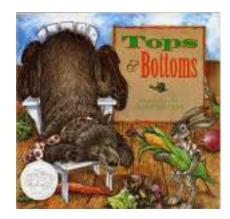
# PLANTS integrated unit

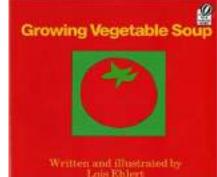
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#### BOOKS (Click each book to view on Amazon)



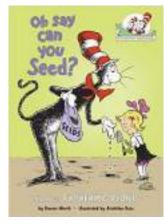


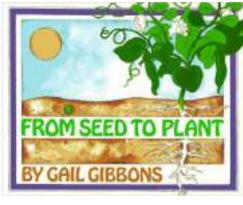


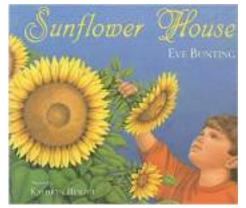


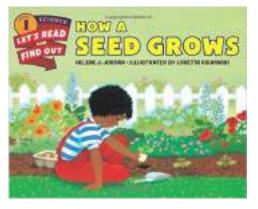
Planting a Rainbow by Lois Ehlert

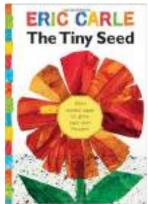














<u>The Needs of a Plant Song – Harry Kindergarten</u>

The Accidental Plant Video

What is a Seed?

<u>Peep Plants a Seed</u>

<u>Parts of a Plant Song – Harry Kindergarten</u>

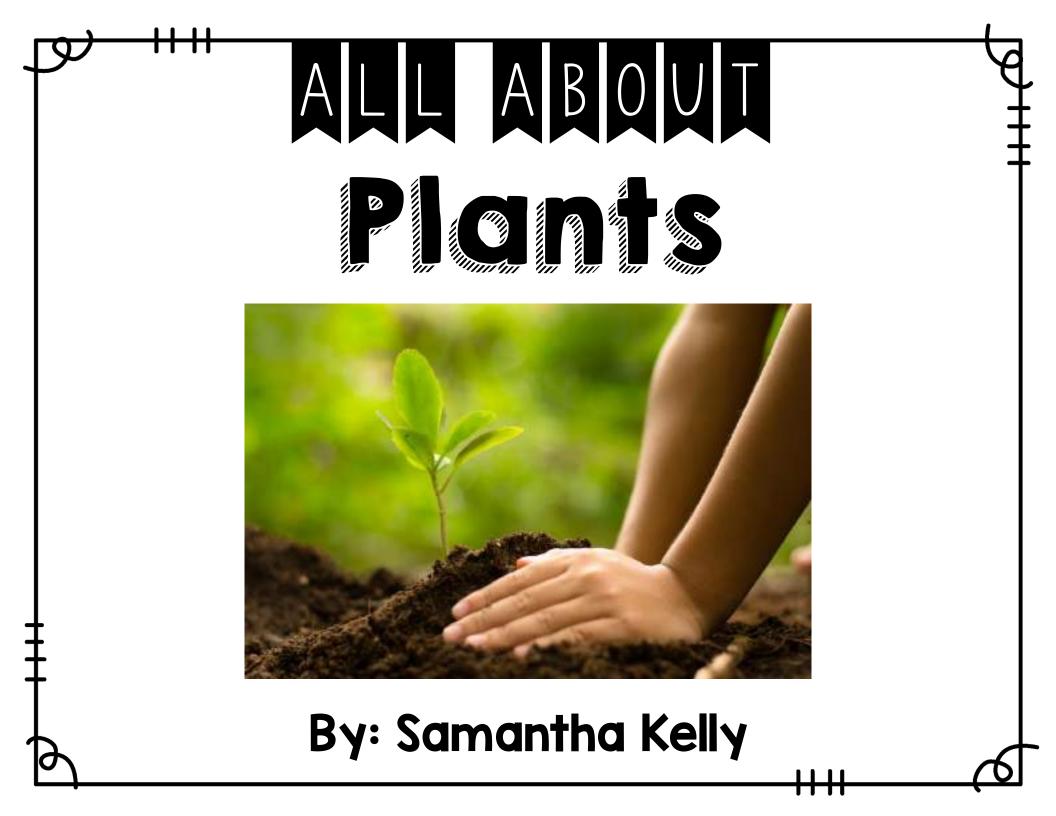
<u>The Farmer Plants the Seeds Song</u>

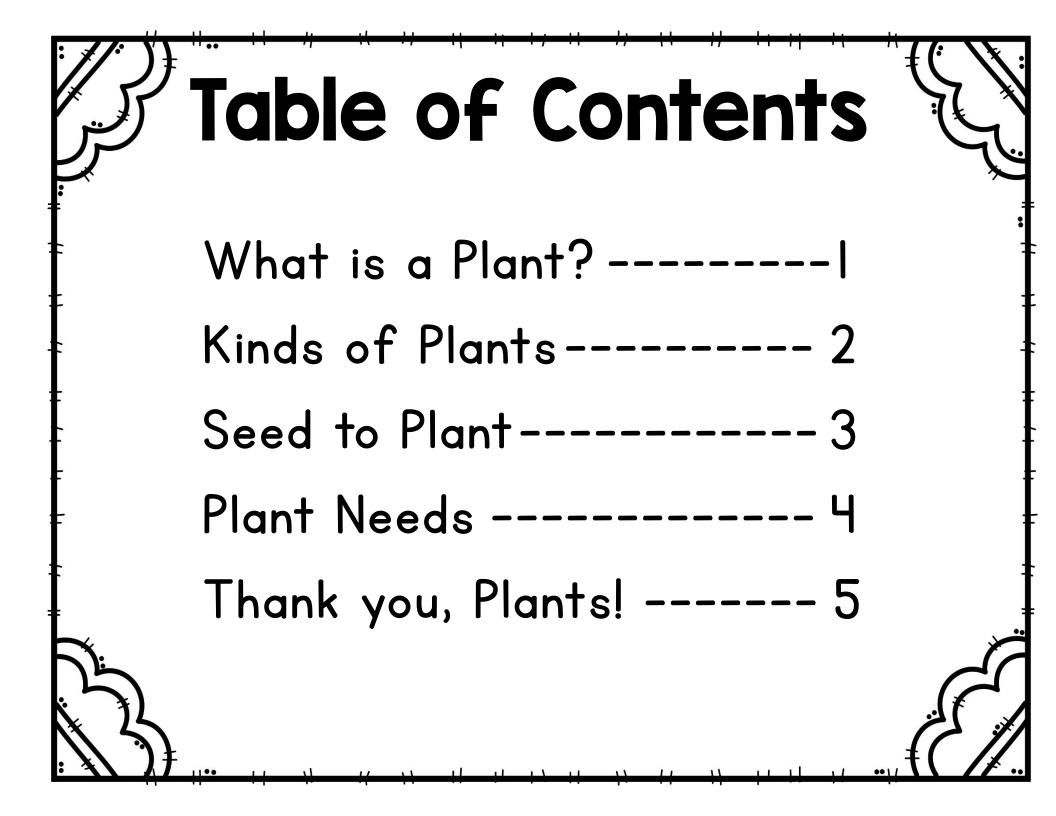
<u>The Planting Song – Mother Goose Club</u>

### Non-Fiction Text teacher read-aloud

Read aloud the non-fiction text to students, pointing out text features like the table of contents, bold words, and captions. Discuss as you read. Students will use the information from this book and other books you read about plants to complete the activities in this set.

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### What is a Plant?



Plants are **living** things that grow all around us. When you look outside, you might see any number of plants. Let's learn about the different kinds, how they grow, and what they do.

### Kinds of Plants

Look at some different kinds of plants. Do you recognize any?



There are many different kinds of plants in our world. Some plants are tall, and some are short. Some plants are safe to eat, and others are poisonous. All plants have traits in common – they all have roots, a stem, and leaves. They are all an important part of our environment.



Sometimes humans plant seeds or seeds fall from plants to the ground. If the seed gets enough water and minerals from the soil, it can **germinate**, or begin to grow. The seed splits open, and **roots** grow down into the soil. Then, the **stem** and **leaves** begin to grow up, until they pop out of the soil. These are called **seedlings**. Some plants will then grow **flowers** or even fruits or vegetables.

#### **Plant Needs**



Just like humans and animals need certain things to grow, so do plants. Plants need **nutrients** to grow. Humans get their nutrients from the foods they eat and drinks they drink. Plants get their nutrients from the **soil** they grow in. Plants also need water and sunlight. Without these things, plants would not grow or be healthy. What do you think would happen if you forgot to water an indoor plant?

### Thank you, Plants!



Birds in a Tree



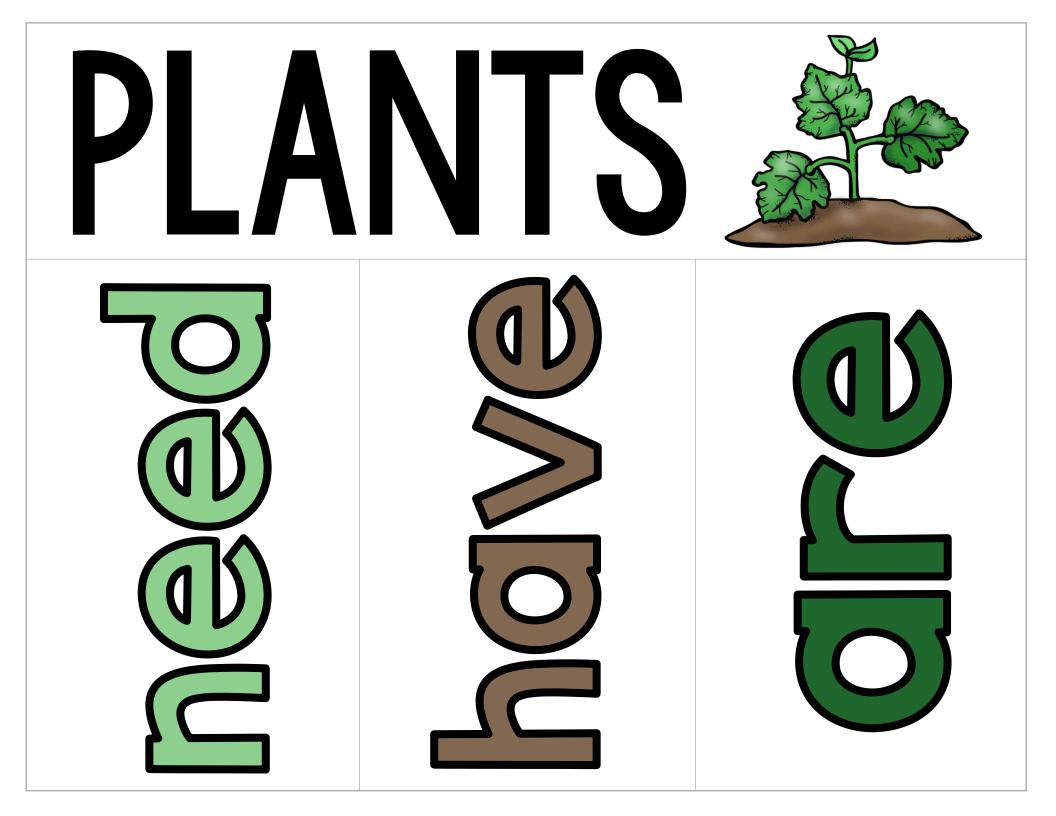
Cheetah in the Shade

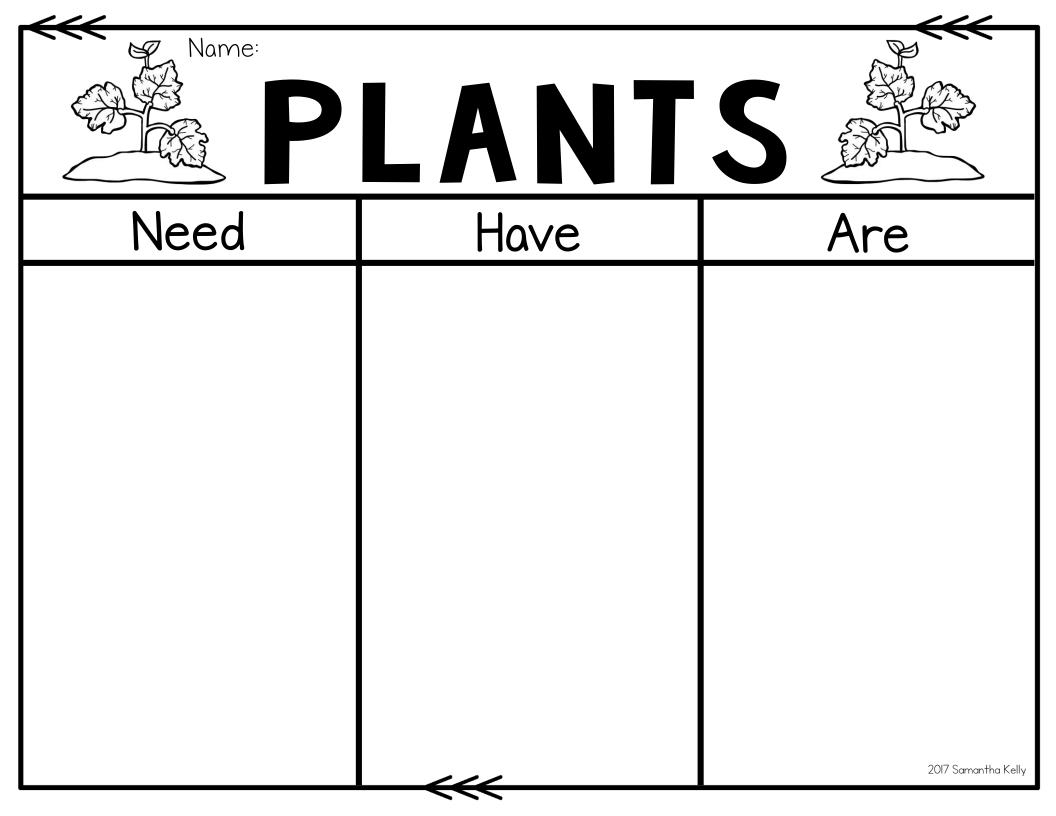
Plants are a very important part of our environment. They provide **food** for humans and animals. What is your favorite fruit or vegetable? Plants also provide **habitats** or homes for animals. Birds build nests up high in trees. Wild animals cool off in the shade from large shrubs. Plants also give us **oxygen** which we need to breathe! Thank you, plants!

## Brace Map

After reading some of the plant texts and watching the videos, use this Need/Have/Are chart to discuss facts about plants. Laminate the whole group chart pieces and put up on the white board or on a piece of chart paper. Discuss and record answers as a whole group. Students may then pick their favorite answers to record on their personal pages.









Read: Tops and Bottoms by Janet Stevens

Sort: In a pocket chart, sort the vegetable cards to answer the question, "Where does the part we eat grow?" Underground or Above ground. Connect this information to the book Tops and Bottoms. There is also a cut/paste version for students to complete.

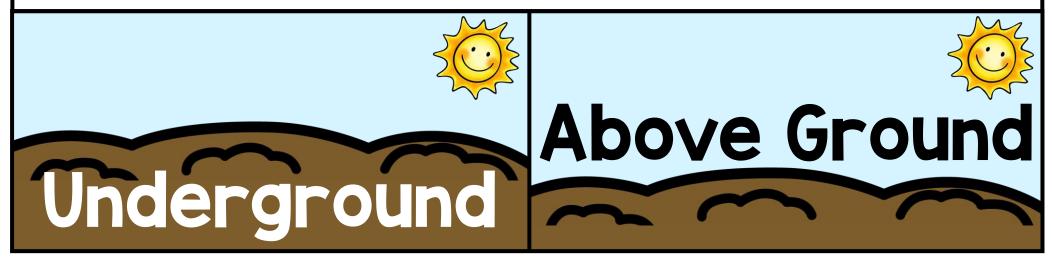
Snack: Bring in broccoli and baby carrots for students to try as a snack.

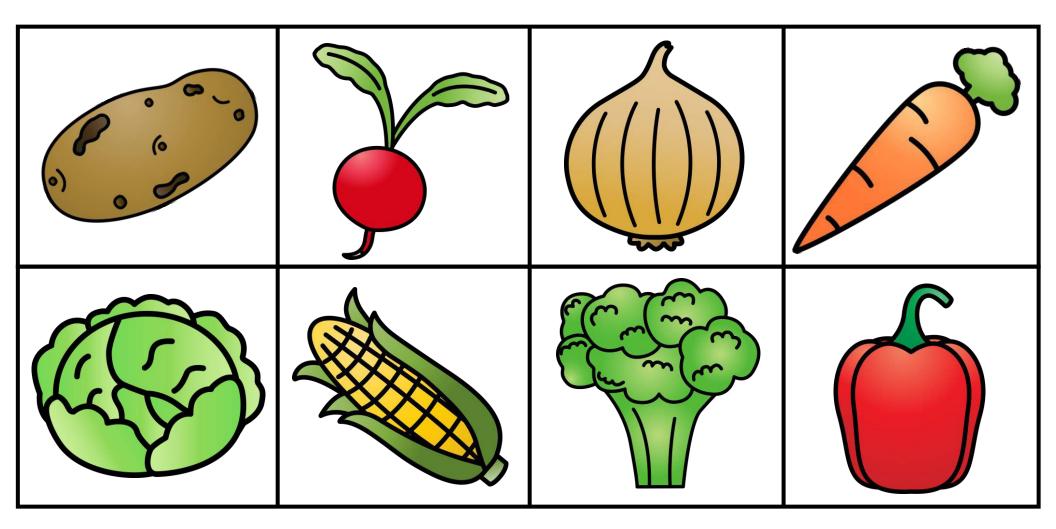
Graph: Students will make a class graph showing which snack they liked more (broccoli = tops, carrots = bottoms). Put the class graph pieces in a pocket chart. Students will each have a thumbs up to place over their vote. Students will fill in their recording sheet to match the class graph and answer the questions.

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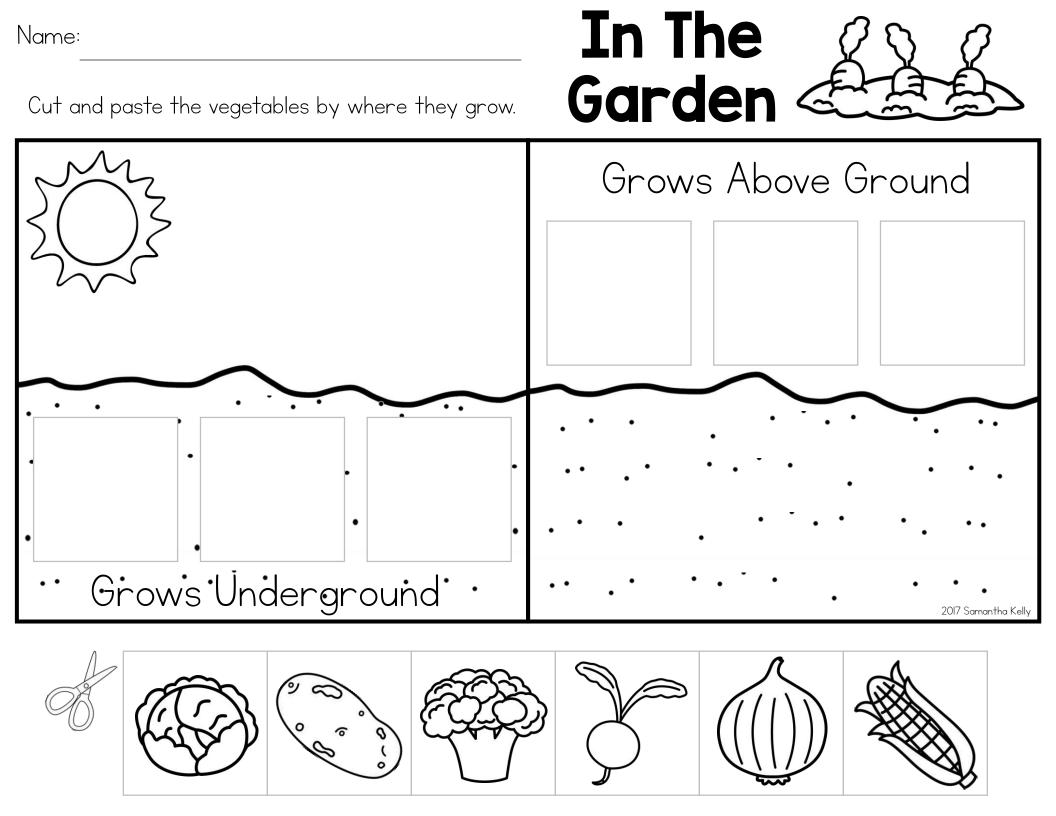


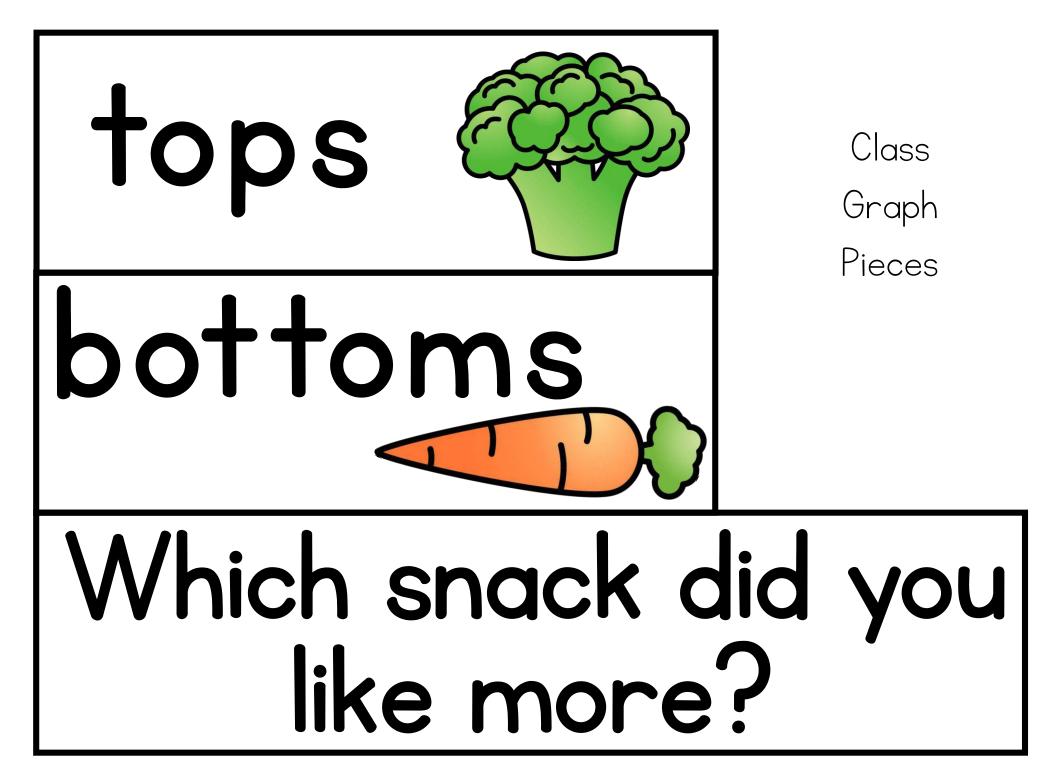
## Yummy Vegetables! Where does the part we eat grow?

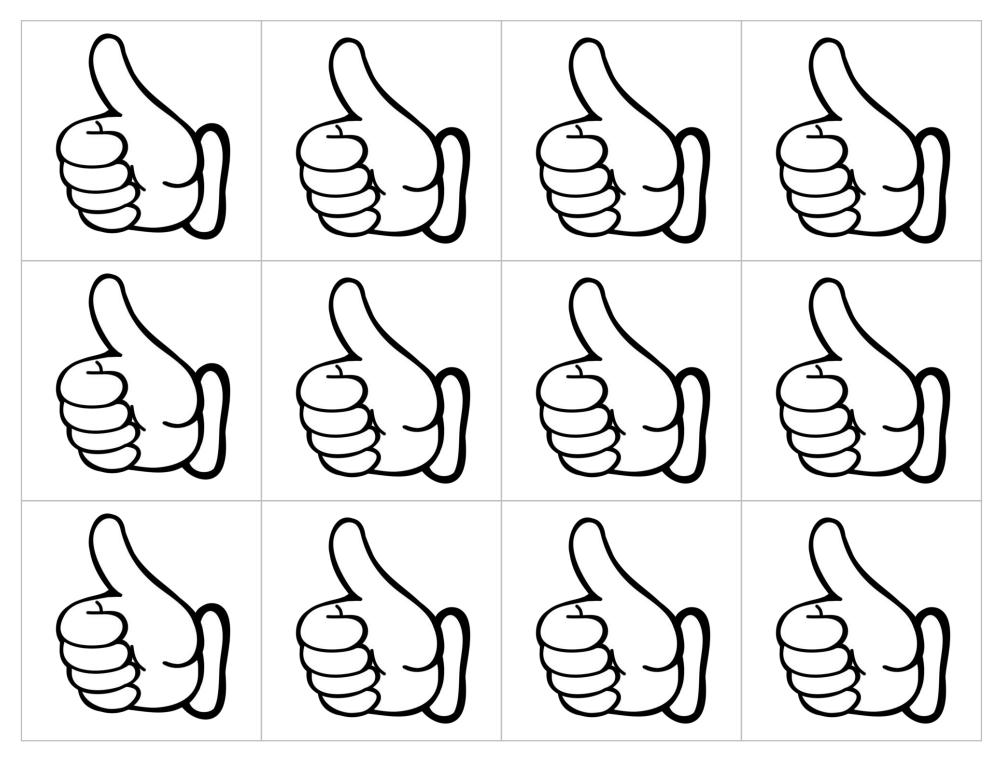




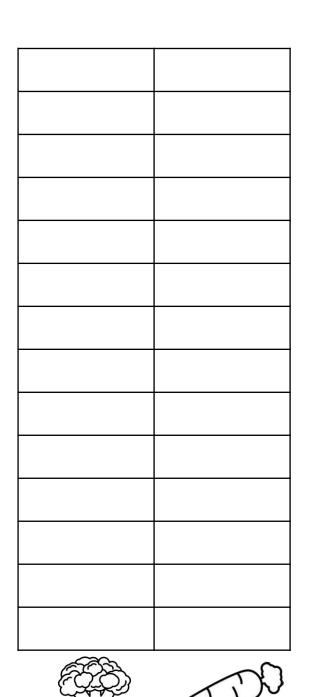
Underground: potato, radish, onion, carrot Above Ground: lettuce, corn, broccoli, bell pepper







Name:

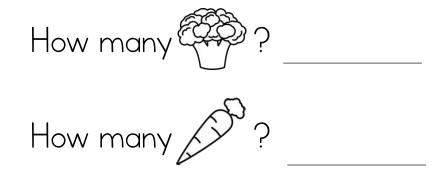


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## Tops or Bottoms?

<u>Broccoli</u> is yummy on the top and <u>carrots</u> are yummy on the bottom.

Which snack did you like better?



Which got more votes?

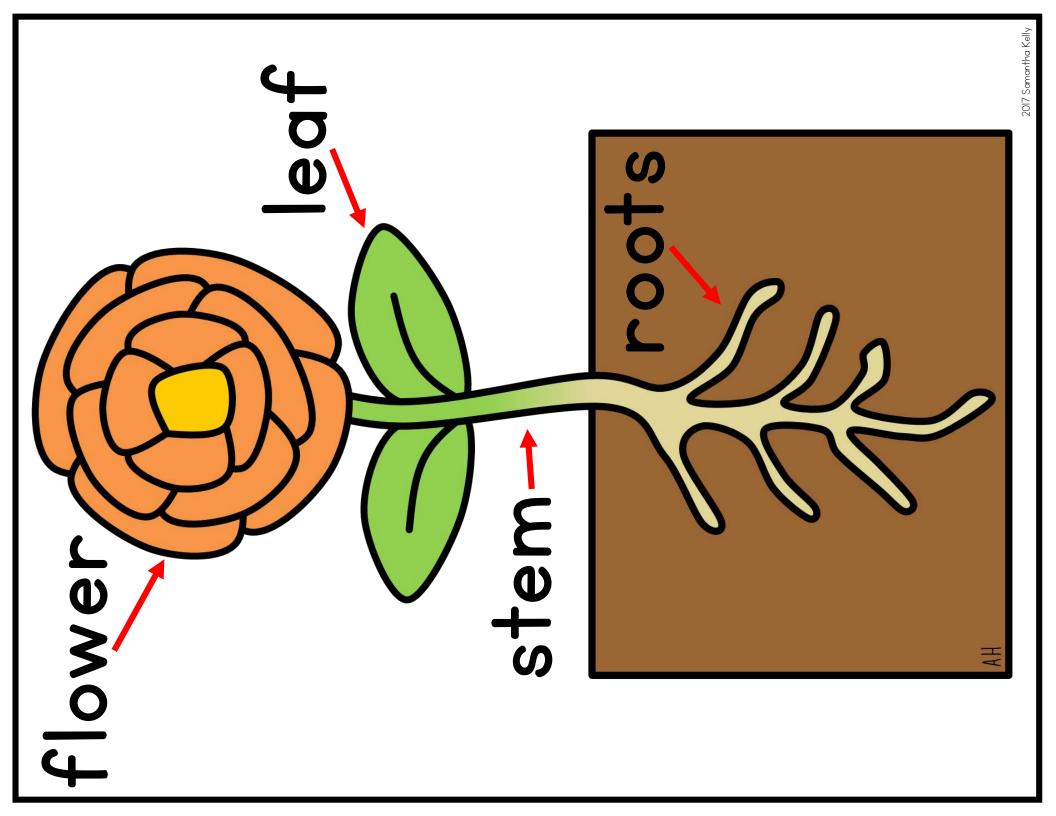
## Parts of a Plant



Teach students about the parts of a plant using the labeled diagram. Also included are cards which detail what each part of the plant does. After discussion, students may cut/paste to label the parts of a plant on their recording sheets.

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## flower

The flower contains the parts that allow other plants to grow. It is where fruit and seeds grow to form new plants!

## leaves

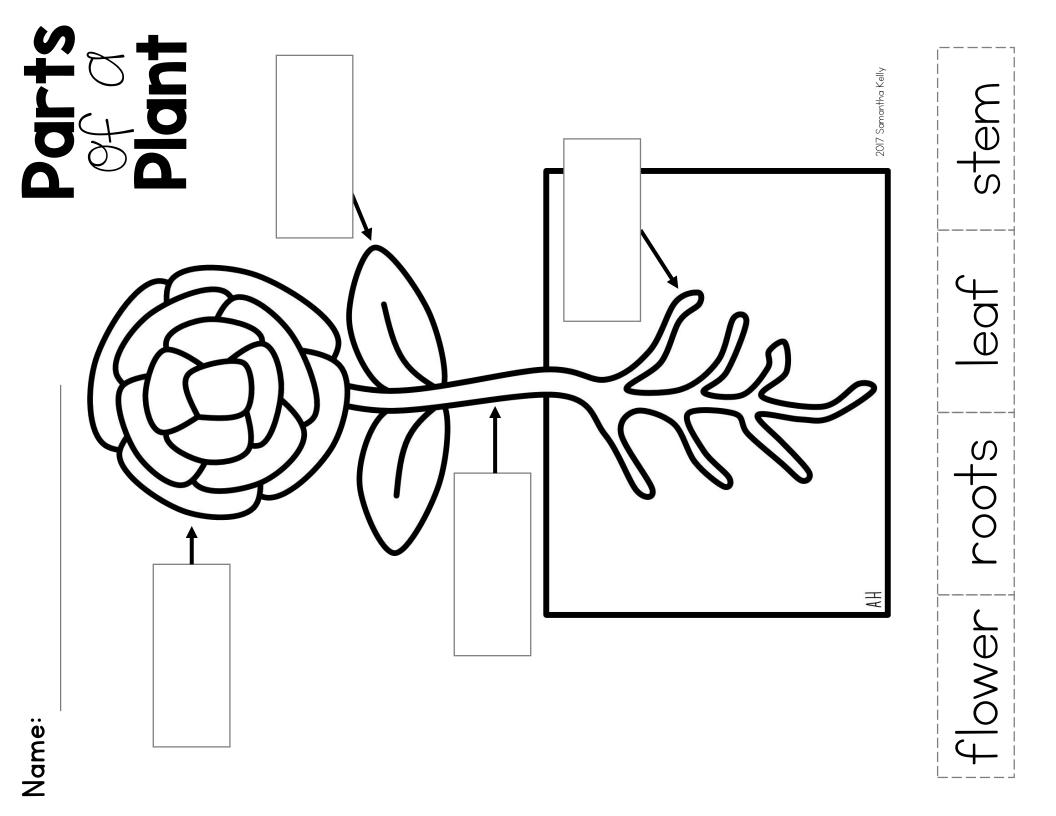
The leaves use energy from the sun to create the plant's "food" through a process called photosynthesis.

## stem

The stem supports the plant so it does not fall down and it delivers water and "food" to different parts of the plant.

## roots

Roots hold the plant into place and they absorb water and minerals from the soil.



# Emergent Reader

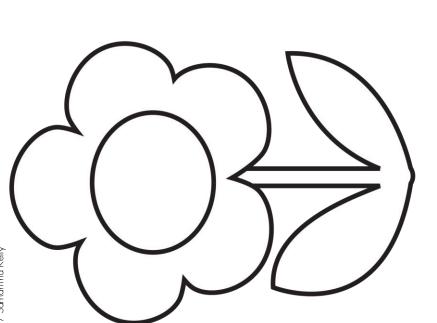
Copy this reader front/back and use the staple settings of your copier to staple twice down the left side.

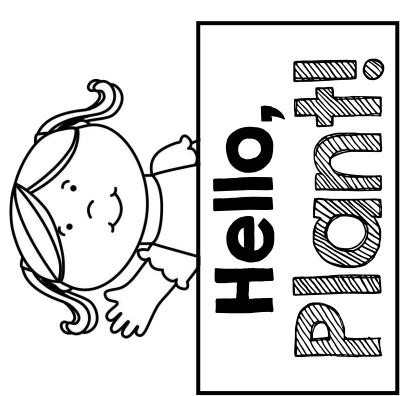
Students will learn about the different parts of a plant with this emergent reader. They may take it home to read aloud to their families.



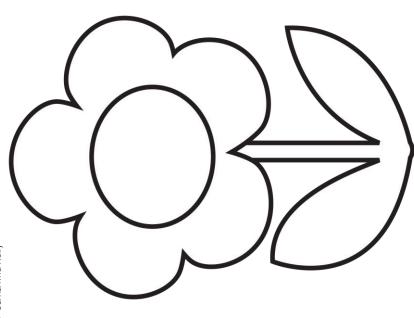


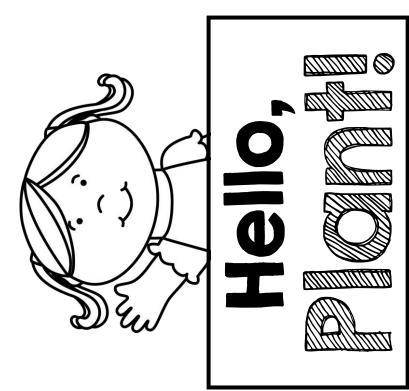


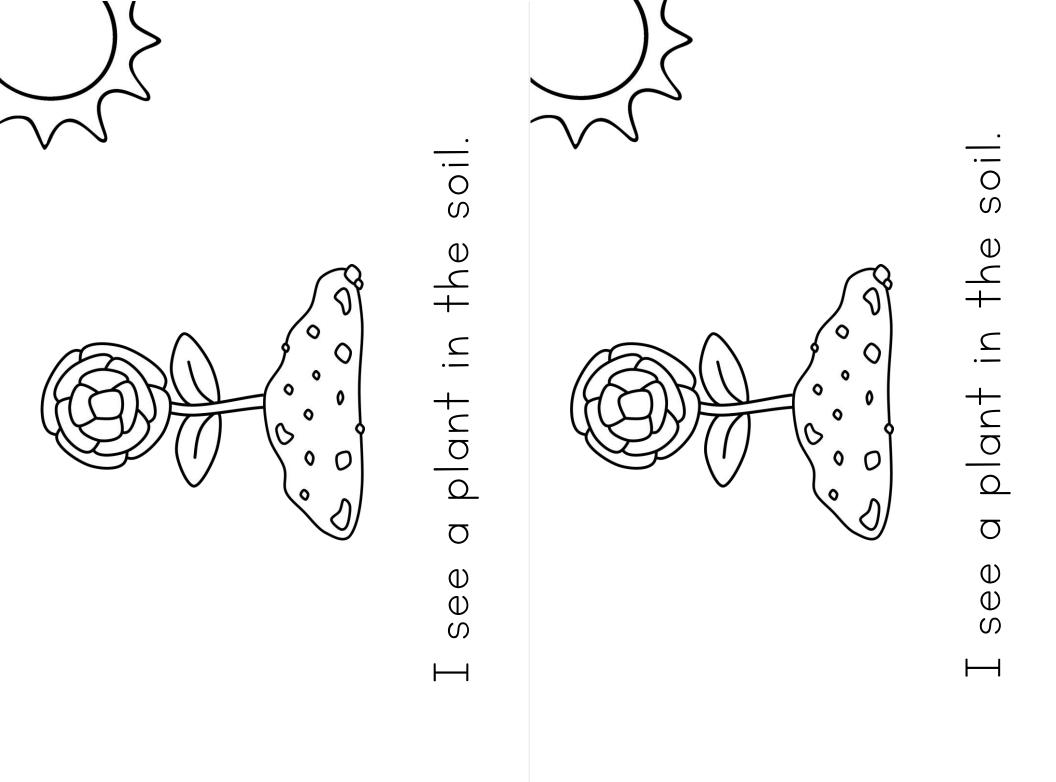




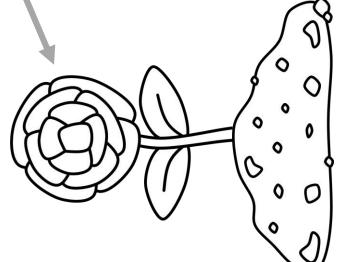
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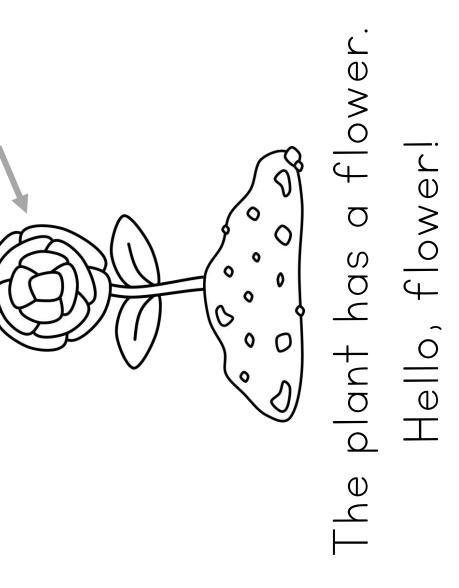


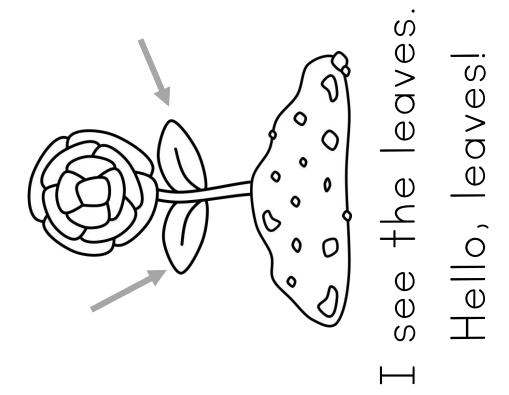


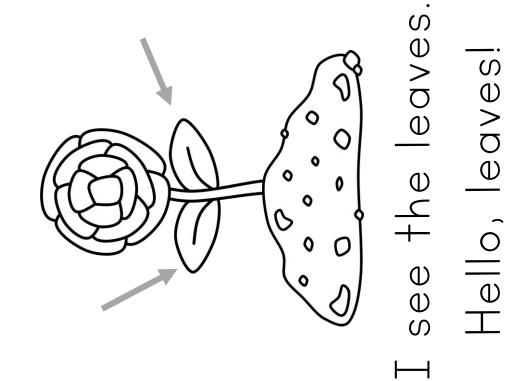


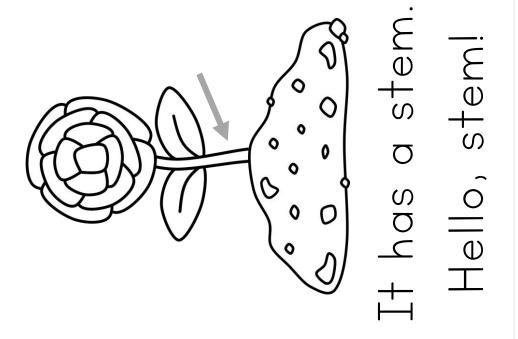


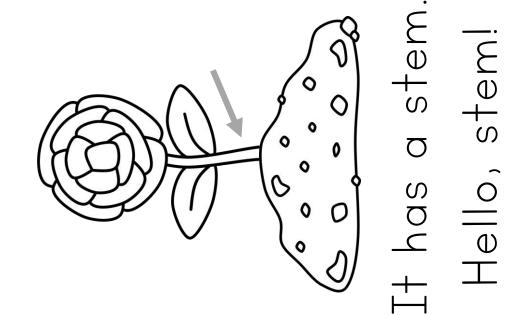






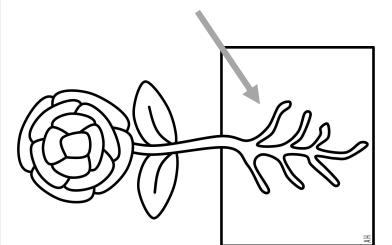


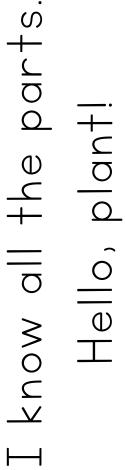


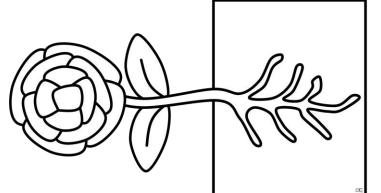


SOİ roots are in the Hello, roots! U C

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know all the parts. Hello, plant ⊢

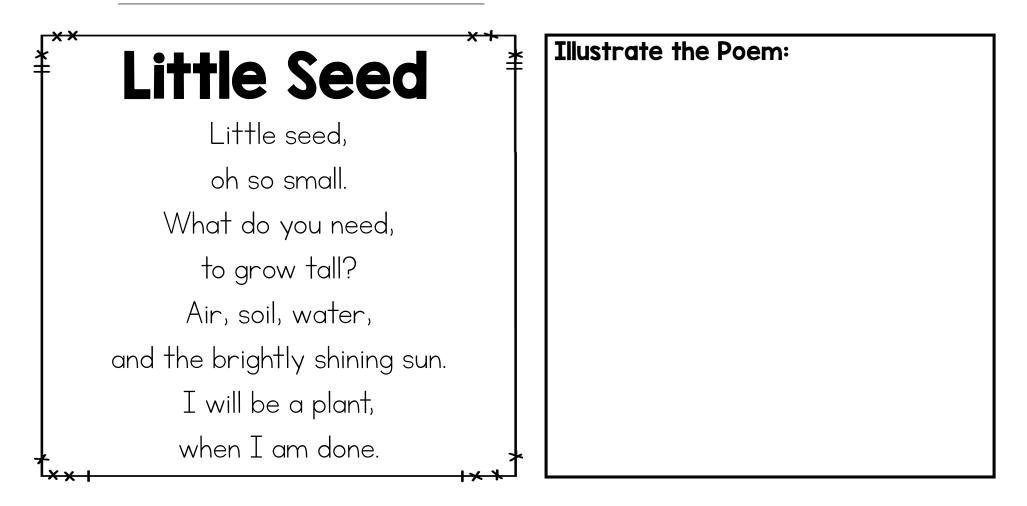
## Plant Needs

Poetry Station: Teach your class about plant needs using this poem/song. It can be sung to the tune of This Old Man. Use the included poster or write the words out on sentence strips/on an anchor chart and use the accompanying images as word clues. Also included are individual recording sheets.

Flipbook: Students will color then cut the images/words out along the dashed lines. They will stack them and the teacher will staple them at the top of the empty box to create a flipbook. Students will flip through the plant needs to complete the sentence.





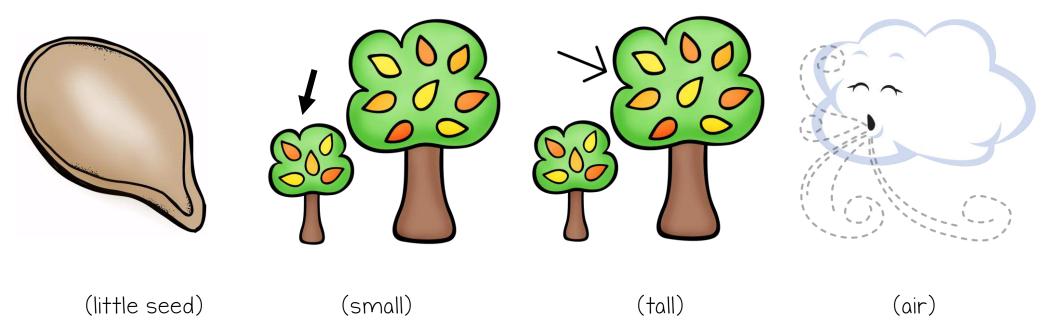


#### What is one thing plants need to grow?

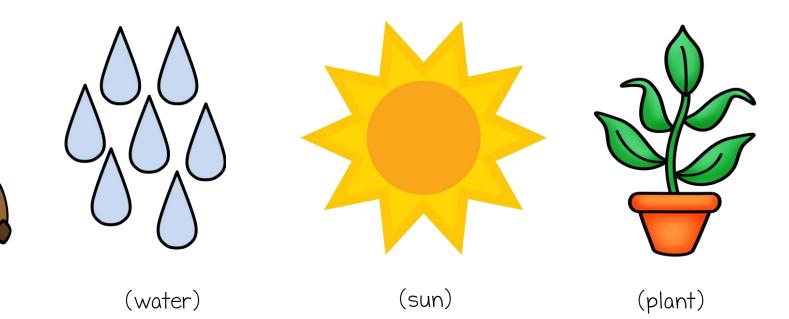
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and the brightly shining sun. What do you need, when I am done. I will be a plant, Air, soil, water, to grow tall? oh so small. Little seed,

(Tune of This Old Man)

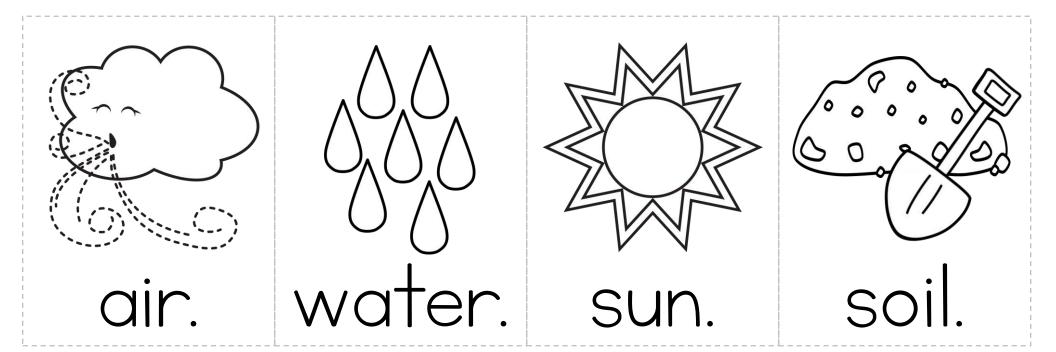


(little seed)



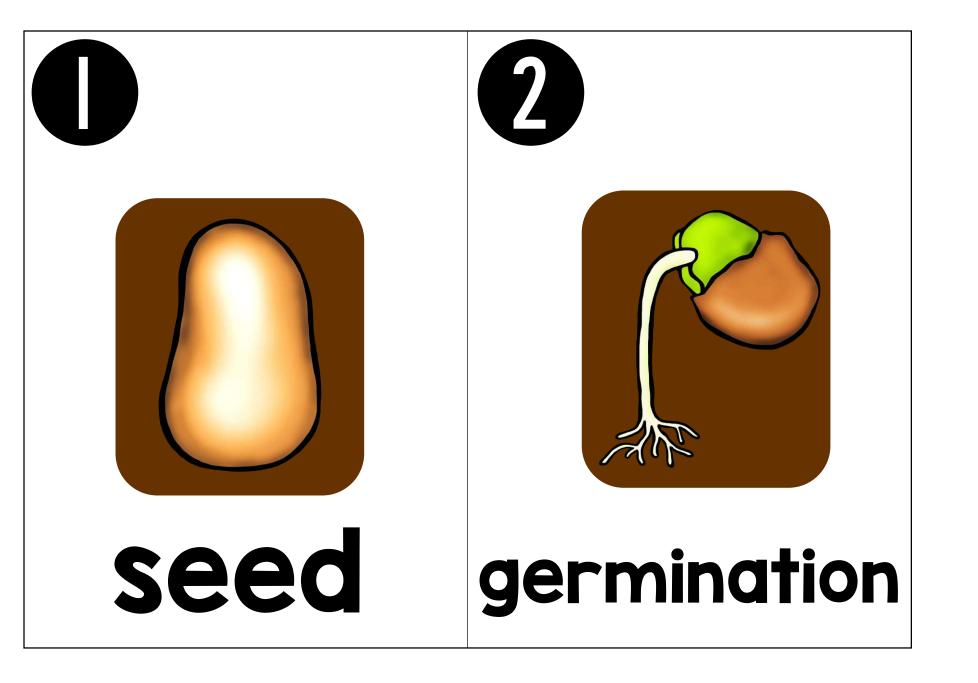
(soil)

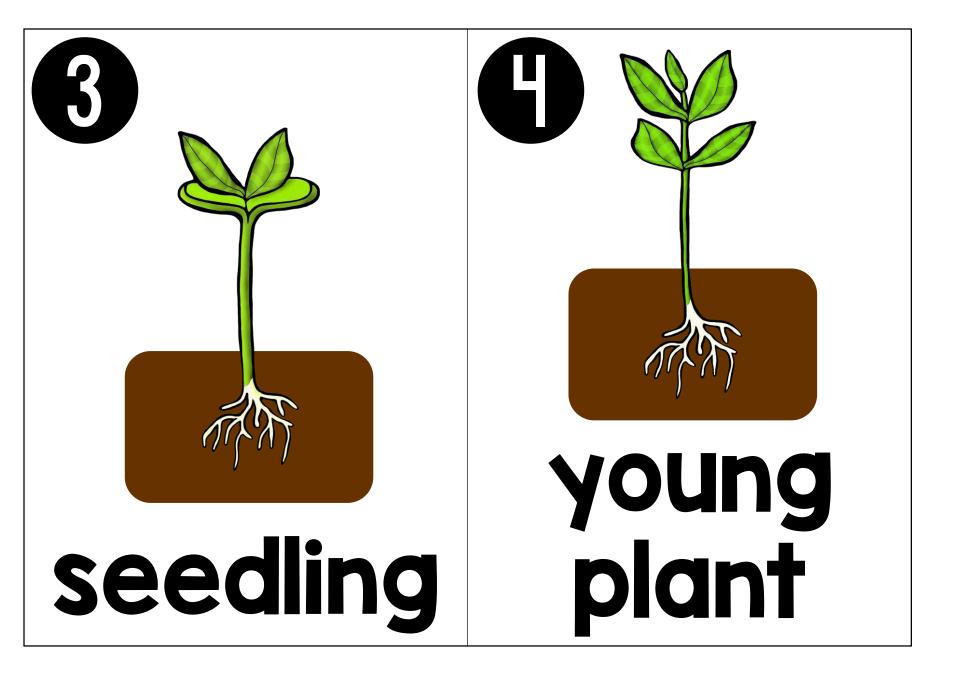
2017 Samantha Kelly	
Name:	
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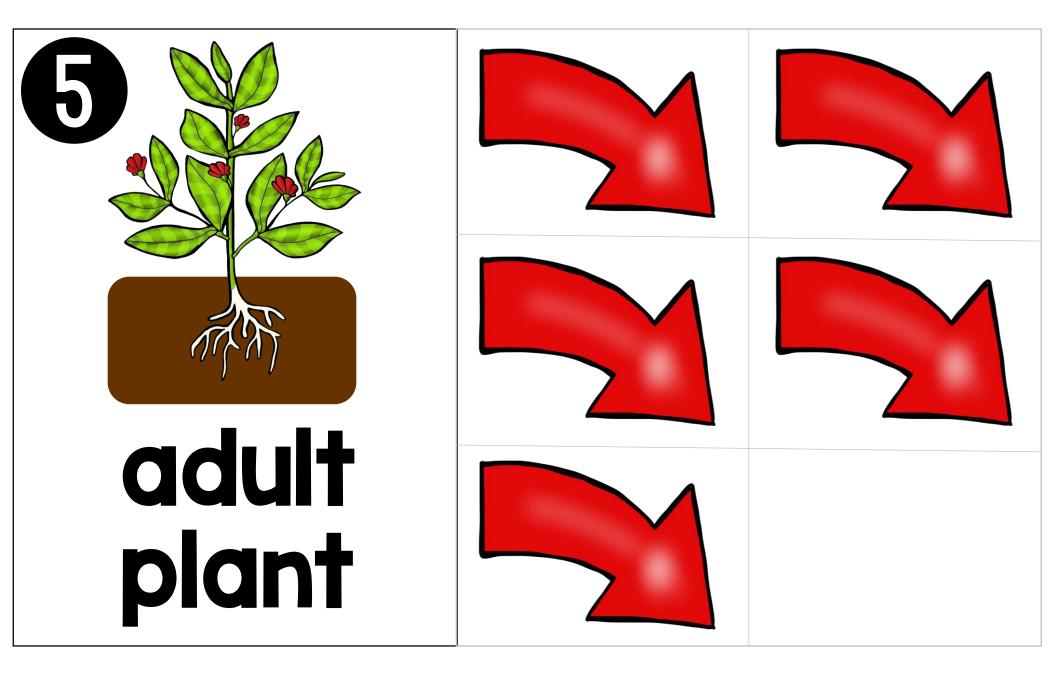


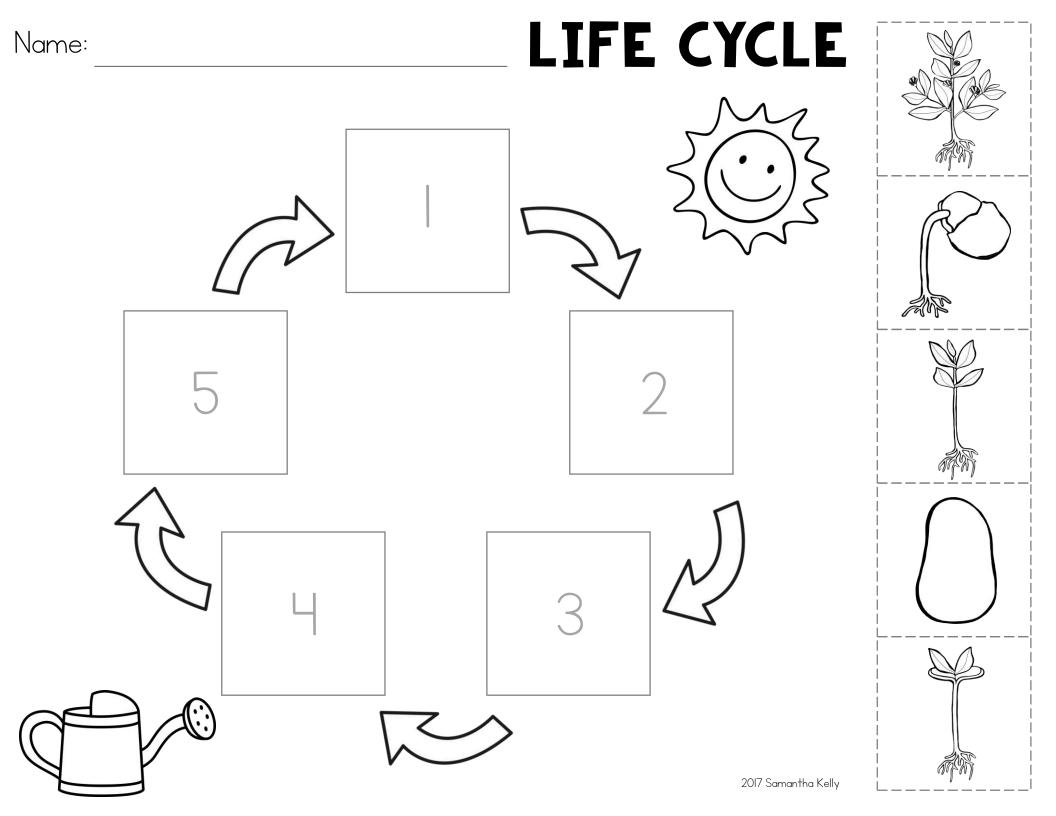
# Plant Life Cycle

Use magnetic tape or regular tape to show the life cycle (in a circle) on the whiteboard. Put the cards in order and use the arrows to show the progression around the circle. Explain the different stages of the life cycle of a plant. Then, they can complete the cut/paste page.









## Nature Walk

Take your class on a nature walk around your school campus. Try to go to areas that have several different kinds of plants. Have kids bring their recording sheets, a pencil, and clipboard to draw and label some of the plants they observe in nature.



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# Nature Walk

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four plants you saw during your nature walk!			2017 Samantha Kelly
Draw and label four plants you			

# Growing Beans

22.25

For this project, each child will grow their own lima bean! Please refer to the teacher instruction page to learn how to set everything up.

Seed Observation Journal – Print as many copies of the observation page as you need. You might have students observe every other day. Copy the book front/back and use the staple settings of your copier to staple twice down the left side. Slice down the middle to make two books. Students will observe their lima bean as it goes through the varying stages. They will draw and describe their observations in their booklets.





### Planting Beans - Teacher Tips

Each student will need a lima bean seed, a sandwich sized Ziploc bag, a paper towel, and the garden window template (pg. 48).

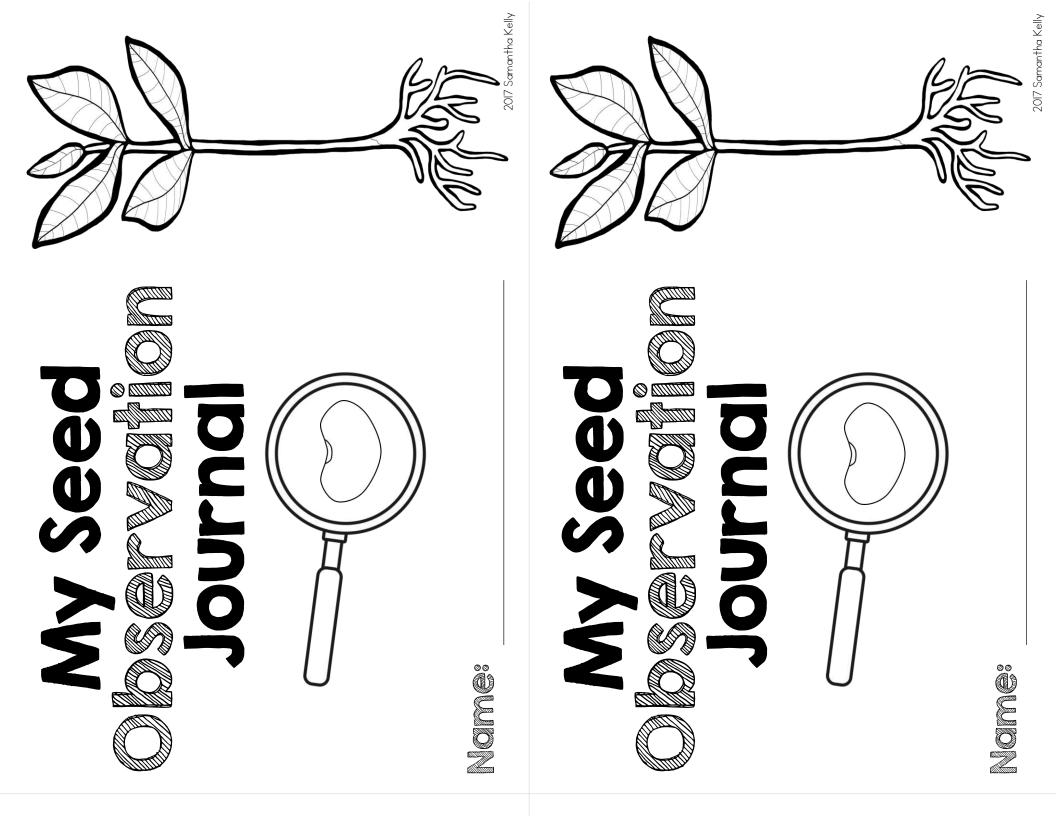
If you would like to see faster results with your beans, I suggest soaking the seeds in a cup with water overnight before giving them to students.

First have students color the template on page 48 and cut on the dashed lines to remove the center. There is an "easy entry" on the right side so they don't have to poke their scissors through to cut out the square. They will write their name on the blank line.



If you have a sink in your room, call students one at a time and have them wet a paper towel and gently wring it out in the sink. They will situate it in the center of the Ziploc bag. Place the seed atop the paper towel and close the Ziploc bag. Tape their garden template to the front of the bag so they can quickly identify their seed each day. Do not tape the top of the Ziploc bag as you may need to open it to water the seeds. Tape the bags to your windows or set them on a ledge in front of your windows. They need light. You might need to dampen the paper towels after a few days. Just open up the top and use a spray bottle. Allow students time every few days to record their observations in their observation journals.





My Ubservations:	<e th="" this.<=""><th></th><th></th><th></th><th>My Observations:</th><th><e th="" this.<=""><th></th><th></th><th></th></e></th></e>				My Observations:	<e th="" this.<=""><th></th><th></th><th></th></e>			
Uale:	My seed looks like this.				Date:	My seed looks like this.			

# Soil Exploration



Allow groups to explore soil through this quick science observation. Give each table a tray of dry soil. Ask them to use their senses (not taste!) to explore the soil. If you have magnifying glasses and tweezers, these would be great tools to use. Have students fill out their observations of the dry soil. Then allow students to pour or spray some water on the soil. Let them explore, wash their hands, then fill out their observations of the wet soil. \* \* Tip: Do this the same day you plant marigolds!





	soil science;
Draw a picture of the soil.	WET SOIL         Draw a picture of the soil.
<pre>     It looks:  </pre>	It looks:
<pre>     It feels:     2017 Saman </pre>	It feels:

# Growing Marigolds

For this project, you will either plant one marigold plant as a class, or each student will plant their own marigolds in a cup. Refer to the instruction page for more information.

Anchor Chart – Use the pieces to assemble an anchor chart detailing the four steps to growing flowers. You may use pictures only, or you may choose to write a descriptive sentence next to each step. See Picture  $\rightarrow$ 

How to Books - Copy these front/back and use the staple settings of your copier to staple three times down the left side. Slice them apart to create three books. Students will write the steps for growing a flower. Go over the included How-to vocabulary (first, next, then, last)



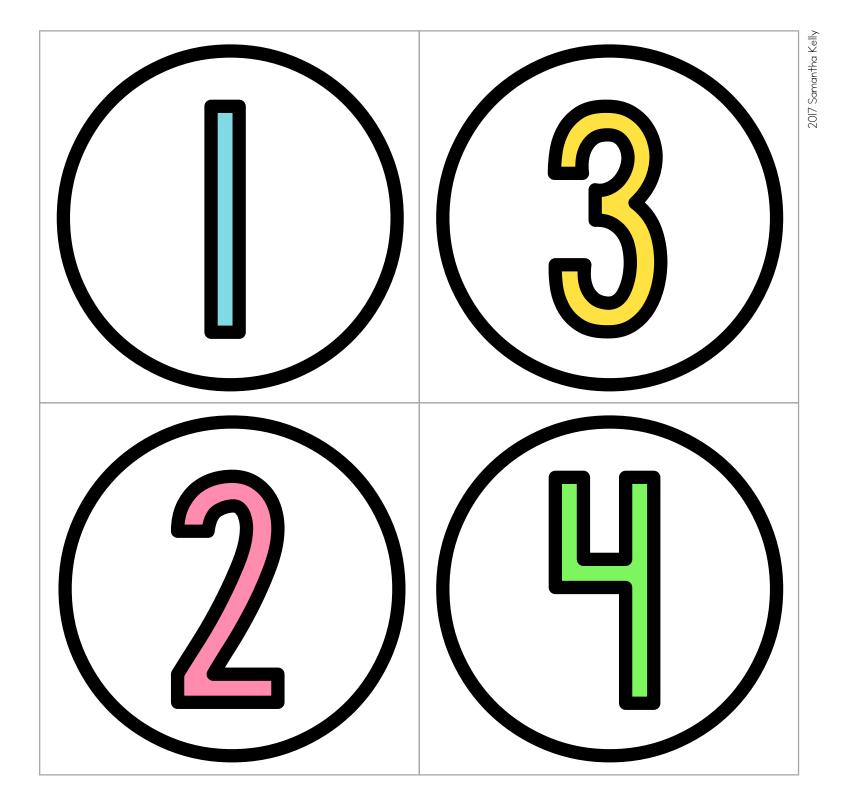
#### **Growing Marigolds- Teacher Tips**

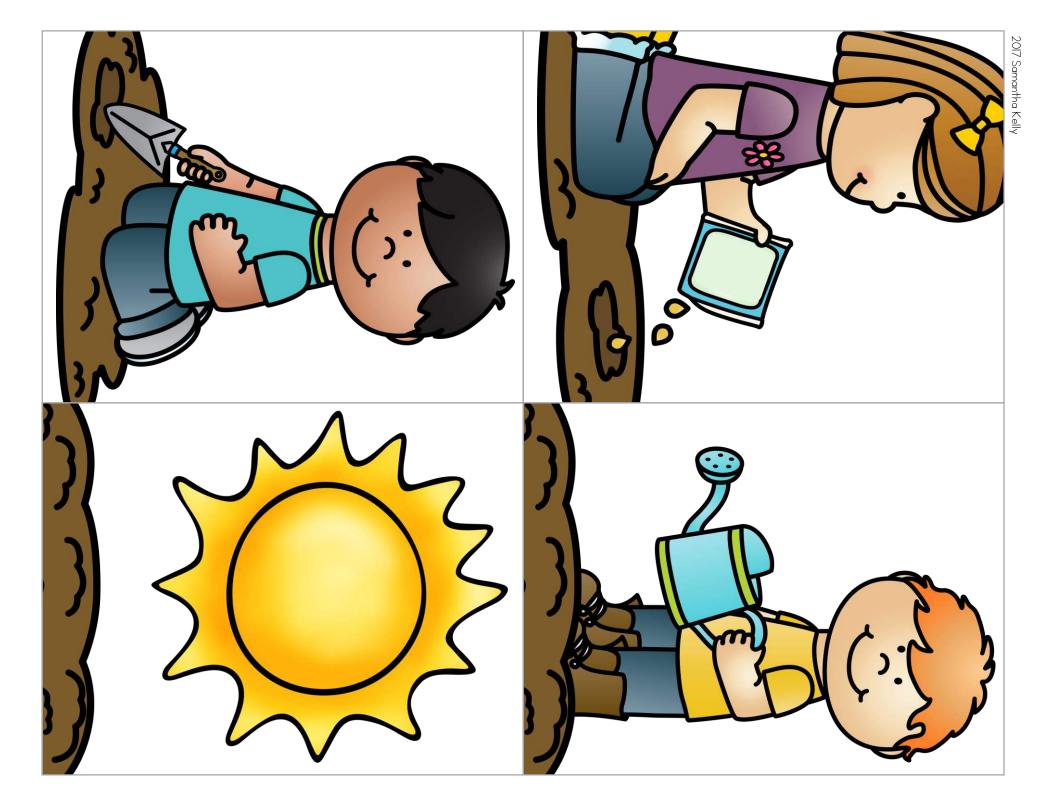
You can either grow a single class marigold plant or have each student grow their own marigold. Follow the directions below for either choice.

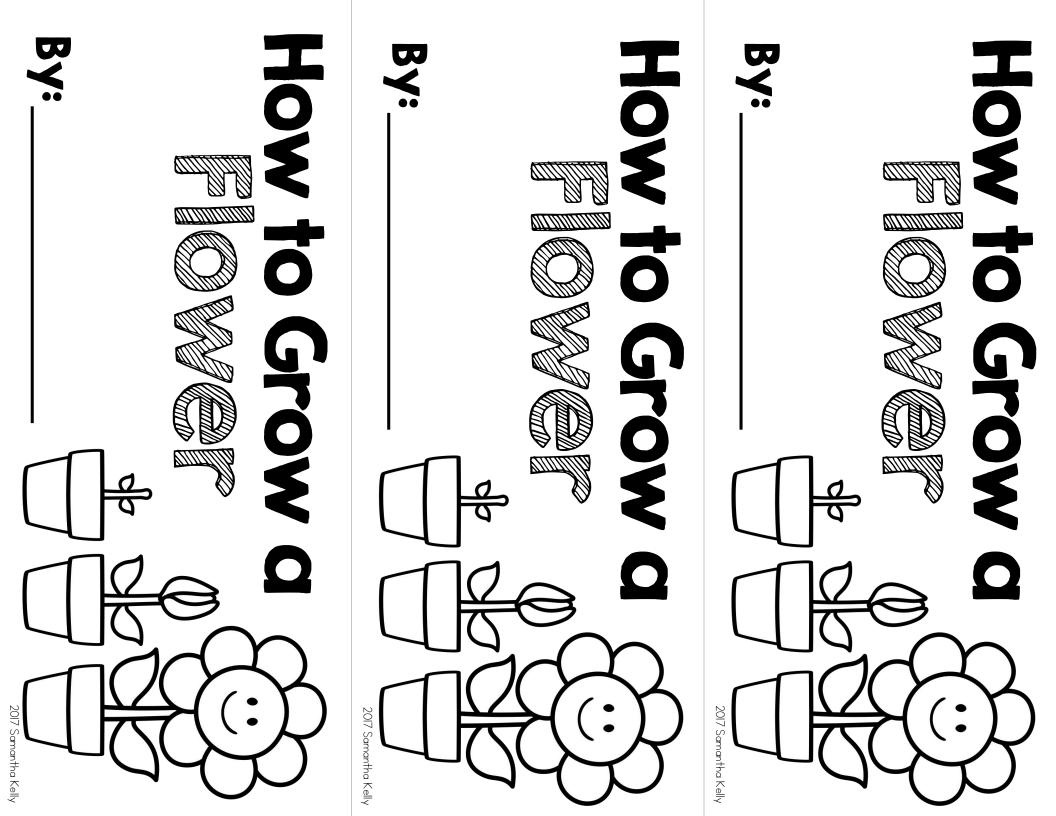
Class Plant: Bring in a clay pot and some Miracle Grow potting soil. Discuss the steps for growing a flower as indicated in the anchor chart (pages 55–57). Allow each student to add a handful of potting soil to the pot. Then, push a few seeds down into the soil. Place the pot by the window and assign a child a day to give it a couple sprays of water from a spray bottle. They should spray down at the soil, not onto the flower. Observe any growth as it happens. Consider transplanting it outside once you are through observing.

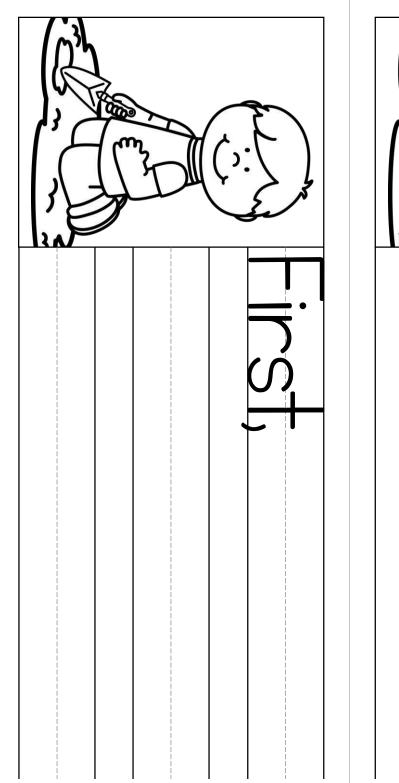
Individual Plants: Give each student a styrofoam cup. Allow them to write their name with permanent marker and decorate it if you wish. Have each student fill their cup with Miracle Grow potting soil. Give them 1 or 2 seeds to push into their soil. Place the cups by the window. Plant one seed in a clear plastic cup, pushed up against the side so you can see growth while it's happening. Allow students to spray their plant each day or every other day. One to two sprays is plenty for these small cups. Send them home with kids when you are through observing.

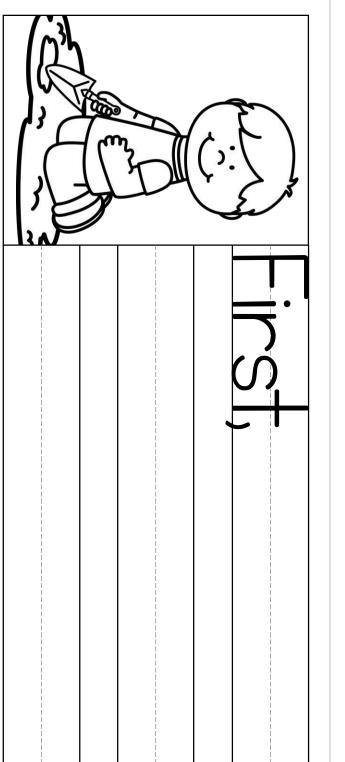


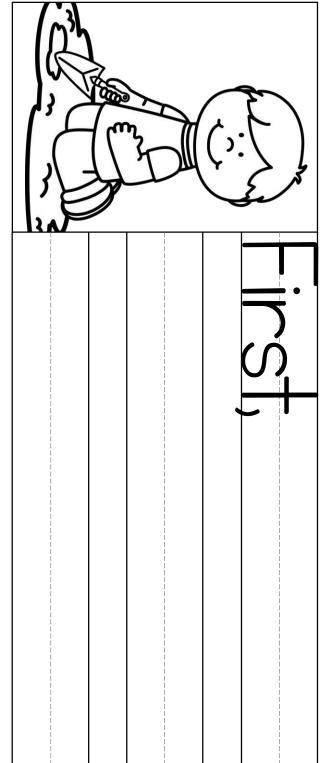


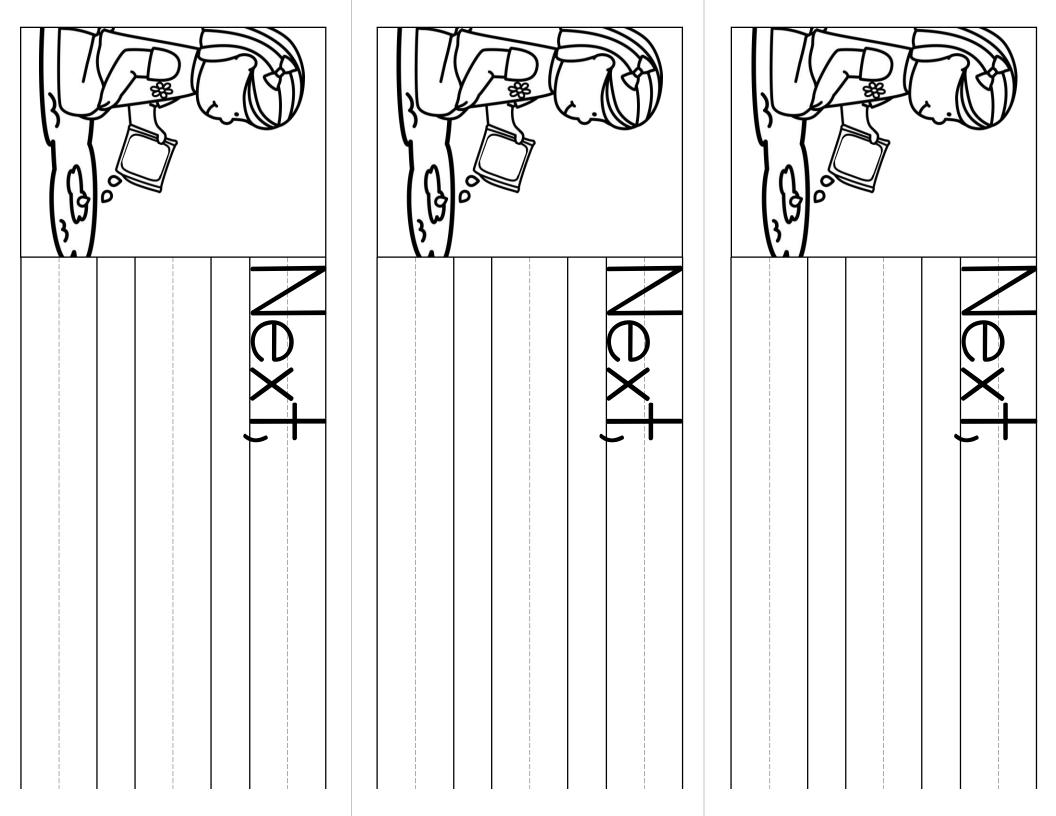


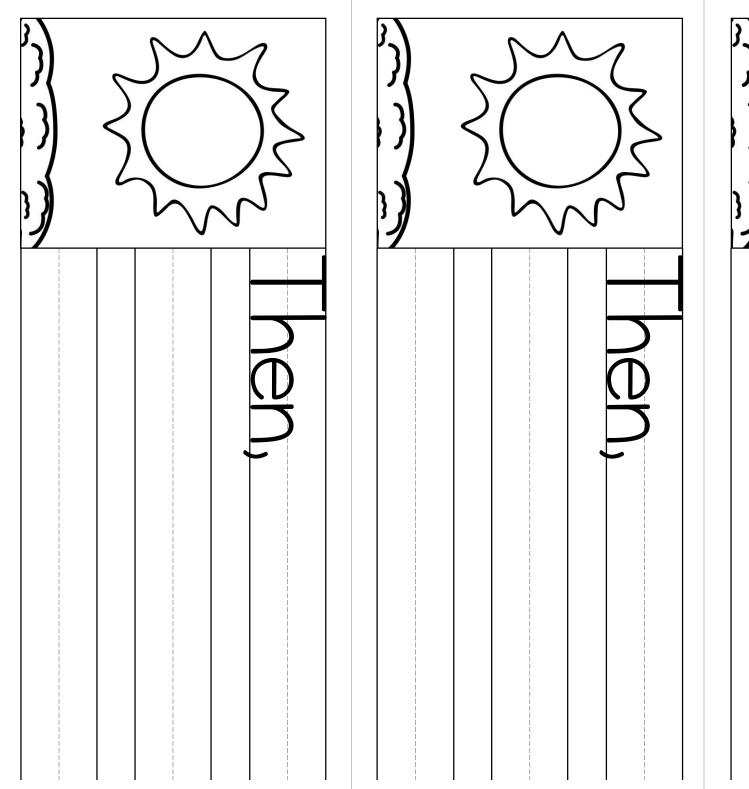


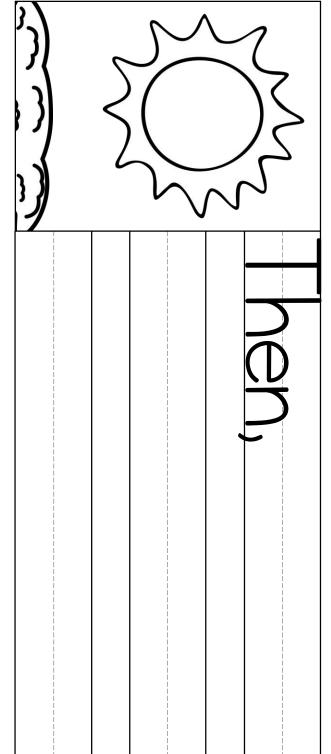


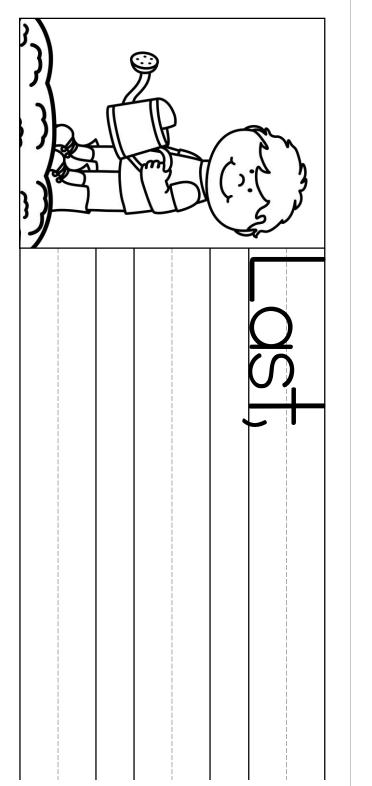


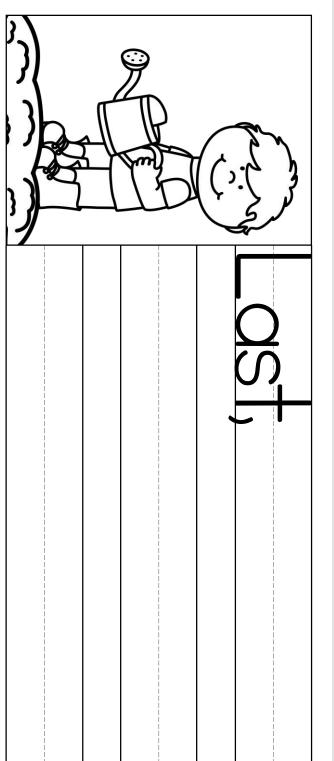


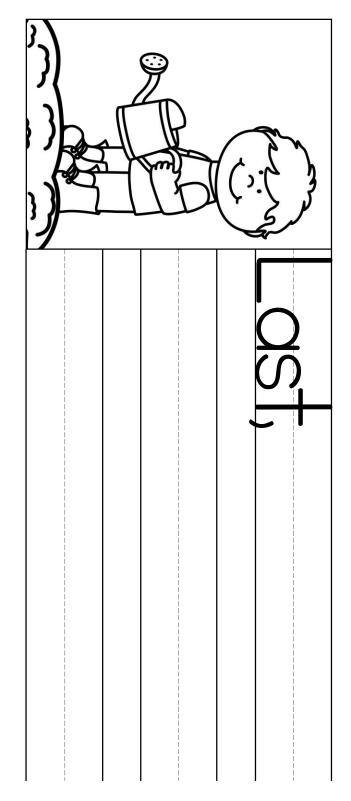












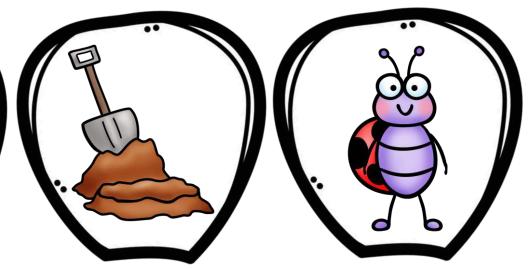
# Word Family Flowers

Laminate and cut out all the flower pieces. Students will read the word family in the center. They will search for the petals with pictures that belong in that word family. There are 5 pictures for each word family flower. Once they have sorted all the petals, they may complete their recording sheet.







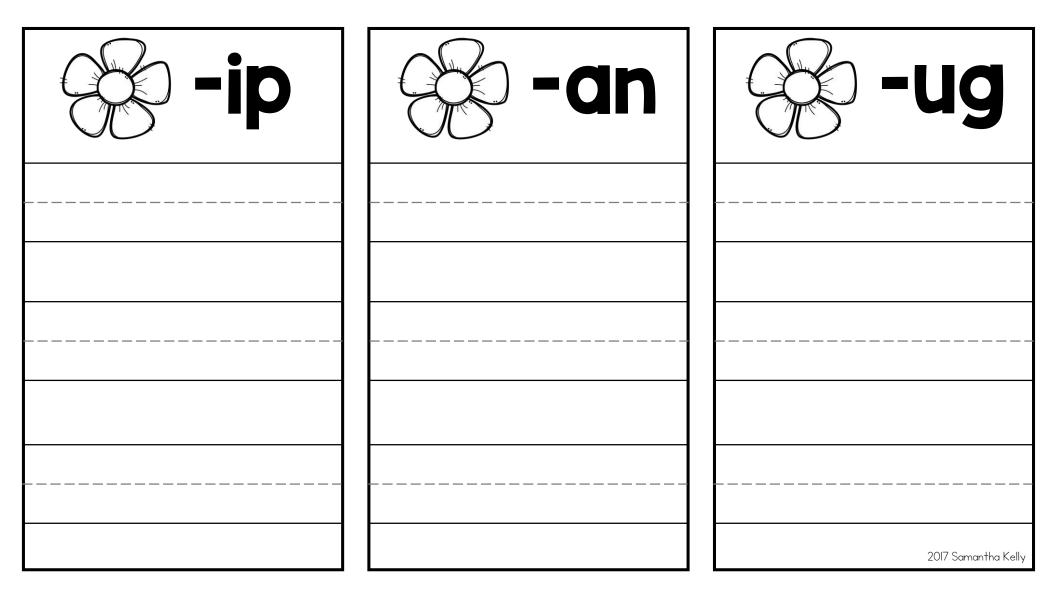


ip - lip, hip, dip, zip, rip an - van, can, pan, fan, ran ug - hug, dug, bug, rug, mug

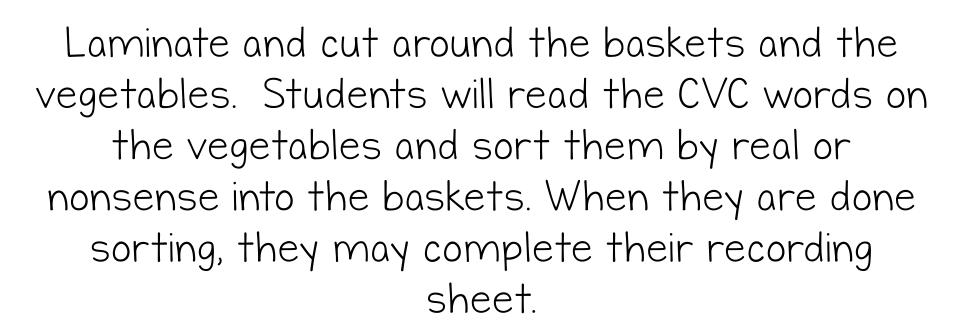
#### WORD FAMILY FLOWERS

Sort the pictures into the correct word family. Write three of the words in each word family below.

Name:



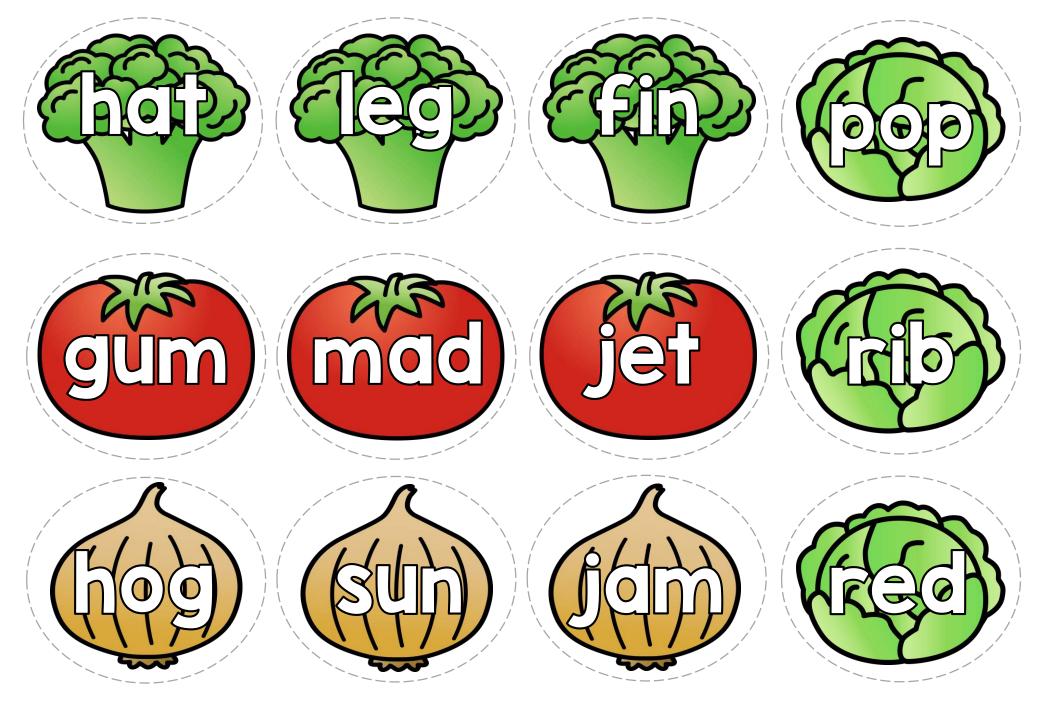
# In the Basket

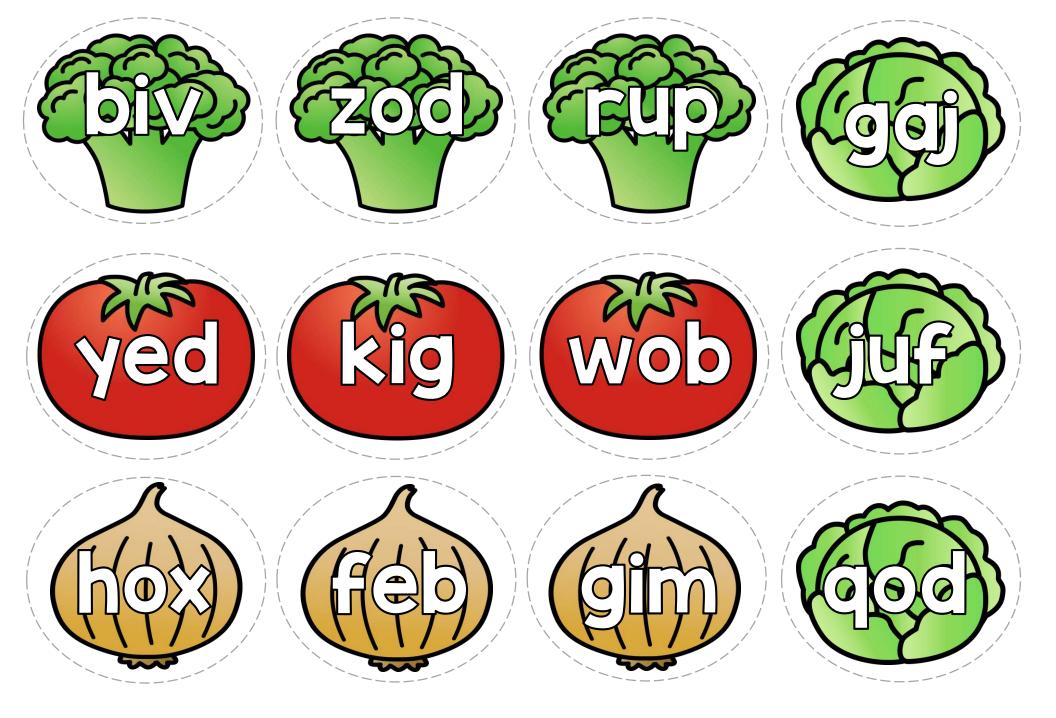








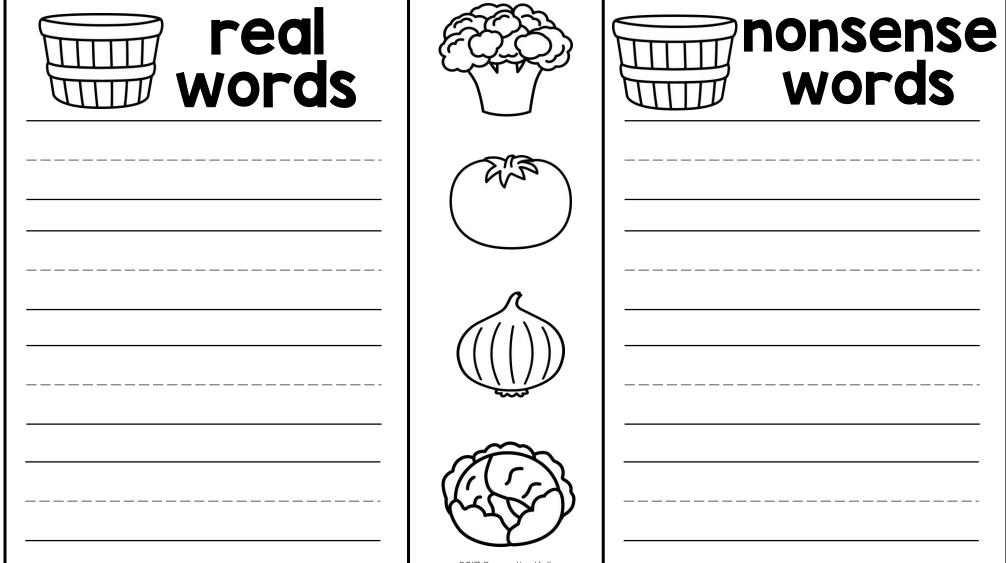




#### IN THE BASKET

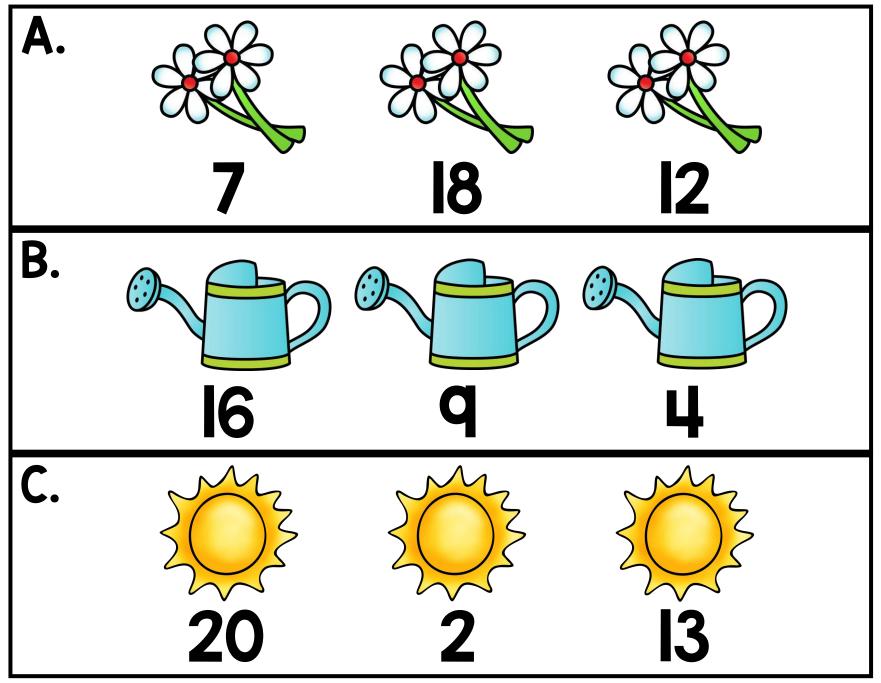
Sort the words by real or nonsense. Write four words for each basket below.

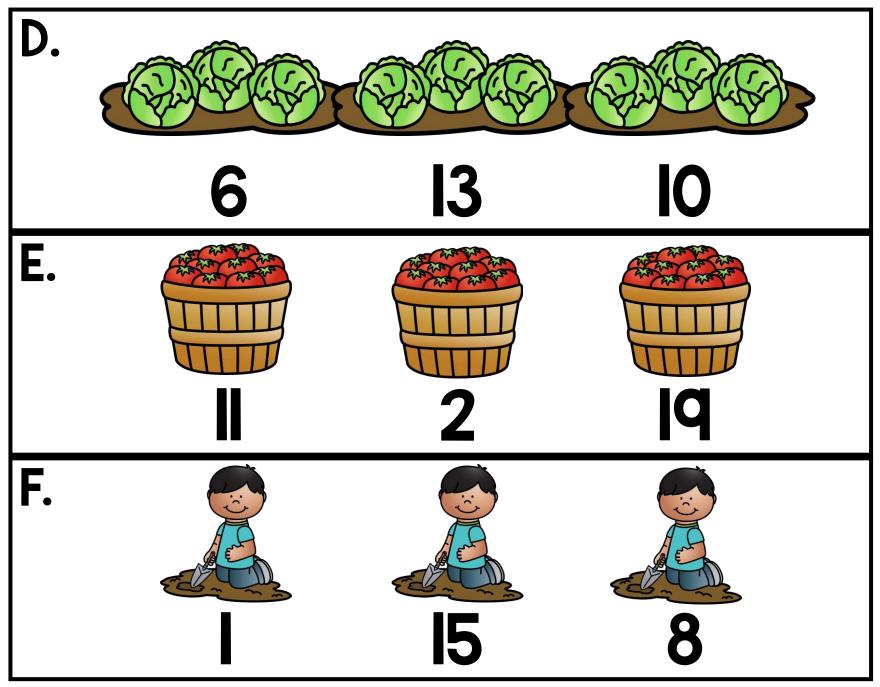
Name:

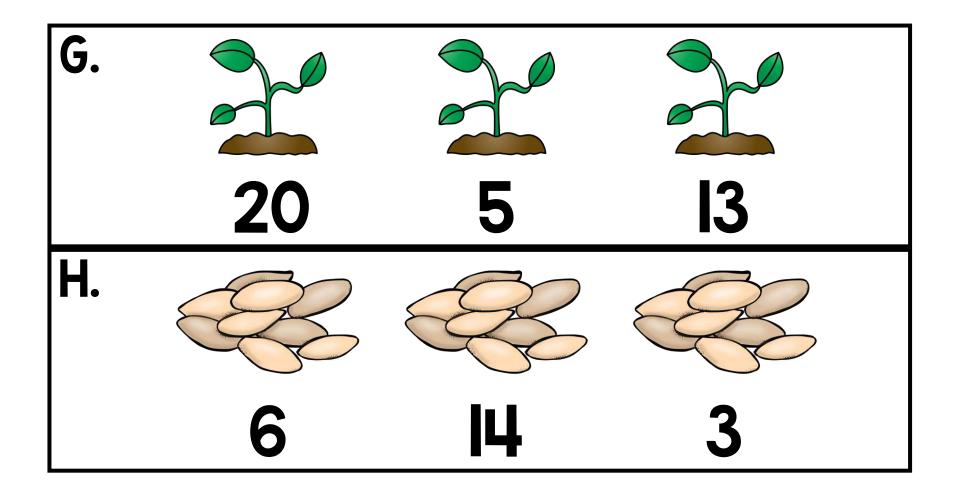


# Growing Numbers

Students will choose a card and read the three numbers. They will write these three numbers in the correct order, from smallest to largest, on their recording sheet. They will continue until they have completed all 8 cards.



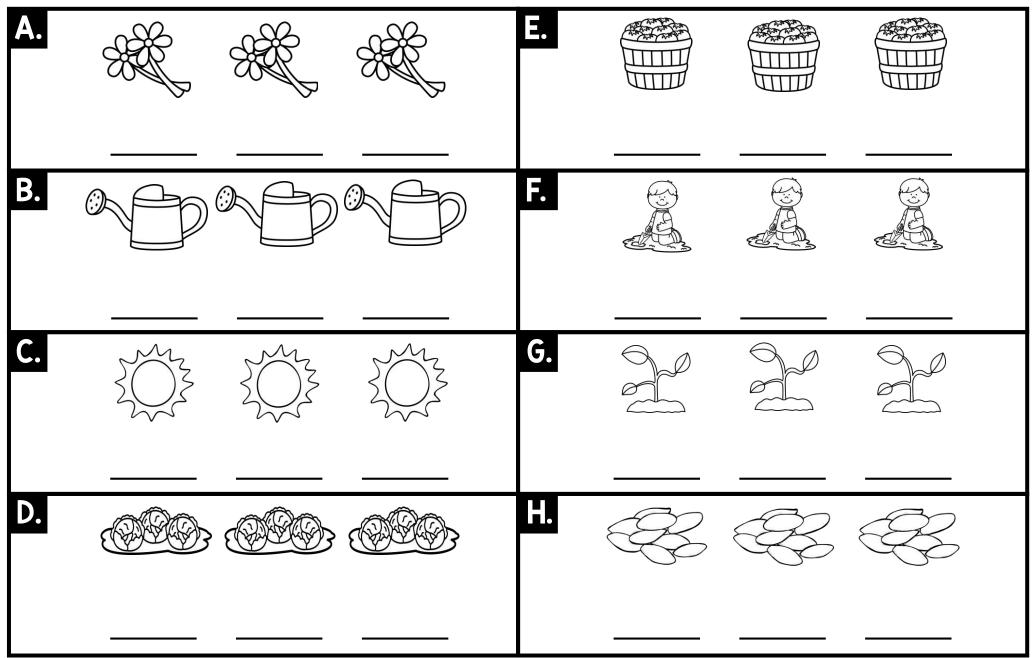




Name:

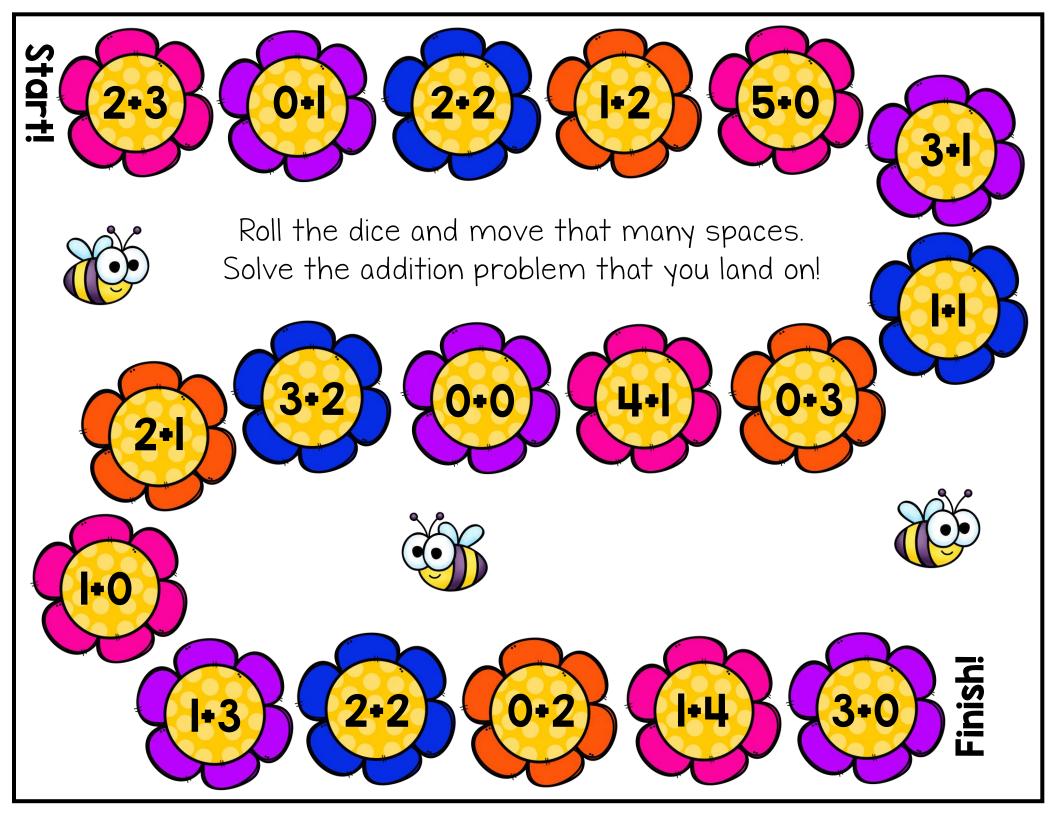
#### Growing Numbers

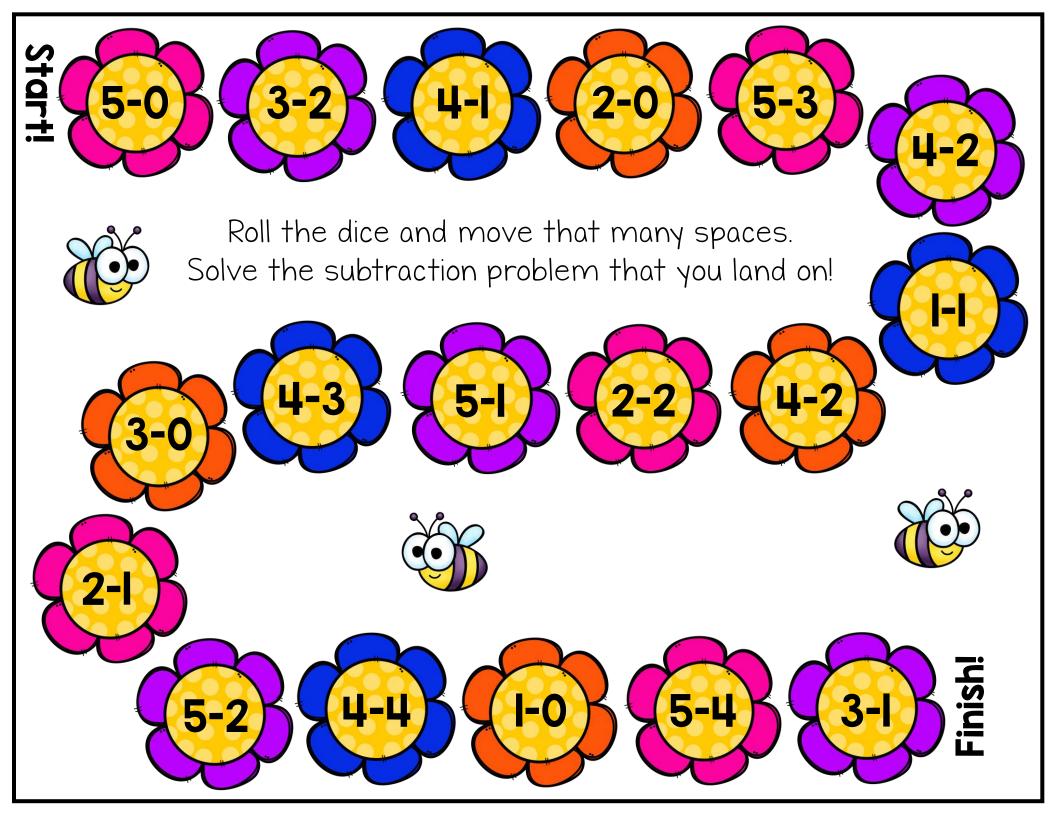
Look at the numbers on the cards. Write them in order from smallest to largest.



# Fluency Flowers

In this game, students will practice their fact fluency through 5. There are two versions – one for addition and one for subtraction. Please choose the one which makes the most sense for your class at this time. Students will take turns rolling a dice, moving that many spaces, then solving the addition or subtraction problem on the flower. First to the finish is the winner!









# Thank You to these designers!

