

LET'S LEARN ABOUT FLORIDA CUCUMBERS!

This Virtual Farm Field Trip unit is all about cucumbers. It begins with an informative 4-minute video, transporting students to Long and Scott Farms in Mount Dora, Florida. Your students will meet farmers Haley and Kirsten to learn how Florida cucumbers are planted, grown, harvested and distributed.

We encourage you to expand the learning experience using this section's worksheets and guided activities, including a taste test. You may choose to use all these resources or pick the ones best suited to your classroom.



ACCESS VIRTUAL FARM FIELD TRIP

Scan code or visit:
FarmToSchoolFL.com/FieldTrips



FLORIDA CUCUMBER FUN FACTS

- There are two main kinds of cucumbers – they are called slicers and picklers. We eat slicers fresh and turn picklers into... pickles!
- Florida grows more slicer cucumbers than anywhere else in the United States.
- Cucumbers are more than 95% water. They are the perfect snack to keep you hydrated on a hot day.
- Have you ever heard someone say, “cool as a cucumber”? That’s because the inside of a cucumber is 20 degrees cooler than the temperature around it.
- Cucumbers are high in nutrients like iron, calcium and vitamin B. Iron helps make blood, which carries the air we breathe to our muscles so we can move and grow. Calcium helps us grow strong bones and vitamin B turns the food we eat into energy.

BEFORE YOU WATCH: DISCUSSION STARTERS

Get students thinking about agriculture, science and nutrition by asking questions such as:

- *Where do the fruits and vegetables you eat come from? How did they get there?*
- *What do plants need to grow?*
- *Let's name some vegetables. Can you think of any others that are green?*
- *Now, let's name some fruits. Which ones are green?*
- *Close your eyes and imagine you are at a farm. What do you see? Hear? Smell?*
- *Today, we'll be taking a virtual field trip to visit a Florida cucumber farm. What do you know about cucumbers?*

AFTER YOU WATCH: CHECK FOR UNDERSTANDING

Trivia Toss

Materials

- **3 buckets, boxes or similar containers**
- **2 palm-sized balls (enough for each team to have one)**

Divide students into two teams. Students work as a team to answer a review question about the video. Then, if they answer correctly, they get a chance to toss a ball into one of three buckets to get a prize for their team. Prizes might be a homework pass, free time, extra computer time or lunch in the classroom.



The video is full of information. You might want to watch it again after your discussion so students can listen for details they missed!

SUGGESTED QUESTIONS:

- *Which flowers grow the cucumbers: male or female? (female)*
- *What big piece of equipment plants cucumbers in rows? (tractor)*
💡 **Teacher Tip:** Ask students if they've ever seen a tractor in real life and where. Ask what other machines they might find on a farm.
- *What insects are brought in to pollinate the cucumber plants? Hint: They fly! (honeybees/ bumblebees)*
💡 **Teacher Tip:** Ask students what else bees do. (Make honey!)
- *True or false: Each cucumber is picked by hand. (True)*
- *True or false: Cucumbers are cooler on the inside than on the outside. (True)*
- *True or false: Each plant is harvested (picked) one time. (False)*
- *True or false: Cucumbers are a healthy choice to eat. (True)*
💡 **Teacher Tip:** Ask students to name other healthy foods.
- *True or false: Cucumbers do not grow in Florida. (False)*

USING THESE TEACHING TOOLS

Below is an overview and guide for using the teaching tools included in this section, including guided activities, recipes and worksheets. We've included the education standards each tool complements, materials needed for each activity, a brief overview of each tool and tips for building your lessons.

You can find each of these tools on the following pages, along with additional information and pointers.

GUIDED ACTIVITIES

TOOL	COMPLEMENTARY STANDARDS	MATERIALS NEEDED	ABOUT THIS TOOL	TEACHER TIPS
Video, Discussion Questions and Trivia Toss (in Classroom Guide) <i>On page 7</i>	Standard(s) Supported: SC.1.L.14.2, SC.K.L.14.3, SC.1.L.14.1, SC.1.L.16.1, HE.K.CH.3.1, HE.K.PHC.1.1, ELA.K.C.4.1	<ul style="list-style-type: none"> - 3 buckets, boxes or similar containers - 2 palm-sized balls (enough for each team to have one) 	This activity gets students out of their seats as they respond to questions about the Virtual Farm Field Trip video.	
Cucumber Three Ways <i>On page 13</i>	Standard(s) Supported: HE.K.CH.3.1, HE.K.PHC.1.1, HE.1.PHC.1.1, SC.1.N.1.2	<ul style="list-style-type: none"> - Sliced cucumbers - Jar of pickles - Cucumber punch (see Cucumber Punch Recipe) 	In this activity, you'll guide students through tasting cucumbers in three different forms – as fresh cucumbers, as pickles and in a cucumber punch.	Start by asking your school nutrition team if they can support you by acquiring and/or preparing the food items. Use this activity to introduce students to new, nutritious foods. Educate them on the nutritional differences between whole foods – like fresh cucumbers – and processed foods – like pickles.

TOOL	COMPLEMENTARY STANDARDS	MATERIALS NEEDED	ABOUT THIS TOOL	TEACHER TIPS
<p>Recipe: Cucumber Punch</p> <p><i>On page 15</i></p>	<p>Standard(s) Supported: SC.K.N.1.2, SC.1.N.1.2</p>	<ul style="list-style-type: none"> - Cutting board - Knife - Clear pitcher - Wooden spoon (optional) <p><i>Adjust quantities based on class size:</i></p> <ul style="list-style-type: none"> - 6-7 cucumbers (sliced thin) - 6-8 limes and/or lemons (quartered) - 15-20 mint leaves (optional) - 8-9 cups (64-72 oz) drinking water - Ice (optional) - Small cups - Spoons 	<p>Use this recipe to prepare your own cucumber punch for the Cucumber Three Ways exercise.</p>	<p>You might demonstrate making a large batch of punch to share with your class or give each student a cup and ingredients to prepare their own.</p>
<p>Food Science: DIY Pickles</p> <p><i>On page 16</i></p>	<p>Standard(s) Supported: SC.K.N.1.2, SC.1.N.1.2</p>	<ul style="list-style-type: none"> - Cutting board - Knife - 2 or more Mason jars - Mixing bowl - Spoon - Measuring cup - Measuring spoons - Refrigerator - Forks, plates and napkins for serving (optional) - 2 medium to large cucumbers - 1 cup water - 1 cup rice vinegar - 3 tablespoons maple syrup or sugar - 3 teaspoons salt - Freshly ground black pepper - 4 leafy sprigs of fresh dill - 4 cloves of fresh garlic - 1 bay leaf 	<p>Use this activity on its own or to prepare your own pickles for the Cucumber Three Ways activity.</p> <p>With this activity, you will teach students how to turn fresh cucumbers into pickles.</p>	<p>Start by asking your school nutrition team if they can support you by acquiring the food items.</p> <p>What's better than a science experiment you can eat? This activity connects young students with where their food comes from, showing them firsthand how cucumbers are processed to become pickles.</p> <p>It also introduces students to the idea that adding ingredients can change an item's properties.</p>

TOOL	COMPLEMENTARY STANDARDS	MATERIALS NEEDED	ABOUT THIS TOOL	TEACHER TIPS
Sense Explorers: Cucumber Edition <i>On page 18</i>	Standard(s) Supported: SC.K.L.14.1, SC.K.N.1.2, SC.1.L.14.1, HE.K.CH.3.1, HE.K.PHC.1.1, SC.1.N.1.2	<ul style="list-style-type: none"> - 1 cucumber slice per student 	This activity encourages students to use their five senses to make observations about cucumbers.	<p>You can also ask your school nutrition team to help provide food for this exercise!</p> <p>Use this activity to teach students how they can use their senses as tools. This activity will also help deepen students' familiarity with cucumbers as a fresh and nutritious food choice.</p>

WORKSHEETS

TOOL	COMPLEMENTARY STANDARDS	MATERIALS NEEDED	ABOUT THIS TOOL	TEACHER TIPS
Cucumber Plant Needs <i>On page 19</i>	Standard(s) Supported: SC.K.L.14.1, SC.1.L.17.1	<ul style="list-style-type: none"> - Crayons, colored pencils or markers 	This simple coloring sheet reinforces students' knowledge of the basic resources plants need to grow.	This tool complements life science lessons about plants.
Letter Practice <i>On page 20</i>	Standard(s) Supported: ELA.1.C.1.1	<ul style="list-style-type: none"> - Scissors - Glue - Writing instrument - Crayons, colored pencils or markers (optional) 	This worksheet prompts students to practice writing the word "cucumber."	<p>This lesson also presents an opportunity to practice sounding with students.</p> <p>Get kids out of their seats by asking them to make each of the letters in the word "cucumber" with their bodies! You might put them in groups to make the whole word or demonstrate and make each of the letters together as a class.</p>
Parts of a Cucumber Plant <i>On page 21</i>	Standard(s) Supported: SC.K.L.14.1, SC.1.L.14.1, SC.1.L.14.2, ELA.1.F.1.3	<ul style="list-style-type: none"> - Scissors - Glue - Writing instrument - Crayons, colored pencils or markers 	This worksheet asks students to cut out words naming parts of the cucumber plant and paste them in the appropriate spot. Students also have space to practice writing the words.	<p>This worksheet complements life science lessons about parts of the plant.</p> <p>It also provides an opportunity to practice sounding and spelling common science terms.</p>

TOOL	COMPLEMENTARY STANDARDS	MATERIALS NEEDED	ABOUT THIS TOOL	TEACHER TIPS
<p>How Cucumbers Grow</p> <p><i>On page 22</i></p>	<p>Standard(s) Supported: SC.1.L.16.1, ELA.1.C.1.2</p>	<ul style="list-style-type: none"> - Scissors - Glue - Crayons, colored pencils or markers 	<p>This worksheet invites students to cut and paste the basic stages of a cucumber's life cycle in the correct order.</p>	<p>This worksheet complements life science lessons about plant life cycles. It also encourages students to think critically about order of events.</p> <p>Try getting kids out of their seats by instructing them to pretend they are a seed, crouched in a ball. Then ask them to stand taller as they simulate the phases of the cucumber plant's growth.</p>
<p>Answer Key</p> <p><i>On page 23</i></p>			<p>See here for answers to each worksheet.</p>	

CUCUMBER THREE WAYS

This group activity brings the field trip to life as students get the opportunity to taste cucumbers three ways: as fresh slices, as pickles and as an easy-to-make punch.

MATERIALS



Sliced cucumbers



Jar of pickles



Cucumber punch
(see recipe on
following pages)

MAKE YOUR OWN PICKLES

For a bonus activity, make pickles together as a class! See the Guided Activity section for an easy recipe.

SUGGESTED QUESTIONS

Lead a discussion as your students try cucumbers three different ways. Questions like the following can help kids better connect with their food, think about their preferences and encourage them to make nutritious choices in the future.

Before the tasting:

1. Have you tried cucumber before? What did you think?
2. If not, what do you think it will taste like?
3. Did you know pickles are made from cucumbers? Do you know how cucumbers get turned into pickles?

As they try the fresh cucumbers:

1. What do you think of the texture of the fresh cucumber?
Is it crunchy or soft?
2. Do you like the smell of the cucumber? How would you describe it?
3. How would you feel about eating fresh cucumbers as a snack?
Why? What might you eat them with?

COLLABORATE WITH YOUR CAFETERIA

You might also consider partnering with your school nutrition team to obtain these food items and/or prepare a cucumber-themed dish for your taste test. Be sure to contact them ahead of time, discuss the support you will need and show gratitude for their collaboration!

As they try the pickles:

- 1. How does the taste of the pickle compare to the fresh cucumber? Is it more sour or salty?*
- 2. What do you think about the texture of the pickle compared to the fresh cucumber? Is it softer or crunchier?*
- 3. Do you like the smell of the pickle? How would you describe it?*
- 4. Have you had pickles before? If so, what do you usually eat them with? If not, would you like to try them again?*

As they try the punch (cucumber water):

- 1. Can you taste the cucumber in the water? How strong is the flavor?*
- 2. How does the flavor of cucumber water compare to regular water? Is it more refreshing?*
- 3. Would you enjoy drinking cucumber water on a hot day? Why or why not?*
- 4. Before today, did you know you could change the flavor of water by adding fruit like cucumbers? What other fruit might you add to water, and how might it change the flavor?*

TEACHER TIP:

You can also use this activity as a nutrition lesson for students. Explain how whole foods made of just one ingredient – like a fresh cucumber – are more nutritious than packaged, processed foods with many ingredients.

You can explain that food with lots of ingredients – like pickles – are like a big puzzle with many pieces, and some of those pieces might not be as healthy (like added sugar). The simple food with one ingredient is usually better for your body and helps you feel your best!

You might even pass around a jar of pickles to show the students the list of ingredients on the nutrition label. Then ask them where the fresh cucumber's ingredient list is. (There is none – because there's just one ingredient!)

CUCUMBER PUNCH RECIPE

CUCUMBER PUNCH

Estimated Servings: 100 oz, or (20) 5 oz cups

EQUIPMENT REQUIRED

- Cutting board
- Knife
- Clear pitcher
- Wooden spoon (optional)

MATERIALS AND INGREDIENTS

Adjust quantities based on class size.

- 6-7 cucumbers (sliced thin)
- 6-8 limes and/or lemons (quartered)
- 15-20 mint leaves (optional)
- 8-9 cups (64-72 oz) drinking water
- Ice (optional)
- Small cups
- Spoons

DIRECTIONS

1. Slice cucumbers, limes and lemon.
2. Place sliced cucumbers, limes, lemons and mint into drinking cup. (*Optional: Lightly mash pieces using a wooden spoon to enhance taste.*)
3. Add water and ice cubes.
4. Enjoy!



You might demonstrate making a large batch of punch to share with your class or give each student a cup and ingredients to prepare their own.

FOOD SCIENCE: DIY PICKLES

Complete this recipe with your students for a fun science experiment they can eat!

SUGGESTED QUESTIONS

Below are discussion questions to ask your class before, during and after this DIY pickle experiment.

Before:

1. Did you know pickles are made from cucumbers?
2. How do you think cucumbers get turned into pickles?
3. Have you tasted pickles before? What did you think?
4. If not, what do you imagine they taste like?

During:

1. What does a fresh cucumber taste like?
2. How do you think adding these ingredients will change the flavor of the cucumber?
3. How might adding these ingredients change the texture?
4. How might adding these ingredients change the smell?

After:

1. Does the pickle taste how you expected? Explain.
2. How does the taste of the pickle compare to fresh cucumber? Is it more sour or salty?
3. What do you think about the texture of the pickle compared to a fresh cucumber? Is it softer or crunchier?
4. Do you like the smell of the pickle? How would you describe it?
5. Have you had pickles before? If so, what do you usually eat them with? If not, would you like to try them again?

COLLABORATE WITH YOUR CAFETERIA

Be sure to ask your school nutrition team if they can support you by providing food items!



When we pickle cucumbers, we put them in a special juice called brine, which is often made of water, salt and vinegar. When cucumbers sit in this juice for a long time, they turn into pickles.

This process – called pickling – helps keep cucumbers fresh for a long time. It also changes the texture, making cucumbers crunchier. Best of all, the cucumbers absorb the flavors from the brine, making them tangy!

EASY DIY PICKLES

EQUIPMENT REQUIRED

- Cutting board
- Knife
- 2 or more Mason jars
- Mixing bowl
- Spoon
- Measuring cup
- Measuring spoons
- Refrigerator
- Forks, plates and napkins for serving (optional)

MATERIALS AND INGREDIENTS

- 2 medium to large cucumbers (about 24 ounces total)
- 1 cup water (room temperature or cooler)
- 1 cup rice vinegar
- 3 tablespoons maple syrup or sugar
- 3 teaspoons salt
- 40 twists of freshly ground black pepper
- 4 leafy sprigs of fresh dill, roughly chopped (about ½ cup)
- 4 cloves garlic, peeled and smashed
- 1 bay leaf


DIRECTIONS

1. Slice the cucumbers into thin rounds, about 1/8-inch thick. Set aside.
2. In a liquid measuring cup or bowl, combine the water, vinegar, maple syrup, salt and black pepper. Stir until most of the salt has dissolved into the liquid, about 30 seconds to 1 minute. Set aside.
3. Place the cucumbers into a wide-mouth jar about 3 to 4 inches in diameter, tall enough to offer at least 1 inch of extra space on top.
4. Top the cucumbers with the dill and garlic. Tuck the bay leaf into the side of the jar. Pour all of the liquid over the cucumbers so they're fully submerged.
5. Cover and refrigerate for at least 1 hour. The flavor will continue to develop over the next couple of days. These pickles will keep for up to 3 weeks in the refrigerator.



SENSE EXPLORERS: CUCUMBER EDITION

This simple, hands-on activity invites students to use their five senses as tools. They will make observations about cucumbers, describe the fruit and compare their observations with their classmates.

 **TEACHER TIP:** Be sure to ask your school nutrition team if they can support you by providing cucumbers!

WHAT YOU'LL NEED:

1 CUCUMBER SLICE PER STUDENT

Try to pick a variety of cucumbers – bumpy or smooth, short or long – to provide contrast.

Make sure to keep one cucumber whole to pass around the class.



Consider passing out magnifying glasses so children can observe closely!

ACTIVITY:

Invite your students to use each of their five senses to experience and make observations about cucumbers. Guide them through this activity, one sense at a time. Begin with broad, open-ended questions, followed by more specific questions, as outlined below.



SIGHT:

Look at the cucumber. Notice its green color and smooth skin. Is it long and thin or short and round? Now look with your magnifying glass. Do you notice anything new?



TOUCH:

Feel the cucumber with your fingers. How does it feel? Is it smooth or bumpy? Is it cool to the touch? Is it firm or soft? Is it heavy or light?



SMELL:

Smell the cucumber. What does it smell like? Does it have a fresh, mild scent? Does it remind you of something clean and crisp?



TASTE:

Take a small bite of the cucumber. How does it taste? Is the flavor strong or weak? Sweet or spicy? Juicy or dry? Soft or crunchy?



HEARING:

Listen to the sound the cucumber makes when you bite into it. Does it make a crisp, crunching sound?

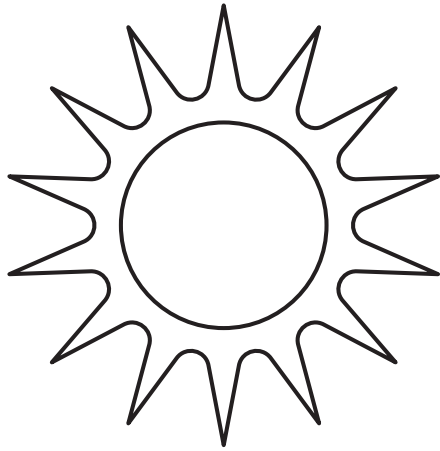


NEED SOME QUIET TIME — AND A CUTE PHOTO? *Have the students rest for several minutes with cucumber slices on their eyes! Cucumbers have a high water content and are naturally cool, which can help reduce puffiness as well as soothe and refresh the skin.*

Name _____ Date _____

Cucumber Plant Needs

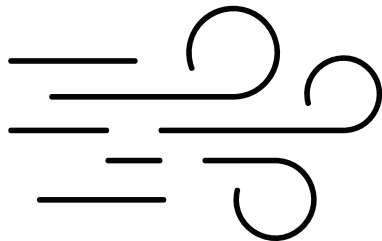
Directions: Color the pictures of what cucumbers need to grow.



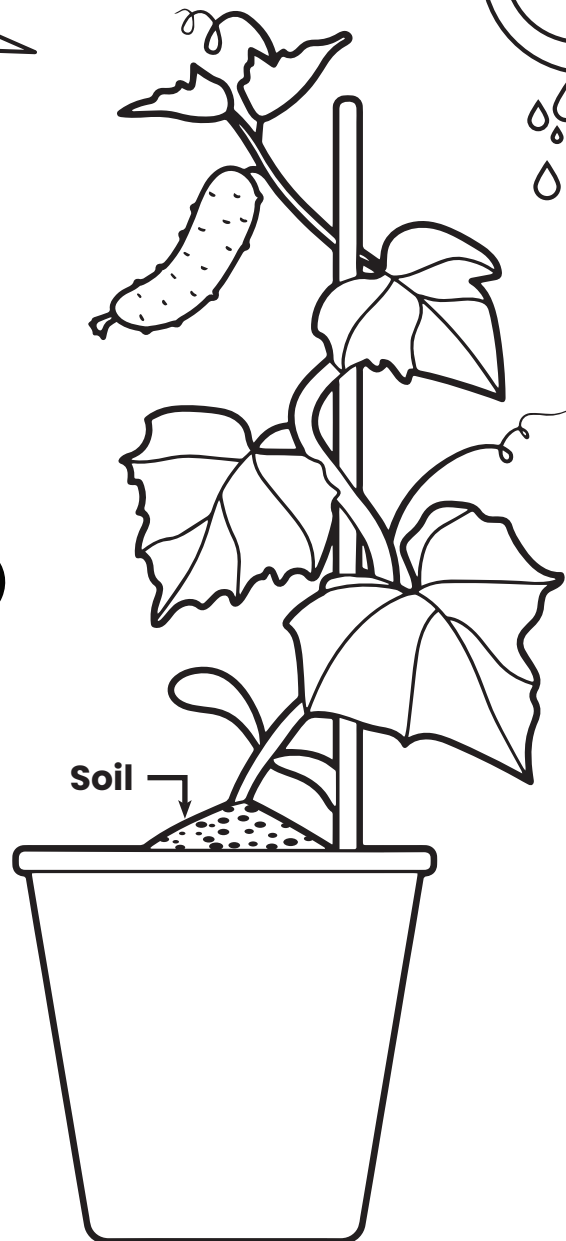
Sun



Water



Air



Soil

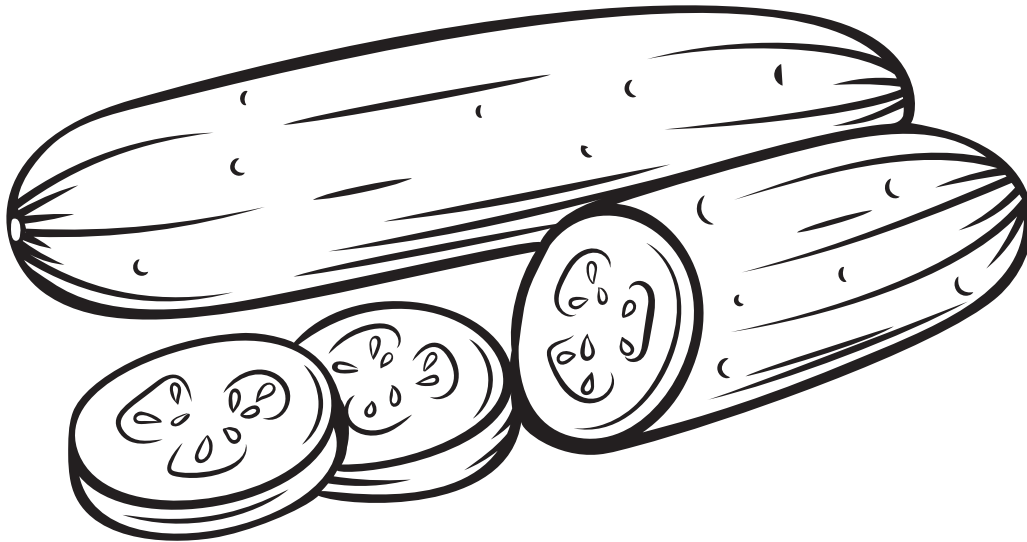


Pollination

Name _____ Date _____

Letter Practice

Directions: Follow the instructions below.



Cc is for

--	--	--	--	--	--	--	--

Trace it:

Cucumber

Write it:

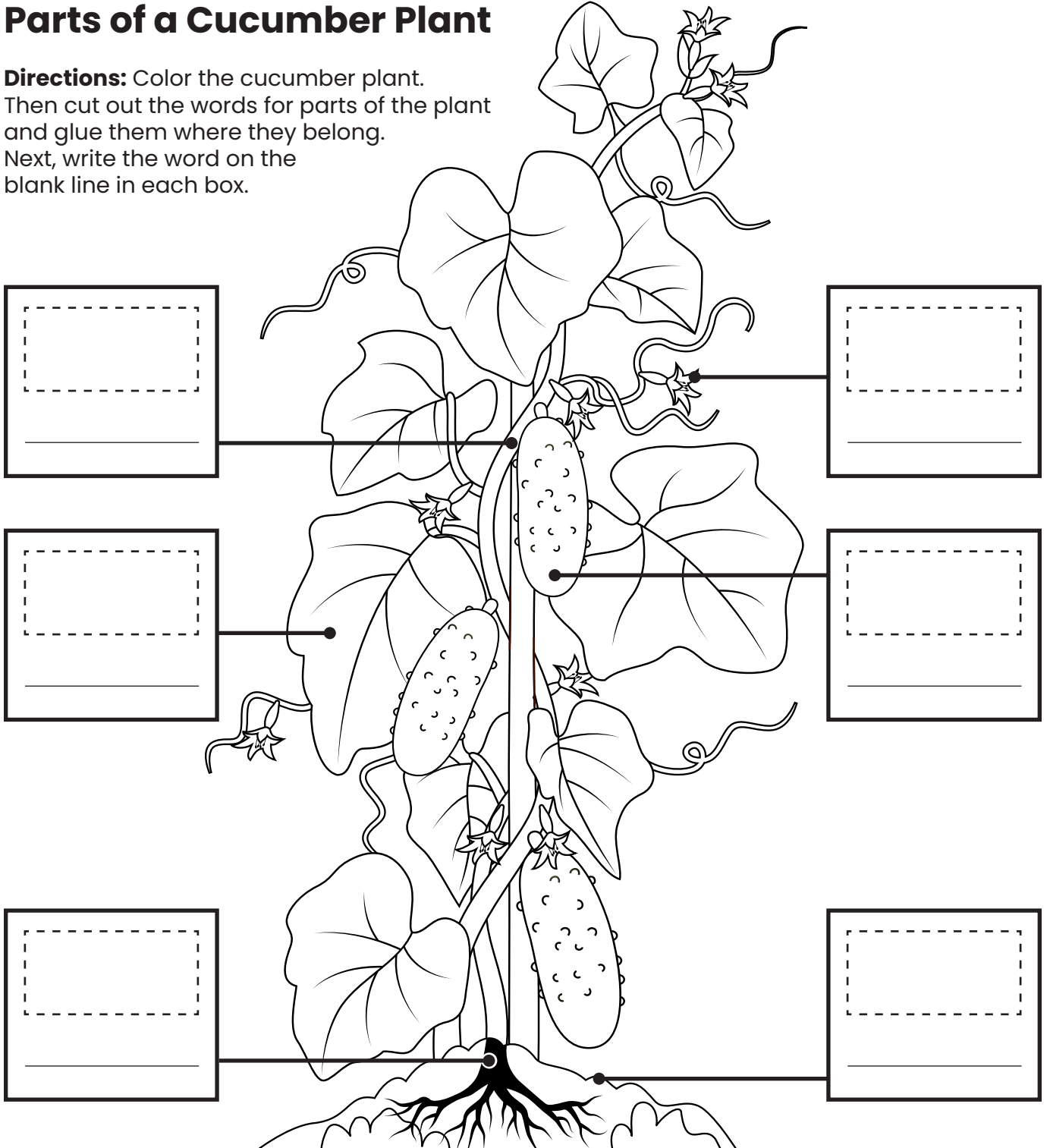
Cut out the letters and glue them in the correct order in the boxes above.




Name _____ Date _____

Parts of a Cucumber Plant

Directions: Color the cucumber plant.
 Then cut out the words for parts of the plant
 and glue them where they belong.
 Next, write the word on the
 blank line in each box.



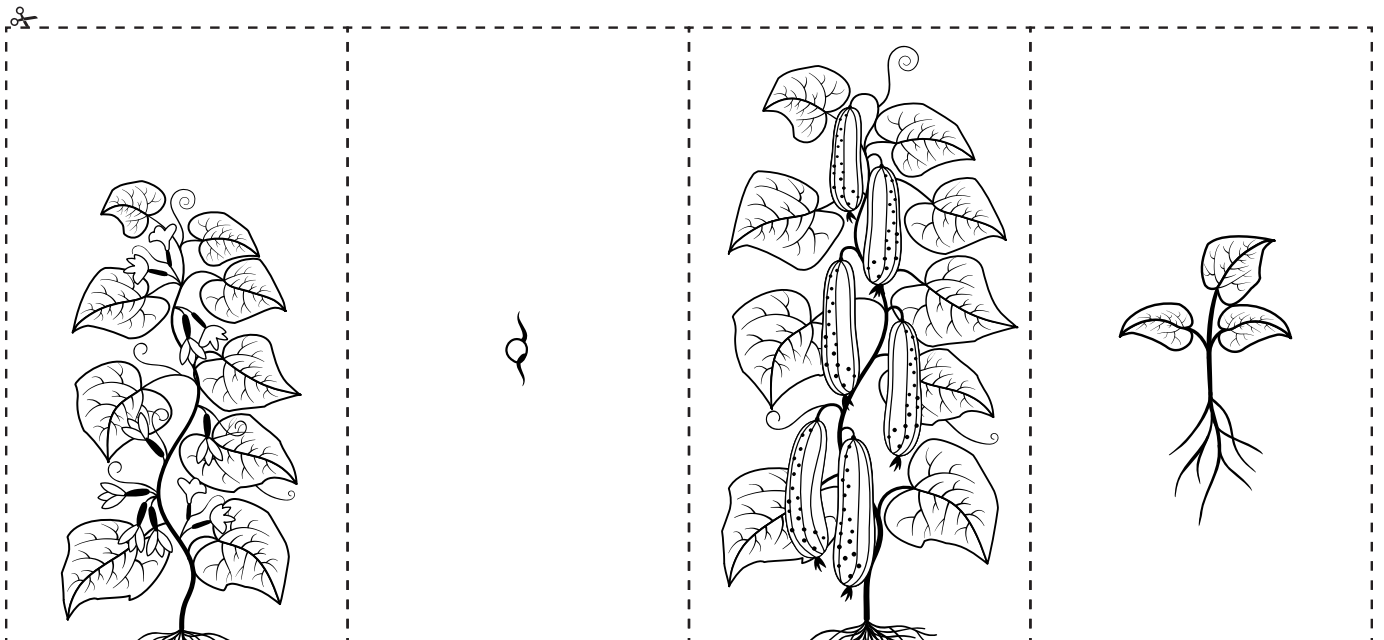

Leaf
Fruit
Stem
Flower
Roots
Soil

Name _____ Date _____

How Cucumbers Grow

Directions: Color, cut and paste the pictures in the correct order to show the life cycle of a cucumber.

1	2	3	4
---	---	---	---



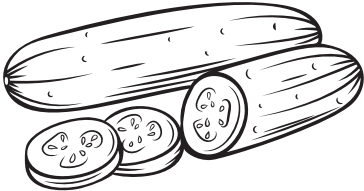
ANSWER KEY

FLORIDA FARM TO SCHOOL VIRTUAL FARM FIELD TRIPS K-1 Worksheet Cucumber

Name _____ Date _____

Letter Practice

Directions: Follow the instructions below.



Cc is for

C u c u m b e r

Trace it: _____ Write it: _____

Cucumber Cucumber

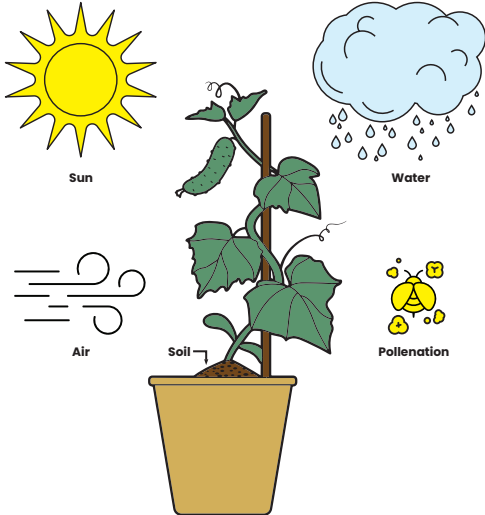
Cut out the letters and glue them in the correct order in the boxes above.

FLORIDA FARM TO SCHOOL VIRTUAL FARM FIELD TRIPS K-1 Worksheet Cucumber

Name _____ Date _____

Cucumber Plants Need

Directions: Color the pictures of what cucumbers need to grow.



Sun Water

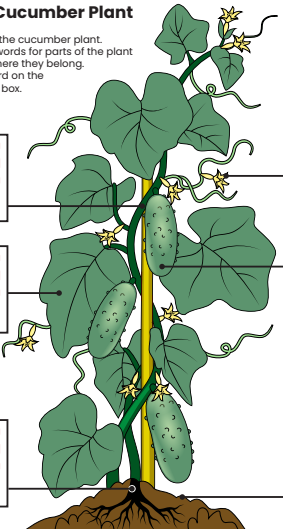
Air Soil Pollination

FLORIDA FARM TO SCHOOL VIRTUAL FARM FIELD TRIPS K-1 Worksheet Cucumber

Name _____ Date _____

Parts of a Cucumber Plant

Directions: Color the cucumber plant. Then cut out the words for parts of the plant and glue them where they belong. Next, write the word on the blank line in each box.



Stem Flower

Leaf Fruit

Roots Soil

FLORIDA FARM TO SCHOOL VIRTUAL FARM FIELD TRIPS K-1 Worksheet Cucumber

Name _____ Date _____

How Cucumbers Grow

Directions: Color, cut and paste the pictures in the correct order to show the life cycle of a cucumber.

