? What do you think happened?

---

---

---

Step 3. On the back of this paper draw what you predict you will see inside the seed.

Step 4. After dissecting the seed, compare your prediction in step 3 with what you actually see inside your seed. Were you surprised by anything? What is the same and what is different? Write it here.

---

---

---

---

\*\*\*Note: After dissection a seed cannot be planted. The natural germination cycle has been interrupted. If you have a dry seed remaining you can observe the stages of germination by doing the following: Place dry beans between two damp paper towels inside a sandwich baggie. Leave a small opening for air circulation. To keep the seeds damp, spray the paper towels. Watch as the seed sprouts. What comes out first? How fast does it grow?

# Life Cycle of a Butterfly Wheel

**Step 1:** Color the wheels on each page.

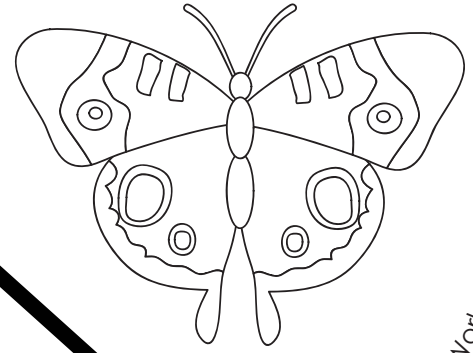
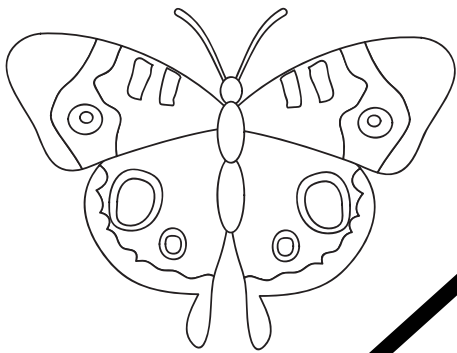
**Step 2:** Cut out each wheel around the outside edge.

**Step 3:** Attach the front to the back with a brass paper fastener through the middle dot.

**Step 4:** Spin the wheel in the direction of the arrow to follow the life cycle of a butterfly.

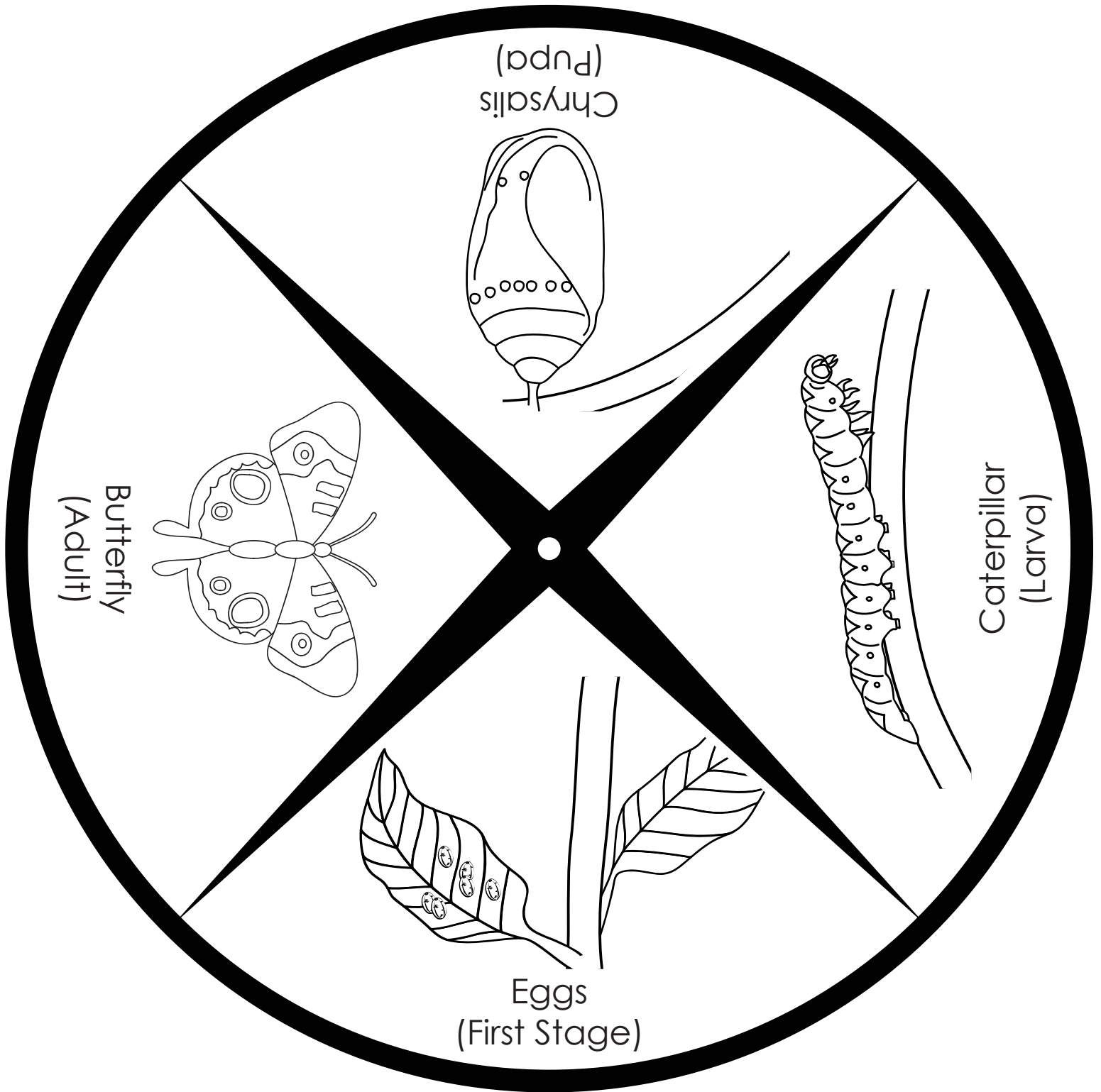
## Life Cycle of a Butterfly

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



Super Teacher Worksheets - [www.superteacherworksheets.com](http://www.superteacherworksheets.com)





# Cheerios Bird Feeder

Make your own bird feeder from Cheerios and string!



## **Items included in kit:**

- Bag of Cheerios
- Twine or string

## **Items needed from home: None**

## **Instructions:**

1. Thread Cheerios through the twine until all Cheerios are used.
2. Hang from a tree branch in your yard.

Watch for birds coming to enjoy their Cheerios treat!!!

# Toilet Roll Bird Feeders

Make a bird feeder using nut or seed butter and birdseed.



## Items included in kit:

- Bag of birdseed to roll on your toilet paper roll.
- Twine to place through the toilet paper roll.

## Items needed from home:

- Empty toilet paper roll
- Peanut butter, almond butter, or other nut or seed butter
- A plate as a work surface

## Instructions:

1. Spread the nut butter thinly on the toilet paper roll, trying to cover the entire roll.
2. Carefully roll the toilet paper roll in the bag of birdseed, trying to cover as much of the roll as you can with the birdseed. (If this does not work, try pouring the birdseed on a plate and roll the toilet paper roll to cover with birdseed.)
3. After your roll is covered with birdseed, remove it from the bag and place the twine through the roll.
4. Find a tree limb or a bush that you can tie your bird feeder on.

There are pictures on the back of this page of birds that may visit your feeder and grab a snack. Be sure to watch for them!!!

# Birds to Watch for at Your Feeder



←House Sparrow – One of the most common birds He is about 5 ½ to 6 ½ in length.

Downy Woodpecker – These birds get 6 to 7 inches in length and special features that protect them from hammering. →



←Black Capped Chickadee are 5 to 6 inches in length and like to socialize with other birds like the Downy Woodpecker.

House Finch – The male bird has the rosy breast while the female is plainer. These birds grow 5 to 6 inches in length. →



←Northern Cardinal – The male cardinal is pictured here. He can get up to 8 or 9 inches in size.



←Blue Jay – This bird gets up to 11 inches in size and calls out *jay jay jay* very loud.



Tufted Titmouse – this is probably the rarest bird that you might see at your feeder. The titmouse grows 6 to 6 1/2 inches in length. →



# 3 Senses Nature Scavenger Hunt

Go outside and see how many you can find!

## SIGHT

- Find something white
- Find something with stripes
- Find something tiny
- Find something long
- Find 5 of the same things



## SOUND

- Find something that snaps
- Hear a bird song
- Hear something that crunches
- Hear something loud
- Find something to make music

## TOUCH

- Find something soft
- Find something bumpy
- Find something smooth
- Find something wet



# Make a Bird Nest

This is an outdoor activity.



## **Items needed from your home:**

- A piece of paper to work on.

## **Items needed from outdoors:**

- Grass, twigs, mud, or other things a bird might use for a nest.

## **Instructions:**

1. Look around your yard and think about what materials a bird could use to make a nest.
  - a. Here are some ideas: Grass, twigs, mud. Can you find others?
  - b. Gather the materials you want to use for a nest.
2. Put down some paper (this may be messy) and start to build your nest.
3. Take a picture of your best nest-building efforts!

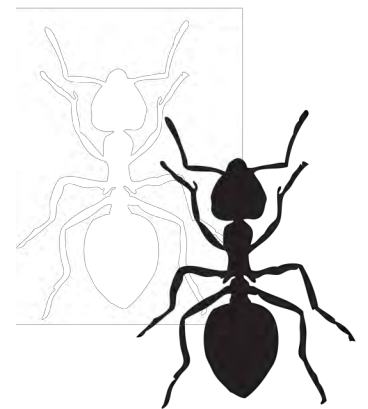
**Was it easy to make a nest? Are you as smart as a bird?**

**Remember they can only use their beaks and feet!**

**Next time you see a nest, think about it.**



Draw a picture of what your yard looks like to an:



Draw a picture of what your yard looks like to a:





Draw a picture of what your yard looks like to a:



Write a story of what your yard looks like to a:



What does it see first?

What is it looking for?

What does it see next?

How does it feel?

How does your story end?



Write a story of what your yard looks like to a:

What does it see first?

What is it looking for?

What does it see next?

How does it feel?

How does your story end?

# Build a Bug Hotel

Learn about insects and encourage beneficial (good) insects to come to your garden. Insects that may visit your Bug Hotel include Bees, Beetles, Butterflies, Lacewings, and Ladybugs.



## Items included in kit:

- Plastic tube
- Twine

## Items needed from your yard:

- Sticks, leaves, other nature items you find.

## Instructions:

1. Cut up a plastic bottle as shown, or use the plastic tube provided in kit. (Discard the top and bottom of the plastic bottle if you use that.)



2. Loop twine (provided) through the tube (or bottle).



3. Fill the tube with materials from your yard to attract bugs. Some things you might use include dead wood, dry sticks, hollow stems, dry leaves, loose bark, straw or hay, cardboard, stones and tiles, rolled up newspaper. Using different materials will attract different bugs. Also, some colors that attract bugs include yellow, orange, and white. Make sure the materials in the tube fit tightly so they won't fall out.



(Continued on back)

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4. Find a good spot for your Bug Hotel.

- Bugs like a warm spot for winter and spring, so find a spot on the south side of your house, preferably near a tree.
- Find a protected area (shrubs, trees, plants). A good place would be near a hedge, nectar rich flowers and a little water.
- Find a spot with sunlight or light shade.
- Place it at least a couple of inches off the ground.
- You can also hang your Bug Hotel on a tree.
- Another good spot would be snuggled among bushes or below plants that have nectar and colors that attract bugs.



---

5. Other types of bug hotels:



Fill empty tissue box with leaves, twigs, or dry grasses.



Fill a large box with multiple tubes. Fill each tube with different materials.

---



---

### Cardboard Box Bug Hotel

- Fill each cubby with different materials.
- Place in a protected area because it is made out of cardboard.





## Birds 'N Worms

A camouflage game



## In this kit:



Paper Worms

Bird Pictures

This Booklet

## Items needed from home:

Scissors

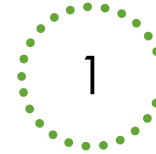
1-2 Plastic cups to collect the worms

A timer

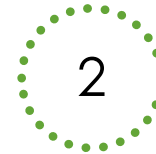
## A note to adult helpers:

This activity will be most successful outdoors on a dry day with minimal wind. If the weather is not acceptable outdoors, it can be done indoors with some imagination!

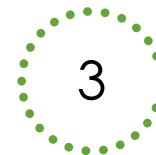
## Want to learn more?



**SciShow Kids – Camouflage:  
Animal Hide & Seek**  
<https://youtu.be/YOIRci0CKzg>



**Detroit Zoo: Insect Camouflage**  
<https://detroitzoo.org/lesson/insect-camouflage/>

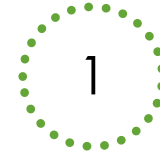


**National Geographic Kids – Wacky  
Weekend: Hidden Animals**  
<https://kids.nationalgeographic.com/explore/wacky-weekend/hidden-animals/>

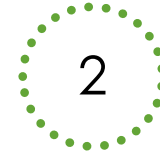
Can you find the caterpillar in these pictures?



Get Started:



**Cut out the bird pictures provided.**



**Stand on a high spot in your yard and imagine that you are one of those birds looking for a caterpillar or an earthworm to eat. What can you see?**

Options could be the top of the stairs, on a deck, or on a playset. Ask an adult if you aren't sure where would be a good spot.



**Lay down on the ground and imagine that you are a caterpillar or earthworm. What can you see? How safe are you from being eaten?**

Try to choose a dry spot to lay down! Think about places that might be easier or harder for a bird to see.



## Game Option 1 (for 1 or 2 players)

1. Spread the colored paper strips out in an open area of your yard.
2. Choose a bird to be as you collect worms.
3. Run toward the area where the worms are spread. (Don't forget to flap your wings!)
4. Grab the VERY FIRST worm that you see and carry it back to the starting point. (You may need a cup to hold the worms so they don't blow away if it is windy!) Lay the worm on a piece of paper.
5. Take turns flying over to the worms, collecting the worms you find first and laying them out in order on the paper until all the worms have been collected.

---

*What colors of worms did you pick up first?*

*Which colors did you pick up last?*

---

### Game Variation

Are there other places in your yard you could put the worms? What happens if you scatter the worms on green grass? On brown grass? On dirt? Are there places that you could put caterpillars where they will blend in with their surroundings? Is that easier for some colors than others? Try some other spots to see what happens when you fly to pick up the worms.



## Game Option 2 (2 or more players)

1. Divide players into the "Bird" team and the "Caterpillar" team.
2. Bird players should go inside or to an area where they can't see the Caterpillar players.
3. The Caterpillar team should work together to place the paper caterpillars in an area of the yard. Choose places that are not completely hidden. You can be sneaky!
4. When all the caterpillars are hidden, call back the Bird team. The Bird Team will "fly" over the yard, collecting as many caterpillars as they can find in 2 minutes.
5. After 2 minutes are up, the Caterpillar team should collect any remaining caterpillars from the yard.
6. Count how many caterpillars each team has. Which team has the most?
7. Switch teams and play again!

---

*What colors of caterpillars did the Bird Team find most?*

*Which colors of caterpillars were left?*

---

### Game Variation

Try giving the Bird Team more or less time to find the caterpillars. Race to see how long it takes to find different colors of caterpillars.





# My Soil Detective Casebook



**Is it SOIL? Or is It DIRT?  
Is there LIFE in the soil?**

# IN THIS KIT:

- This packet
- Magnifying glass (get the one out of the Journey to the Center of a Bean kit)



# ITEMS NEEDED FROM HOME:

- A large metal spoon or a garden trowel
- A paper plate, tray, or other container
- A pencil or colored pencils



# A NOTE TO ADULTS:

This activity involves digging in the dirt! Before starting, make sure your child is wearing clothes they can get dirty and knows a good place (or two) where they can dig.





# FIND YOUR DIGGING SPOT!

## ASK AN ADULT FOR HELP TO FIND A GOOD SPOT TO DIG

Find a place outside in your yard or at a park where you can dig without disturbing trees, shrubs, flowers, or other valuable plants. Make sure you ask permission to dig there! A spot near the edge of a lawn, around a tree or shrub, or in a spot where there is a vegetable garden planted.

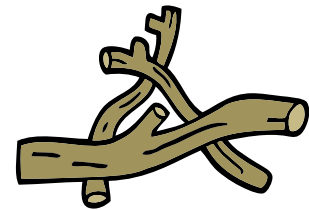
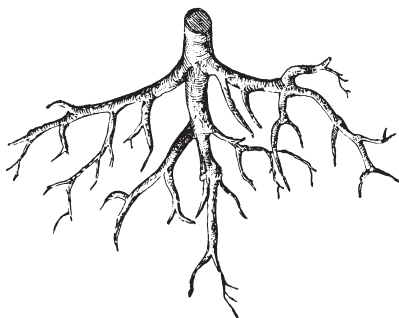
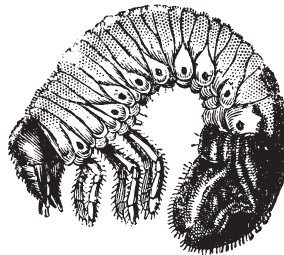
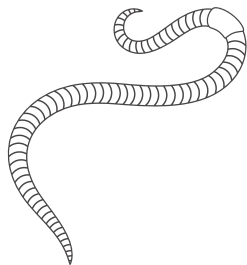
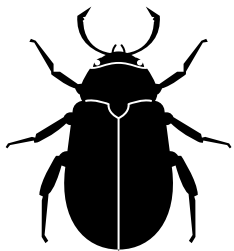


**WHAT DO YOU THINK  
YOU WILL FIND?  
WRITE OR DRAW YOUR IDEAS  
IN THE BOX:**

A large white rectangular box intended for the user to write or draw their ideas. It is positioned on the right side of the page, below the main text and above the footer.

# START DIGGING!

1. If the ground is too hard to dig, ask an adult or an older sibling to start digging a hole with a larger shovel.
2. Using your trowel or a large metal spoon, start turning over the soil and begin your search!
3. Sort what you find onto your plate, tray or container. If you find any living creatures, remember to handle them with respect!
4. Look at the pictures below. Which did you find? Did you find other things too?



**I also found:**

**Which of the things you found are alive?  
Which ones used to be alive?**

# Get to Know Your Soil:

1. Take a handful of soil.
2. Look at it with the magnifying glass. What does it look like?
3. Rub it between your fingers. What does it feel like? Can you make a ball? A long, flat ribbon? Is it warm or cold?
4. Smell the soil. What does it smell like?

Write or draw about your soil:

**Is all soil the same? If you want to, find a different spot to investigate.**

**Visit a park, ask a neighbor for a spot, or choose a very different spot in your yard.**

# DIG IN TO MORE SOIL SCIENCE!

A close-up photograph of two hands, one above the other, holding a small amount of dark brown soil. The background is a blurred field of soil and some dry leaves.

## BOOKS

Dirt by Steve Tomecek

Soil! Get the Inside Scoop by David L. Lindbo

The Scoop on Soils (Elementary GLOBE)

<https://www.globe.gov/web/elementary-globe/overview/soils> (PDF)

Dirt: the Scoop on Soils by Natalie Rosinsky

## VIDEOS & WEBSITES

<https://www.soils4kids.org/>

Who-Buddies The Great Soil Discovery:

<https://youtu.be/qDc8IGCGUD0>

Soils are Living: <https://youtu.be/Qas9tPQKd8w>

Soils Sustain Life: <https://youtu.be/vDL6F6GkAzI>

Where Does Soil Come From? <https://youtu.be/5b9o7yM7YGE>

What is Dirt Made of? <https://youtu.be/if29mjcd5bc>

Science Trek Soil: <https://www.pbs.org/video/science-trek-soil/>



# Soil

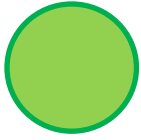
Let's play a game! Can you find all the words about soil? Circle them as you find them. Have fun!

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



## Word Bank

*Sand Silt Clay Loam Soil Compost Nutrients Organic  
Decompose Humus Bedrock Weathering Erosion*



## Grow your own window garden:

### Microgreen exploration

Microgreens are like baby plants. Before seeds become the big plants we see in the grocery store or on our dinner plate, they start out very small with just a couple leaves. You can grow microgreens in your house and have a tasty snack that you grew yourself!

You will notice that this kit includes seeds to grow radishes, peas, and cabbage. Usually when you eat a radish, you are eating the root. When you eat a cabbage, it is a head of cabbage (formed of lots of leaves smooshed together). When you eat peas, they are the round seeds. All of these vegetables also have leaves that you can eat too! When you grow them as microgreens, you are able to eat the small plant before it produces the part you would normally eat.

#### **Items included in this kit:**

- Potting soil
- 3 pots
- 3 types of seeds (radish, cabbage, and pea)

#### **Items needed from home:**

- Small cup (optional)
- Paper towel (recommended but optional)
- Marker (optional)
- Tape (optional)
- Popsicle stick or regular stick (optional)

#### **Instructions:**

##### **1. Soak the pea seeds (optional)**

- This step is not required, but it can be helpful. Pea seeds are large and might take a little longer than the other kinds to germinate (sprout.) If you want to harvest all your microgreens at the same time, we recommend soaking the pea seeds. Otherwise they may be a little bit behind.
- To soak your pea seeds, place them in a small cup or bowl of water for 8 hours or overnight.

## 2. Moisten the potting soil

- It's important to make sure that the soil is damp before you start using it. It should feel moist to the touch, but not sopping wet.
- Pour a little bit of water into the bag of potting soil, mix it up, squeeze it to feel if it needs more water, and add more water if necessary.

## 3. Fill the pots

- Fill each pot full with potting soil.
- Gently but firmly press the soil down. Don't smash it down, but don't pat too softly, either.
- Add more potting soil so that it is almost to the top of the pot, and gently pat that down too. You will have some potting soil leftover.



## 4. Place the seeds

- Scatter one package of seeds into the first pot, the next package into the second pot, and the last package into the third pot. Make sure ALL the seeds from one package end up in their pot!
- Try to make sure the seeds are spread out, not too clumped together. Some seeds can be touching each other, but try to avoid too many in a cluster. You could spread seeds around using your fingers, a spoon, or a pencil eraser.
- Gently press the seeds into the soil surface with the back of a spoon. This will help them not move around during watering.



- You may want to label your seeds so you can keep track of which is which. To do this, you can tape the label from inside the seed package to a stick or popsicle stick (pushing the stick in a corner of the pot,) or tape the label directly on the outside of the pot.

#### 5. Cover seeds

- Cover the seeds with a paper towel (trim it so it fits neatly on top of the soil) OR with a very light layer of more potting soil. This will help the seeds to stay moist and keep them from moving around during watering.



#### 6. Water seeds

- To water your seeds, you can mist them with a spray bottle (make sure it is clean and doesn't have any cleaner or makeup inside) or set the pots into a shallow dish (like a brownie pan) and pour some water into the pan around the pots. This method is called "bottom-watering" – the soil will suck up the water from the pan through small holes in the bottom of the pots.



- Avoid watering directly on top of the seeds, as the water can move the seeds around and make them clump together. You could use a gentle stream of water on top of the paper towel or light layer of soil using a small watering can, a cup, or a drizzle from your hands; just make sure to go slow and stop if the seeds start to move around.



## **7. Place in a sunny, warm spot**

- Put your pots on a windowsill or table near a window where the seeds will get as much light as possible. Windows that face south usually get the most light.

## **8. Wait 7-10 days; keep watering and observing**

- Mist or drizzle water on your seeds throughout the day; you want the paper towel (or top layer of soil) to stay moist. If you are bottom-watering, check the level of water in the pan every day and top it off if needed.
- Write down what you see every day on your observation sheet. You can peek under the paper towel; this works best if you lift up a corner after you mist it with water.
- The seeds should begin to germinate after 3-5 days. Once the seeds have germinated and begin to send up little stems and leaves, remove the paper towel (if you are using one.)

- You may see some fuzzy white stuff on top of the soil as the seeds begin to germinate and grow. Don't worry, this isn't mold! It is actually tiny, baby roots trying to find their way from the seed into the soil.



## 9. Harvest your microgreens

- When your microgreens are 1" to 3" tall, it's time to harvest! This might take anywhere from one to two weeks, depending on how much light your microgreens get.
- One kind may grow faster than another; that's okay! You can harvest each kind as it is ready, or you can wait to harvest until the last kind is tall enough.





## **10. Taste your microgreens**

Do you think the radish, pea, and cabbage microgreens will taste like the regular vegetable?

Do you normally like these vegetables?

Do you like the microgreens?

**11. You can use your microgreens to make the delicious recipe on the following page!**

# Parents,

Cooking with your child(ren) is a great way to encourage an adventurous plate, explore with their senses, boost confidence and spend quality time together.



## Substitutions

Lime juice	↔	Apple Cider Vinegar
Grated Carrots	↔	Sunflower Seeds
Olive Oil	↔	Any nut oil



## MICROGREEN SALAD

### Ingredients

- 1 pkg microgreens
- 2 carrots grated \*
- 2 Tbsp lime juice\*
- 1/4 tsp salt
- 4 Tbsp olive oil\*
- coarse salt to taste
- ground pepper to taste

### Directions

1. Place the microgreens and grated carrots in a serving bowl and reserve in the refrigerator until ready to serve.
2. Whisk together the remaining ingredients, cover and refrigerate until ready to serve
3. At the last moment before serving, dress the salad lightly with dressing, sprinkle with sea salt and fresh ground pepper.



PREPARATION: 10MIN  
TOTAL TIME: 20MIN

## **Microgreen observations**

### **Planting**

Which seeds are biggest? Which are the smallest? Order your seeds from smallest to biggest.

### **Germination (sprouting)**

How many days did it take for the seeds to sprout?

Did the seeds sprout at the same time? If not, which seeds sprouted first? Second? Third?

What do you see when you peek under the paper towel (if you're using one)? Describe or draw what you observe.

Can you see what emerges from the seed first – the root? Or the stem and leaves?

## Growing

Microgreens grow fast! Write or draw what you see every day.

Day 1	Day 2	Day 3
Day 4	Day 5	Day 6
Day 7	Day 8	Day 9
Day 10	Day 11	Day 12

Describe the differences you see between the pea sprouts, radish sprouts, and cabbage sprouts.

What colors are they?

What are the shape of their leaves?

How large are their leaves?

How tall are their stems compared to the others (shortest, tallest, medium)?

### **Harvesting**

Did one type of sprout grow faster than the others? Did one seem slower than the others?

### **Tasting**

Describe how each type tastes. Do they taste the same or different?

# Let it Rot!

Using a decomposition observation bag, observe what happens to various organic materials as they break down.

## **Items included in kit:**

- Clear plastic bag
- Organic materials: plant debris, sticks, stems, leaves
- Soil

## **Items needed from home:**

- Pieces of old fruits or vegetables
- 1 slice of bread

## **Instructions:**

1. Collect at least 1 measuring cup of fruit or vegetable scraps. This could take a few days. Here are some examples of what you could use: orange or banana peels, grapes, lettuce, tomatoes, apple cores, mushroom parts. Any fruit or vegetable will work. Remember to collect only living or once living materials.
2. Use the Organic Material Worksheet to list the organic materials that you will be adding to your bag. Under the Characteristic column, describe how the items look – color, texture, odor.
3. Add the fruit and vegetable pieces to the plastic bag.
4. Toss in the slice of bread and close the bag without removing all the air. Put the bag in an out of the way place and wait.
5. Check in one week to see if you notice any changes.
6. Check again in two weeks. At this time, you will open the bag to see how the items inside have changed.
7. Look for physical changes in all the materials, including the plant debris. Log the changes that you observe on your Organic Material Worksheet.
8. If you would like to see further decomposition of the material, reseal the bag and wait 2 more weeks.
9. When you are done observing the bag, you can dump the contents of the bag in a spot in your yard or garden that you think might need some fertilizer!

## **Compare and Contrast**

- Has the color of any of the materials changed? If so, how?
- Has the texture of any of the materials changed? If so, how?
- Is there any organic material in the bag that has decomposed and now you cannot identify what that item was?
- How does the bag of decomposing material smell? Would you describe the smell as sweet, sour, or maybe earthy?

## **Conclusions**

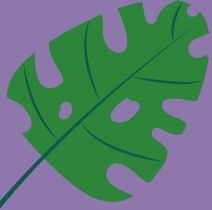
- Based on changes to the organic materials do you think that the decomposition process has started?
- Based on what you have observed, do you think that the decomposition process is a slow process, a fast process, or does it look like it depends on the type of organic material used?



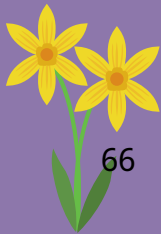
# Organic Material Worksheet

Organic Material	Describe Organic Materials	Describe Organic Materials after 1 week	Describe Organic Materials after 2 weeks
Sticks and Plant Debris			
Soil			
Bread Slice			
Fruits and Vegetables			

Conclusions

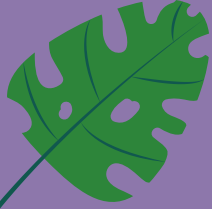


IF I  
WAS A  
PLANT...

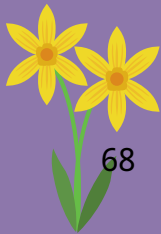


**If I was a plant,  
when do I  
bloom?**

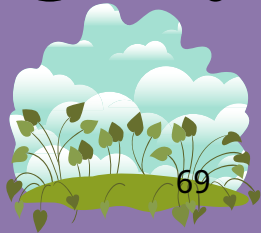


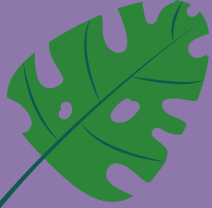


IF I  
WAS A  
PLANT...

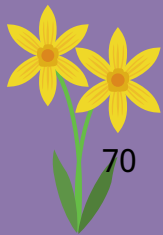


# If I was a plant, where do I grow?





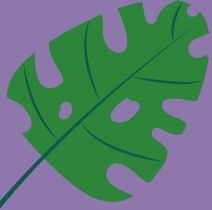
IF I  
WAS A  
PLANT...





**If I was a plant,  
will I have flowers  
or fruit ?**



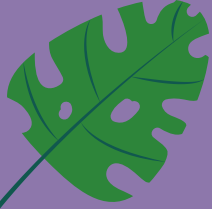


IF I  
WAS A  
PLANT...



**If I was a plant,  
will I attract bugs  
or birds?**





IF I  
WAS A  
PLANT...



**If I was a plant,  
what would I  
smell like?**





IF I  
WAS A  
TREE...



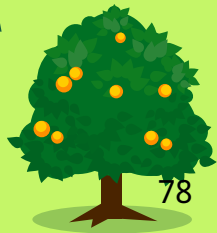
**If I was a tree,  
where would I  
live?**







IF I  
WAS A  
TREE...



**If I was a tree,  
how tall would I  
be?**

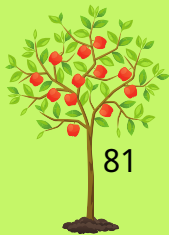


IF I  
WAS A  
TREE...



**If I was a tree,  
would I make  
fruit?**

**IF YES, THEN WHAT KIND OF FRUIT?**

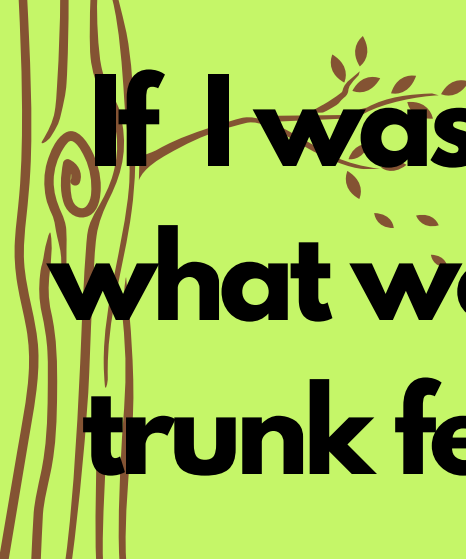


81



IF I  
WAS A  
TREE...



A stylized illustration of a tree trunk and a branch with leaves. The trunk is on the left, and a branch with several leaves extends from the top left towards the center of the text.

**If I was a tree,  
what would my  
trunk feel like?**





IF I  
WAS A  
TREE...

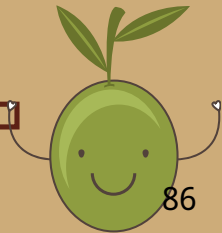




**If I was a tree,  
what would my  
leaves look like?**



IF I WAS  
A SEED...

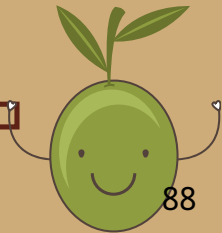


**If I was a seed, what  
kind of seed would I  
be?**





IF I WAS  
A SEED...



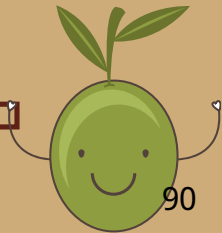
**If I was a seed, what  
will I grow into?**







IF I WAS  
A SEED...



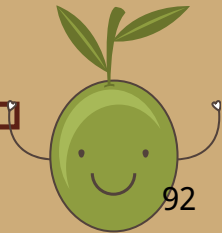


**If I was a seed, what  
do I need to grow?**





IF I WAS  
A SEED...

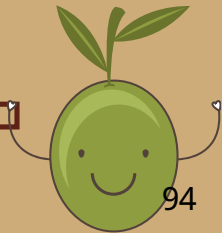


**If I was a seed, what  
will I feel like?**





IF I WAS  
A SEED...



**If I was a seed, what  
do I look like?**



# Headbands – Local Food Edition

Play our version of the popular Hedbanz game to learn about locally grown produce!

## Items included in kit:

- Ribbon headband
- Seasonality Calendar magnet
- Headband picture cards
- Question page
- Answer key

## Items needed from home:

- A timer, if desired

## Setup:

1. Place the picture cards face down in the center of the playing area.
2. One player ties the headband on their head. Make sure the Velcro dot is in the center of your forehead.
3. Choose a card from the center pile and attach it using the Velcro dots. (Be careful not to peek!)

## Play:

1. Ask the other players questions to help you identify the fruit or vegetable on your head. A good starting question is, “Am I a fruit or a vegetable?”
2. Questions should have yes or no answers. Use the provided question sheet (on back of this page) for sample questions or come up with your own! The provided Answer Key and Seasonality Calendar Magnet will help answer the questions!
3. Continue asking questions until you can correctly identify the fruit or vegetable or until you give up. (If using a timer, ask questions until time is up.)
4. If you correctly identified the fruit or vegetable, keep the card in front of you. If you were unable to identify it, place it back in the game envelope.
5. The player with the most picture cards when all cards have been used is the winner!

### **\*\*A note about Fruits vs Vegetables\*\***

There is a slight difference between produce items that we consider fruits from a culinary standpoint and produce items that we consider fruits from a botanical standpoint. The answer key has labeled produce items based on their typical culinary designation. So it is possible for an item to be categorized as a vegetable, but the part we eat to be identified as a fruit! The classic example of this is the tomato. This is a great discussion to have before playing the game to prevent unnecessary arguments!



# Question Card: Vegetables

Am I a vegetable?  
Is the part you eat a leaf?  
Is the part you eat a root?  
Is the part you eat a stem?  
Am I (choose a color)?  
Do I grow in Kansas?  
Am I ripe in (choose a month)?  
Can you buy me at a local farmers'  
market?  
Do you usually eat me raw?  
Do you usually eat me cooked?

# Question Card: Fruits

Am I a fruit?  
Do I grow on a tree?  
Do I grow on a bush?  
Am I (choose a color)?  
Do I grow in Kansas?  
Do I have one large seed?  
Do I have many small seeds?  
Am I ripe in (choose a month)?  
Can you buy me at a local farmers'  
market?  
Do you usually eat me raw?  
Do you usually eat me cooked?

# Answer Key



## Strawberry

Fruit  
Do NOT grow on trees  
Do NOT grow on a bush  
Red  
Does grow in Kansas  
Has many small seeds  
Can buy locally  
Eat raw or cooked



## Carrot

Vegetable  
Part you eat is a root  
Orange (and red, yellow, purple, and white!)  
Does grow in Kansas  
Can buy locally  
Eat raw or cooked



## Tomato

Vegetable  
Part you eat is a fruit  
Red (and orange, yellow, purple, green, and white!)  
Does grow in Kansas  
Can buy locally  
Eat raw or cooked



## Lettuce

Vegetable  
Part you eat is a leaf  
Green and red  
Does grow in Kansas  
Can buy locally  
Eat raw



## Asparagus

Vegetable  
Part you eat is a stem  
Green and purple  
Does grow in Kansas  
Can buy locally  
Eat raw or cooked



## Watermelon

Fruit  
Do NOT grow on trees  
Do NOT grow on a bush  
Red, orange, yellow flesh  
Does grow in Kansas  
Has many small seeds  
Can buy locally  
Eat raw



## Onions

Vegetable  
Part you eat is a root  
White, yellow, red/purple  
Does grow in Kansas  
Can buy locally  
Eat raw or cooked



## Peppers

Vegetable  
Part you eat is a fruit  
Green, red, yellow, orange  
Does grow in Kansas  
Can buy locally  
Eat raw or cooked

(More on back!)

# Answer Key



**Avocado**

Fruit  
Grows on a tree  
Green  
Does NOT grow in Kansas  
One large seed  
Cannot buy at a farmers' market  
Eat raw



**Oranges**

Fruit  
Grows on a tree  
Orange  
Does NOT grow in Kansas  
Several small seeds  
Cannot buy at a farmers' market  
Eat raw



**Blackberries**

Fruit  
Grows on a bush  
Dark purple or black  
Does grow in Kansas  
Can buy locally  
Eat raw or cooked



**Spinach**

Vegetable  
Part you eat is a leaf  
Green  
Does grow in Kansas  
Can buy locally  
Eat raw or cooked



**Pumpkin**

Vegetable  
Part you eat is a fruit  
Orange, white  
Does grow in Kansas  
Can buy locally  
Eat cooked



**Radish**

Vegetable  
Part you eat is a root  
Red, pink, white, purple, yellow, black  
Does grow in Kansas  
Can buy locally  
Eat raw or cooked



**Apple**

Fruit  
Grows on a tree  
Red, yellow, green  
Does grow in Kansas  
Can buy locally  
Eat raw or cooked



**Zucchini**

Vegetable  
Part you eat is a fruit  
Green, yellow  
Does grow in Kansas  
Can buy locally  
Eat raw or cooked



**Fennel**

Vegetable  
Part you eat is leaf, stem  
White and green  
Does grow in Kansas  
Can buy locally  
Eat raw or cooked



**Green Beans**

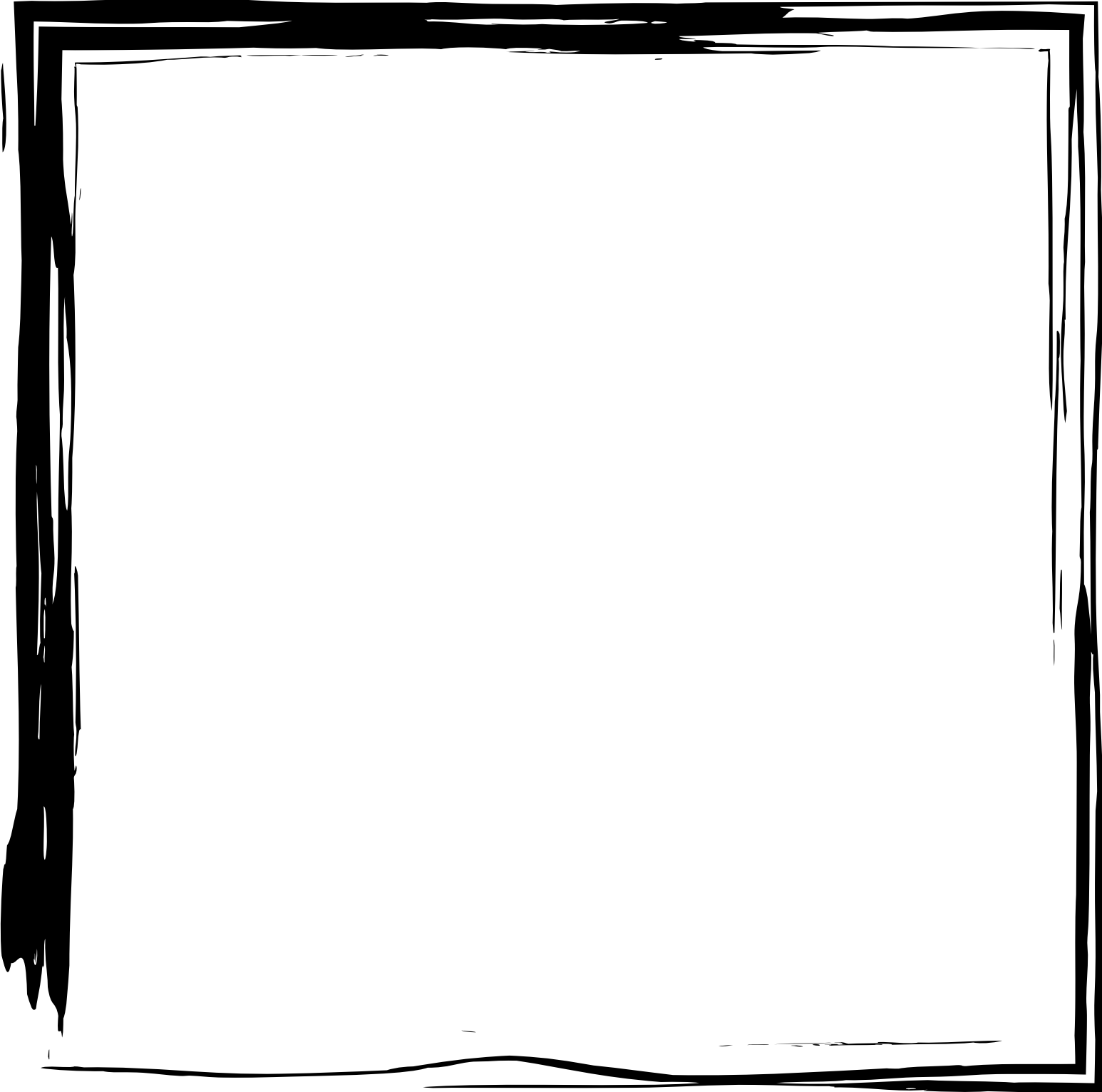
Vegetable  
Part you eat is a pod  
Green, purple, yellow  
Does grow in Kansas  
Can buy locally  
Eat raw or cooked

# Who Grows Your Food?

Have you ever thought about how your food gets to your table?  
Thousands of people play a role in getting your food to your table every day.

All of the food you eat starts on a farm, grown by a farmer.

Do you know any farmers? Have you ever visited a farm? What was it like?



Write or draw a story about a farmer. What does the farmer look like? What does the farmer grow?  
What is on the farm? What kinds of tools are there? How big is the farm?

Share your picture or story with your family. See the other side to learn more about farmers.

# Who Grows Your Food?

Ask an adult to help you check out these farmer stories and videos to learn more about modern farmers.

Check our website to see a video featuring some of our local farmers!  
<https://www.sedgwick.k-state.edu/agriculture/index.html>

Here are some other websites with stories and profiles of some different farms and farmers:

<https://kansasfarmfoodconnection.org/node/215>

[https://kansasruralcenter.org/category/risk\\_management/women\\_farmer\\_profiles/](https://kansasruralcenter.org/category/risk_management/women_farmer_profiles/)

<https://www.farmflavor.com/kansas-agriculture/>

<https://www.growingamerica.com/farmer-profiles>

<https://www.youngfarmers.org/tag/farmer-profile/>

## Think about it:

How were the farms and farmers featured in those stories and videos the same as what you pictured? How were they different?



# Look and Cook Recipe: Applesauce

## Ingredients

Water



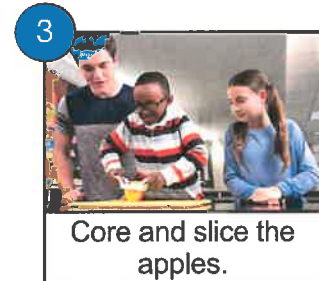
Apples



Cinnamon  
(Optional)



## Directions



# Applesauce

Eat this by itself as a snack, spoon it into yogurt for breakfast, or eat it with potato pancakes, French toast, chicken, or pork.

Total Time: 55 minutes • Hands-on Time: 20 minutes • Yield: 6 servings • Serving Size:  $\frac{3}{4}$  cup

## INGREDIENTS

- 6 apples, any variety, rinsed
- $\frac{1}{2}$  cup water
- $\frac{1}{2}$  teaspoon of cinnamon (optional)

## INSTRUCTIONS

1. Wash your hands with soap and water, then gather all your kitchen tools and ingredients and put them on a clean counter or other cooking surface.
2. Optional: Peel the apples.

*Note: Applesauce with the peel left on is faster to make and healthier. The apple peel has fiber, which helps you feel full and has many other benefits for our health.*

3. Use the apple corer or slicer to remove the core and cut the apple into slices. If you do not have a slicer, have a helper use a chef's knife to take out the core and cut the apple into slices.
4. Dice the apple slices.
5. Measure the water and pour the water in the pot.
6. Add the diced apples to the pot with water, cover, and put the pot on the stove. Turn the heat to medium-low and cook until the apples are tender, about 25 minutes.
7. Take pot off the stove and set aside to cool a bit, about 10 minutes. Once it has cooled a bit, stir it to help the applesauce cool faster.
8. Mash the apples using a potato masher or fork. If you'd like to add cinnamon or other spices, add and stir them in now.
9. Serve and enjoy the applesauce right away or store in the refrigerator in a lidded container. The applesauce will keep, covered and refrigerated, for up to 4 days.



## SHOPPING LIST

- 6 apples (any variety, such as Fuji, Granny Smith, Golden Delicious, Honeycrisp, McIntosh, Red Delicious, Winesap, and Pink Lady)
- Cinnamon
- Dried spices, such as nutmeg, ginger, or cloves (optional)

**Amount per serving:** Calories: 94; Total Fat: 0.5 g; Saturated Fat: 0 g; Sodium: 2 mg; Total Carbohydrate: 24 g; Dietary Fiber: 4 g; Sugars: 19 g; Protein: 0 g; Vitamin A: 78 IU; Vitamin C: 0 mg; Calcium: 12 mg; Iron: 0 mg.



# Look and Cook Recipe: Grain Bowls

## Ingredients

Quinoa



Broccoli



Carrots



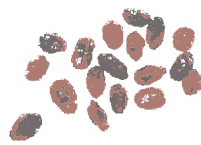
Vinaigrette dressing



Chicken



Raisins



Water



## Directions

1



Wash your hands.

2



Measure water.

3



Measure quinoa.

4



Cook quinoa.

5



*Optional:* chop veggies and chicken.

6



*Optional:* make dressing.

7



Add veggies, raisins, and chicken to quinoa.

8



Add dressing.

9



Enjoy your grain bowl!

# Grain Bowls

Use your favorite fruits, veggies, and protein foods to build your own grain bowl!

Total Time: 35 minutes • Hands-on Time: 35 minutes • Yield: 6 servings

## INGREDIENTS

See [Shopping List](#) for suggestions for foods in each category.

- 3 cups cooked grains or 1 cup uncooked grains, such as quinoa
- 2 cups water\*
- 3 cups chopped vegetables
- 1½ cups protein food
- 1½ cups dried fruit
- ½ cup vinaigrette dressing (1½ tablespoons finely chopped onion or shallot, ¼ cup oil, 1½ tablespoons vinegar, 1 tablespoon water, ¾ teaspoon mustard, ¾ teaspoon honey, ½ teaspoon salt, pinch of black pepper, 1½ tablespoons chopped chives (optional))

## INSTRUCTIONS

1. Wash your hands with soap and water, then gather all your kitchen tools and ingredients and put them on a clean counter or other cooking surface.
2. Measure 2 cups of water and add it to a pot. Cover the pot and set it on the stove or cooktop. Turn the heat to high and bring the water to a boil.
3. Measure 1 cup of uncooked quinoa and pour into a strainer or fine-mesh colander. Rinse under cool running water until the water runs clear.
4. Once the water is boiling, add the quinoa to the boiling water and cover the pot again. Turn the heat to medium-low, and simmer the quinoa for 15 minutes.
5. While the quinoa is cooking, measure and chop the veggies, fruit, and protein into small, bite-sized pieces.
6. Make the vinaigrette dressing by whisking ingredients together in a bowl. Or, you can put all the ingredients in a jar, cover, and shake until it is well mixed.
7. Once quinoa is done and cooled, add the chopped veggies, protein, and fruit to the quinoa.
8. Add dressing to the quinoa mixture and mix until everything is well combined. You can also set out the quinoa, vegetables, protein, fruit, and dressing in separate bowls, and let everyone decide how much he or she would like to add to his or her grain bowl.
9. Serve and enjoy your grain bowl!

\*If using another grain instead of quinoa, amount of water and cooking time may vary.

**Amount per serving:** Calories: 343; Total Fat: 12 g; Saturated Fat: 1.5 g; Sodium: 188 mg; Total Carbohydrate: 55 g; Dietary Fiber: 6 g; Sugars: 25 g; Protein: 9 g; Vitamin A: 5203 IU; Vitamin C: 28 mg; Calcium: 60 mg; Iron: 3 mg.

Nutrient information is based on using quinoa, raw carrots, cooked broccoli, chicken, and raisins in this recipe. Nutrient information will be different depending on which grains, vegetables, protein foods, and fruits you use.

## SHOPPING LIST:

Produce Section:

- 3 cups vegetables (any combination of tomatoes, cucumbers, zucchini, broccoli, carrots, green beans, corn, peas, etc.)
- 1½ tablespoons fresh chives (optional, for dressing)

1 onion (for dressing)

Refrigerated or Frozen Aisles:

- 1½ cups cooked protein food (chicken, meat, fish, beans, or tofu). You can also use dried or canned beans or canned meat or fish (see below in “Dry Goods” section)

10 oz. raw chicken or a 16 oz. container tofu

Dry Goods:

- 1 cup uncooked grains (quinoa, brown rice, farro, quinoa, bulgur wheat, or whole-wheat orzo)
- 1½ cups dried fruit (raisins, cranberries, or cherries or chopped dried apricots, prunes, dates, or figs)

Options for protein foods:

- 1 (15 oz.) can low-sodium beans
- 2 (5 oz.) cans chicken or fish

Staples From Your Pantry:

- oil
- vinegar
- salt
- black pepper
- honey
- mustard