

# TEAM JOURNAL | Open Field Farm

NAME | NOMBRE \_\_\_\_\_

SCHOOL | ESCUELA \_\_\_\_\_

GRADE | GRADO \_\_\_\_\_



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The TEAM Program was developed by the Sonoma and Gold Ridge Resource Conservation Districts  
in partnership with Envirichment and Stephanie Lennox with support from  
Laura Powell, Science and Environmental Literacy Consultant  
with funding from Sonoma Ag + Open Space.

## MEET YOUR TEAM

Here are your TEAM Program partners and their logos (a symbol of their business).

### Land Owner

Sarah and Seth James started their 560 acre Petaluma organic and biodynamic farm in 2012. They raise animals, food and flower crops.



### Resource Conservation Districts

help agricultural and open space lands with projects that help save soil, water, and wildlife.



Sonoma County voted to create **Ag + Open Space** and a 1/4 cent sales tax to permanently protect agricultural and open space lands. Since 1990, we have protected over 118,000 acres!



**AG + OPEN SPACE**  
SONOMA COUNTY

**YOU.** Together we save over 18 million a year to permanently protect our agricultural and open space lands in Sonoma County!



**Draw your own logo here!**



# LET'S THROW AROUND SOME BIG WORDS!

## Word Challenge!

Read the three words and their definitions below. Find which word tree's synonyms match each of the three words below. Fill in the blanks with the correct matching word.

1. **Environment** - an area in which something exists or lives; habitat, a type of place where a person, animal, plant or other living thing is most likely to be found
2. **Agriculture** - people farming plants and animals to produce food and other products
3. **Conservation** - protection of land, water, wildlife, soil and plants

growing

planting

crop-raising

garden

harvest

graze

farm



\_\_\_ R \_\_\_ C \_\_\_ R \_\_\_



open space

habitat

nature

biosphere

care

Earth

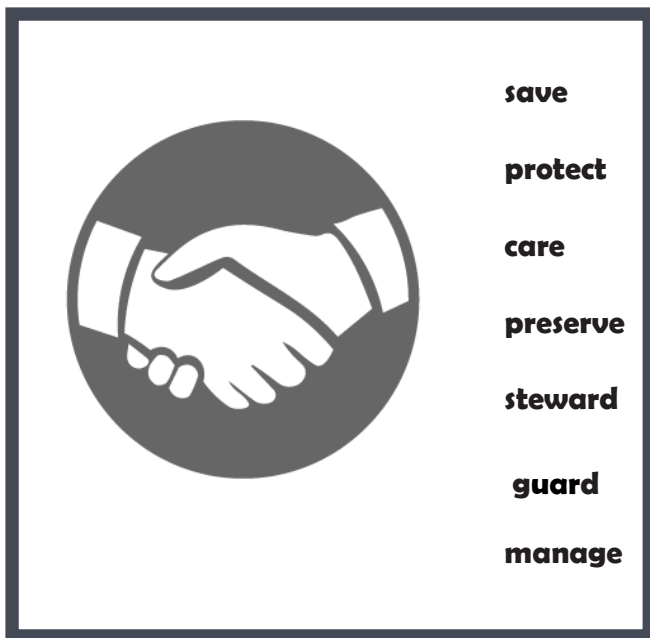
ecosystem

\_\_\_ N \_\_\_ R \_\_\_ N \_\_\_

"I am part of a TEAM that is conserving  
local environment and agriculture"

"I am part of a TEAM that is protecting  
local open space and farms"

Open spaces and working  
agricultural lands like Dutton Ranch are  
protected with our tax dollars through  
our Ag + Open Space District.



\_\_\_ O \_\_\_ \_\_\_ R \_\_\_ \_\_\_ T \_\_\_ \_\_\_

Throughout your  
Open Field Farm  
Journal you will find  
honey bee's...  
see if you can find  
them all! Circle  
the one's you find.  
Answer in back when  
you finish!



## WHAT IS CON-SER-VA-TION?

*The act of protecting, helping or caring for something*

YOU are a conservationist (one who saves!) Circle the things below that you do:

Turn the lights off when you leave the room

Turn the water off while brushing your teeth

Say “no” to single use plastics like straws

Bring a water bottle from home

Bring bags with you to the grocery store

Walk or ride your bike instead of taking the car

Have solar panels on your house

Shop at a farmers market

Recycle plastic items

Other ways? Write them here: \_\_\_\_\_

### How WE (Sonoma County) do conservation TOGETHER!

Through our Ag + Open Space, we have saved our tax pennies and used those to protect farms and open spaces in our community.



**Agriculture**



**Open Space**



**Waterways**



# HOW DO WE PROTECT LAND IN SONOMA COUNTY?

*Together we save pennies to conserve agriculture and open space!*

**FOR EVERY \$1.00  
YOU SPEND** (taxed)



**We Save \$0.0025**

that's one-fourth of a penny



**WHEN YOU SPEND \$4.00**



**We Save**

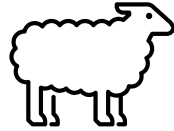
**1 Whole Penny - \$0.01**



**There are 500,000 people in Sonoma County, that totals \$18,000,000 a year that goes into our Ag + Open Space bank to protect agriculture and open space for the community. Visit [sonomaopenspace.com](http://sonomaopenspace.com) to learn more!**



**AG + OPEN SPACE**  
SONOMA COUNTY

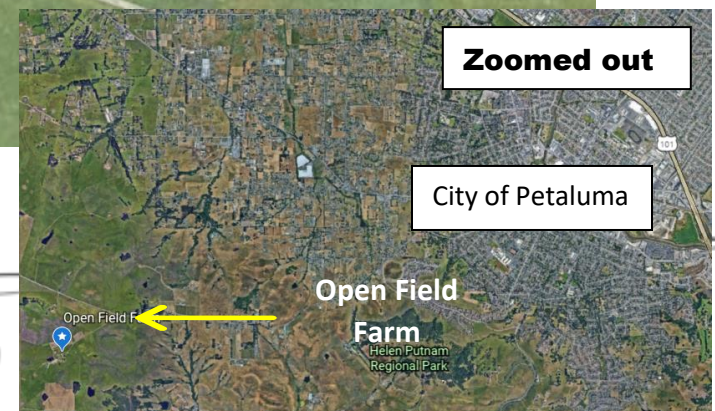
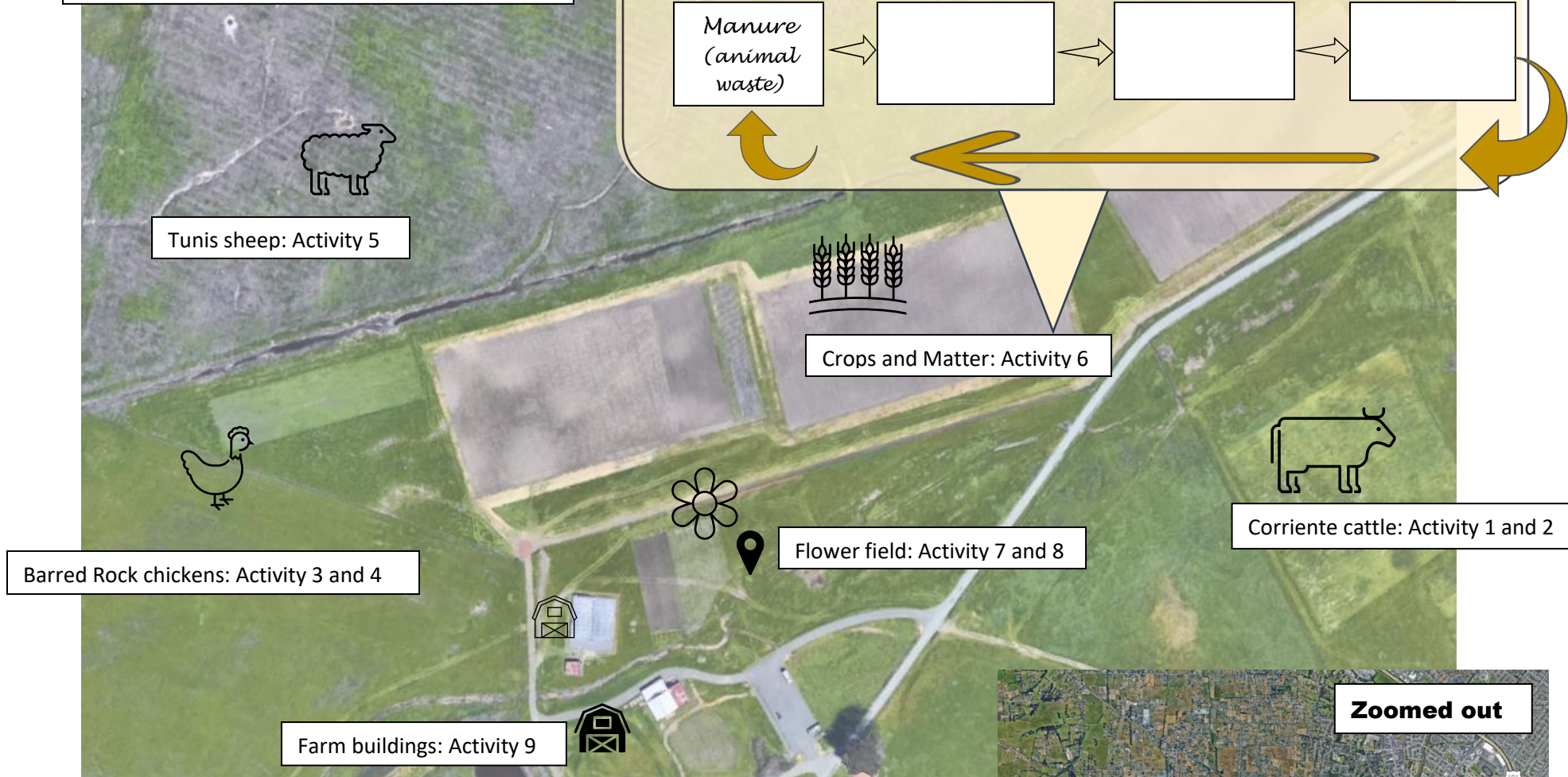


## Let's Check Out Open Field Farm!

– Station One Video Starts @ 7:40 minutes –

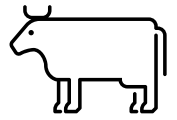


## Zoomed in: Open Field Farm Map



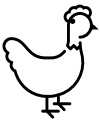


**Activity 1:** What do you think would happen to the plants in the pasture if the farmer did not move the cattle for a long time?

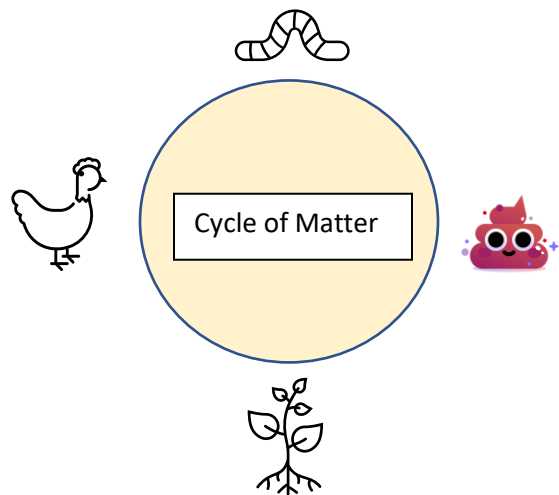


**Activity 2:** All the cows have names at Open Field Farm, *ON YOUR MAP* and find the cow. What are you going to name this one? Write the name down next to the cow in the space provided.

**Activity 3:** What is the importance of the chickens on the farm?

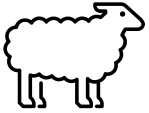


**Activity 4:** Draw arrows to show how matter moves between each living thing.

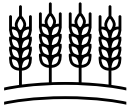




Activity 5: Can you think of one thing that can be made from sheep's wool? Write your answer on the line below.



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Activity 6: *ON YOUR MAP*, label the empty boxes to show how matter moves through the farm. Remember a healthy ecosystem = healthy animals!



Activity 7: How many pollinators can you spot? List two different pollinators you saw in the flower field today. *BONUS if you can name one or both in a different language!*



1.

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2.

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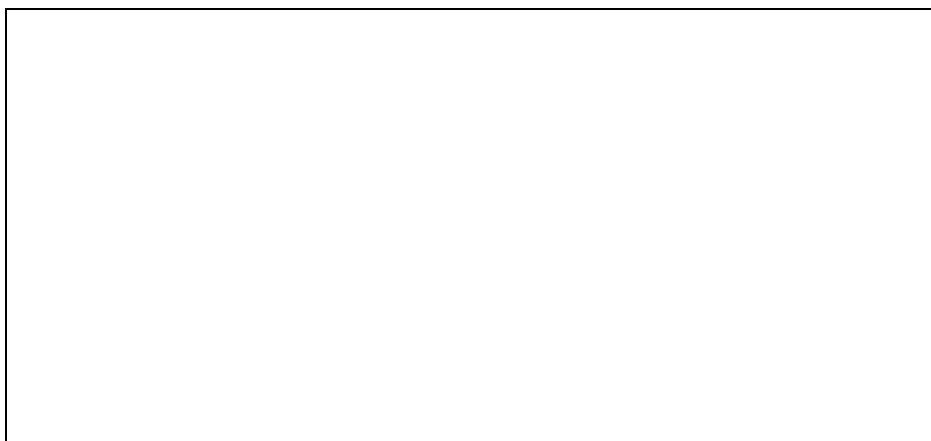




**Activity 8:** If you could pick one of these herbs or flowers to take home, which one would you choose, and why? Draw your plant in the blank space below.



**Activity 9:** Write down something you like to eat or make with your family that has garlic or onions in it. *BONUS* draw your favorite meal in the box provided below.



#### Savory Tomato Pie

Recipe: This savory tomato pie is one of my favorite summer recipes still have the ingredients on the farm to enjoy a taste of the summer :

#### INGREDIENTS

- 1 unbaked pie crust (I like to follow this recipe but any will do: <https://www.homemadefoodjunkie.com/sourdough-pi>)
- 4-5 tomatoes, sliced
- 1 teaspoon salt
- Handful of fresh basil leaves, chopped (about 1/4 cup)
- 1 ear of corn (kernels stripped from the cob, cooked or uncooked)
- 1/2 cup chopped onion
- 1 clove garlic, minced





## **CSA for the Day!**

– Station Two Video Starts @30:20 minutes –

# Activity 1 The Farm in me

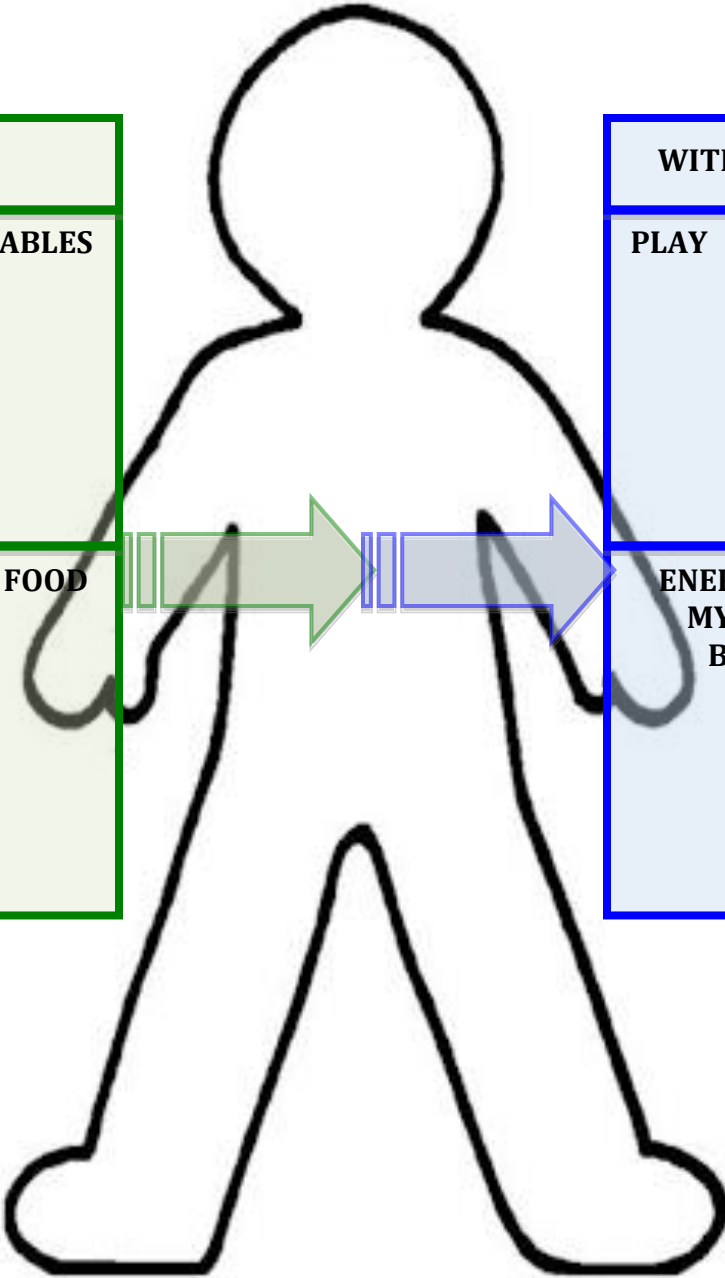
Put a number in each box that means you disagree, kind of agree or strongly agree using 0 - 10 on the scale below (10 meaning you strongly agree and all the way to 0 menaing you disagree).

***“Farming is important to my life.”***

10      9      8      7      6      5      4      3      2      1      0  
I STRONGLY AGREE      I KIND OF AGREE      I DISAGREE

FOOD I EAT...	
FRUITS	VEGETABLES
MEAL	SNACK FOOD

WITH THE FOOD I EAT I...	
PLAY	WORK
ENERGIZE MY BODY	RELEASE WASTE MATTER



**HOW MUCH OF THE FOOD IN YOUR LIFE IS GROWN BY FARMERS AND FARMS?**  
*Shade in the person above to show how much of your body’s total food intake comes from farming/agriculture.*



# Activity 2 Harvest Menu

Each item below is grown on the farm and has its own growing season! Circle the items you saw in the barn or like to eat.



## Vegetables

Broccoli  
Lettuce  
Potatoes  
Green beans  
Onion  
Garlic  
Summer squash  
Winter squash  
Pumpkin  
Tomato  
Cucumber  
Asparagus  
Artichoke  
Carrots  
Cauliflower  
Kale  
Chard  
Corn  
Peppers  
Peas  
Beet  
Celery  
Cabbage  
Eggplant

## Fruit

Strawberries  
Watermelon  
Honeydew melon

## Meat

Beef  
Lamb  
Chicken eggs

## Flowers



Calendula  
Bachelor buttons  
Straw flowers  
Sunflowers  
Cosmos  
Zinnias  
Snap dragons  
Asters

## Herbs

Basil  
Parsley  
Thyme  
Oregano  
Rosemary  
Dill  
Cilantro  
Chamomile  
Lemon balm

### **Open Field Farm CSA**

Come each week to the  
farm to see what's new!

Members pay \$65 - \$155  
per week

Members are invited to  
special farm events too!

## Grains

Wheat  
Rye



## Activity 3 Harvest Seasons at Open Field Farm

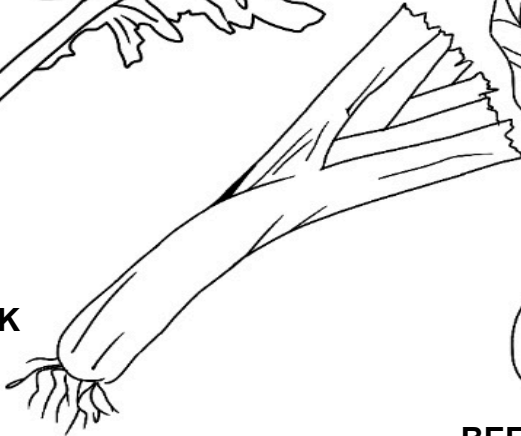
Color in the fruits and vegetables that the farmers grow at Open Field Farm during each season.

### Winter

KALE



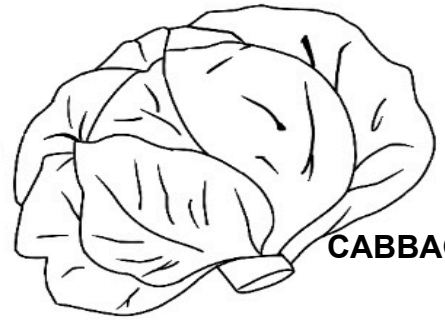
LEEK



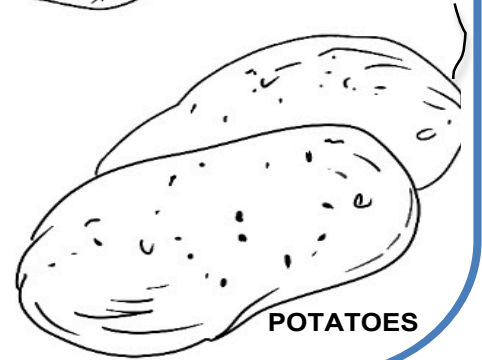
BEET



CABBAGE



POTATOES

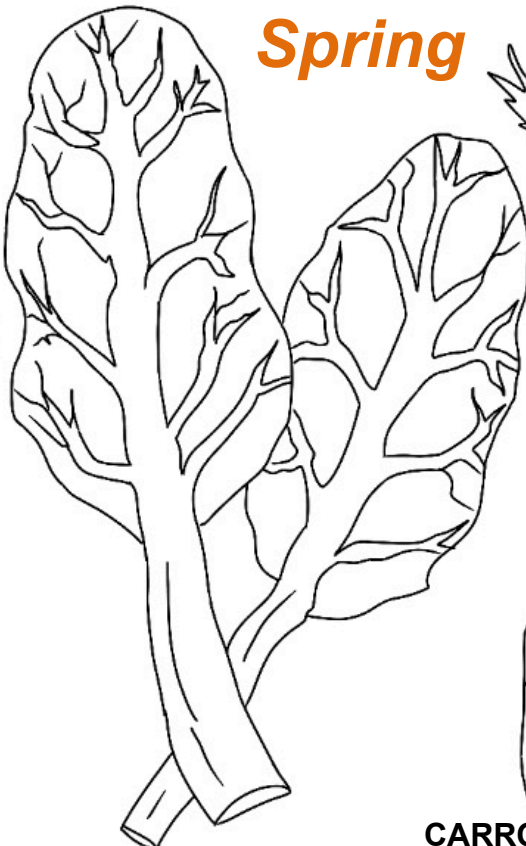


### Spring

A  
S  
P  
A  
R  
A  
G  
U  
S



CHARD

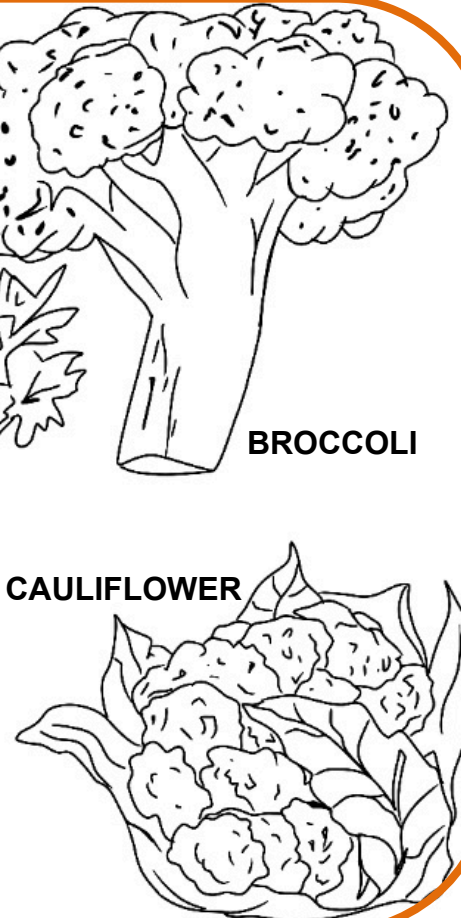


CARROTS



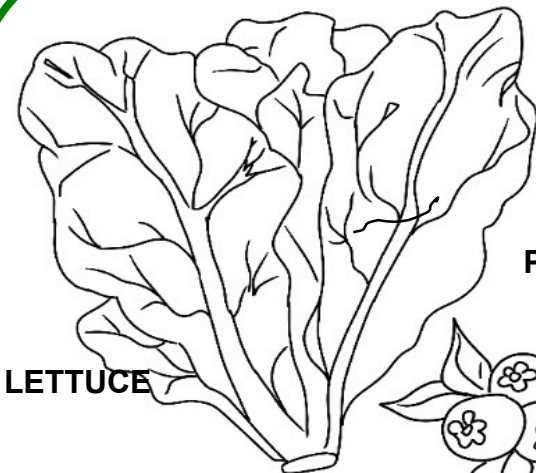
BROCCOLI

CAULIFLOWER



Continued from page 1(. Color in the fruits and vegetables that the farmers grow at Open Field Farm during each season.

**Summer**



LETTUCE



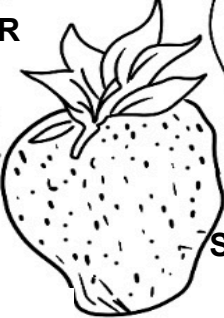
PEPPER



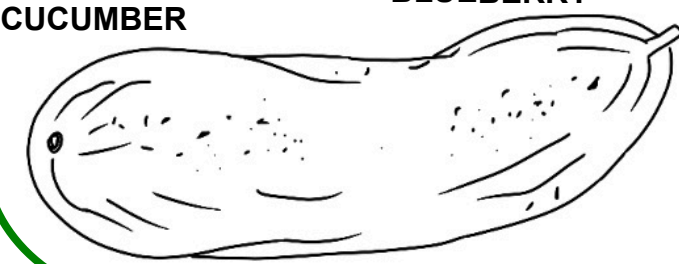
TOMATO



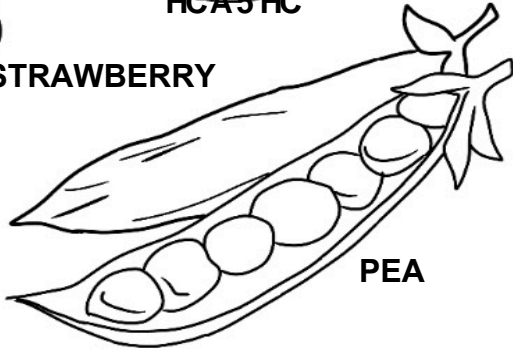
BLUEBERRY



STRAWBERRY

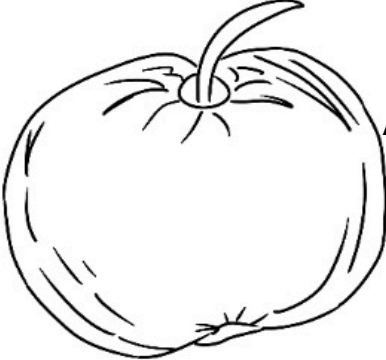


CUCUMBER



PEA

**Autumn / Fall**



APPLE



SQUASH



PUMPKIN



CORN



## Bee-coming Food

— Station Three Video Starts @49:00 minutes —

## ACTIVITY 1 – What Moves Pollen?

How does **pollen** move from one flower to another flower? Does the plant move pollen on its own, or does the plant get some help?

These phrases might help jog some ideas about how pollen is moved around....

Tiny farmers  
Pollinators  
Carrying pollen  
Sticky pollen

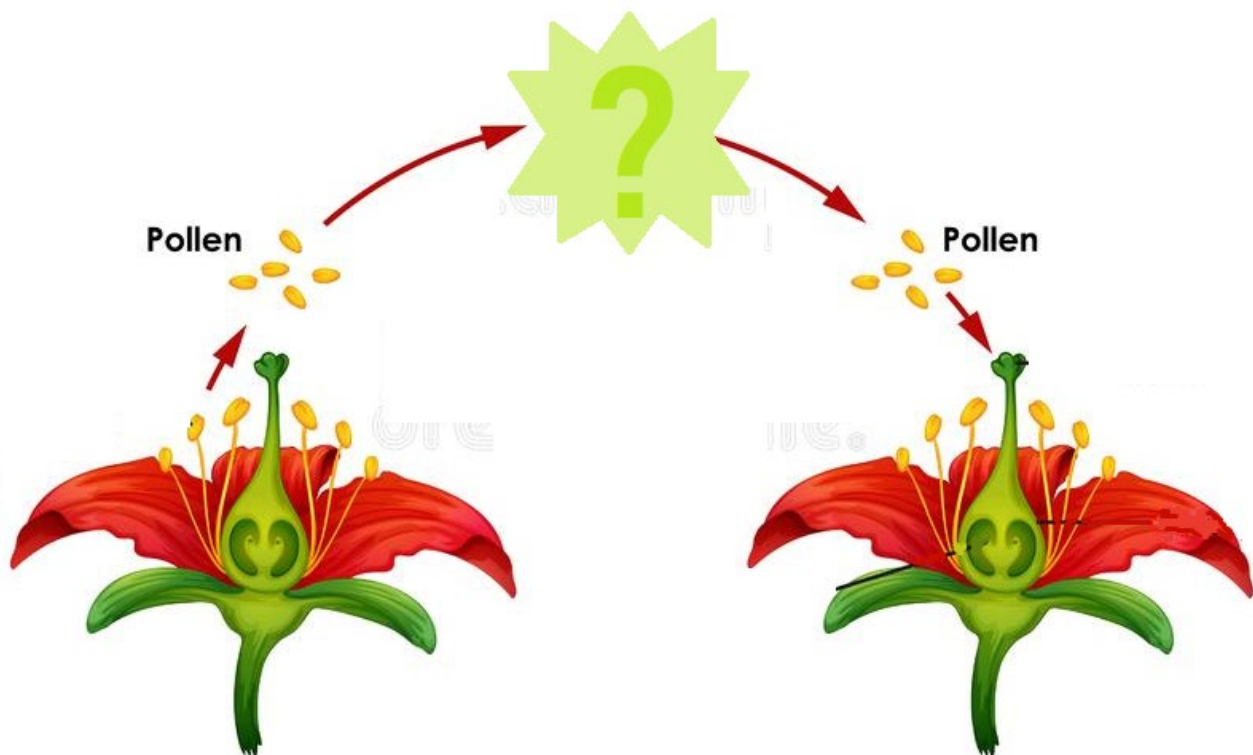
Write down a few ideas!

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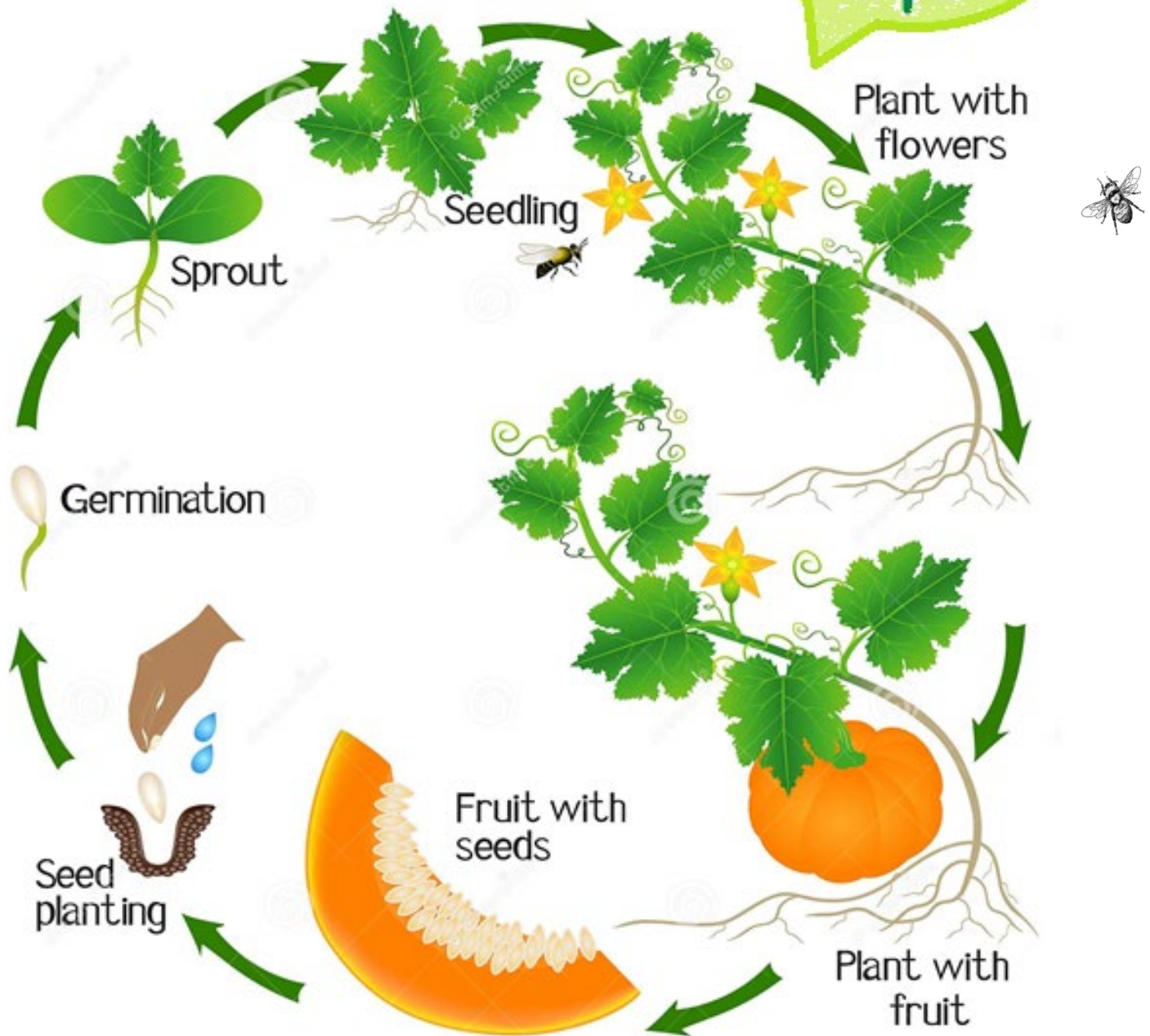


## Question

How does pollen move from flower to flower on this pumpkin plant?

Hint: The answer is in this picture!

Pollen



## ACTIVITY 2 – Bee Behavior!

What did you observe about the bee's behavior in the squash flower?

A bee is working hard inside a squash blossom (flower). What is it doing? Here are some words that might help you describe its activities. You can rewind the video and watch it again if you like.

Climb

Taste

Sticky

Inside

Flower

Walk

Feed

Pollen

Around

Stamen

Fly

Gather

Nectar

Over/Under

Petals

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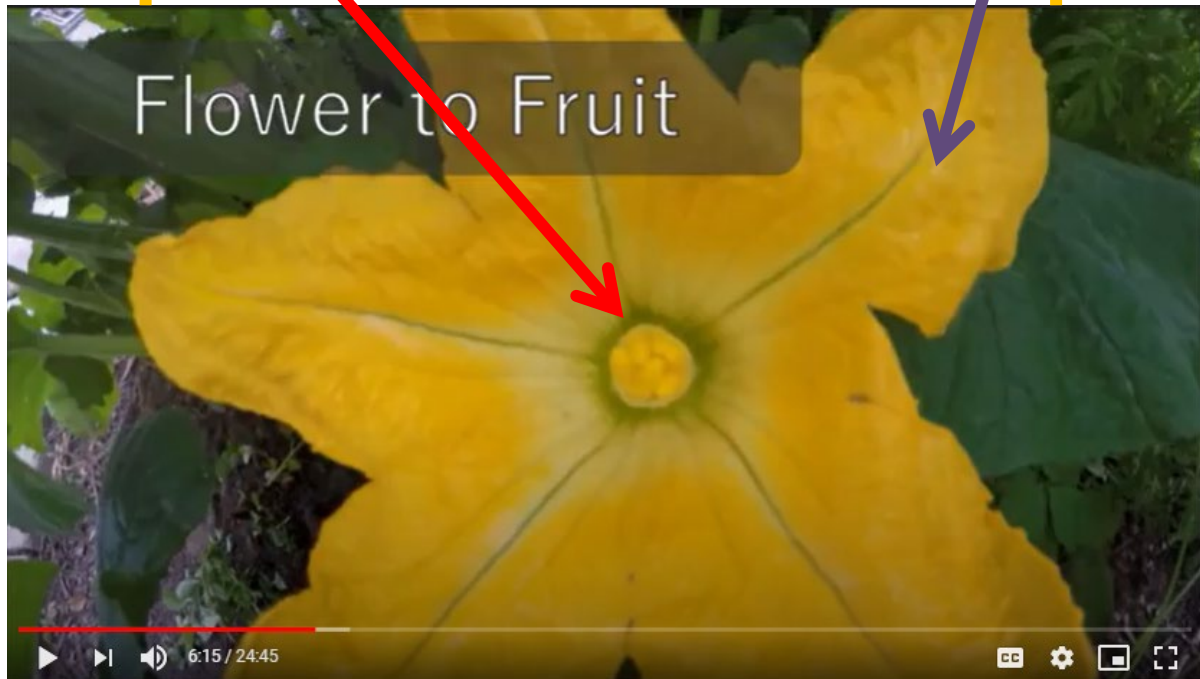
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STAMEN

SQUASH FLOWER

PETALS



STAMEN

POLLEN





## ACTIVITIES 3 and 4 – Bee Diversity!

Guess how many different species of wild bees live in California: \_\_\_\_\_

Why does the world need so many different kinds (or species) of bees?

Search these pages for clues about how bees of different shapes and sizes help the world.

Write down a few ideas!

The world needs so many different kinds of bees because \_\_\_\_\_

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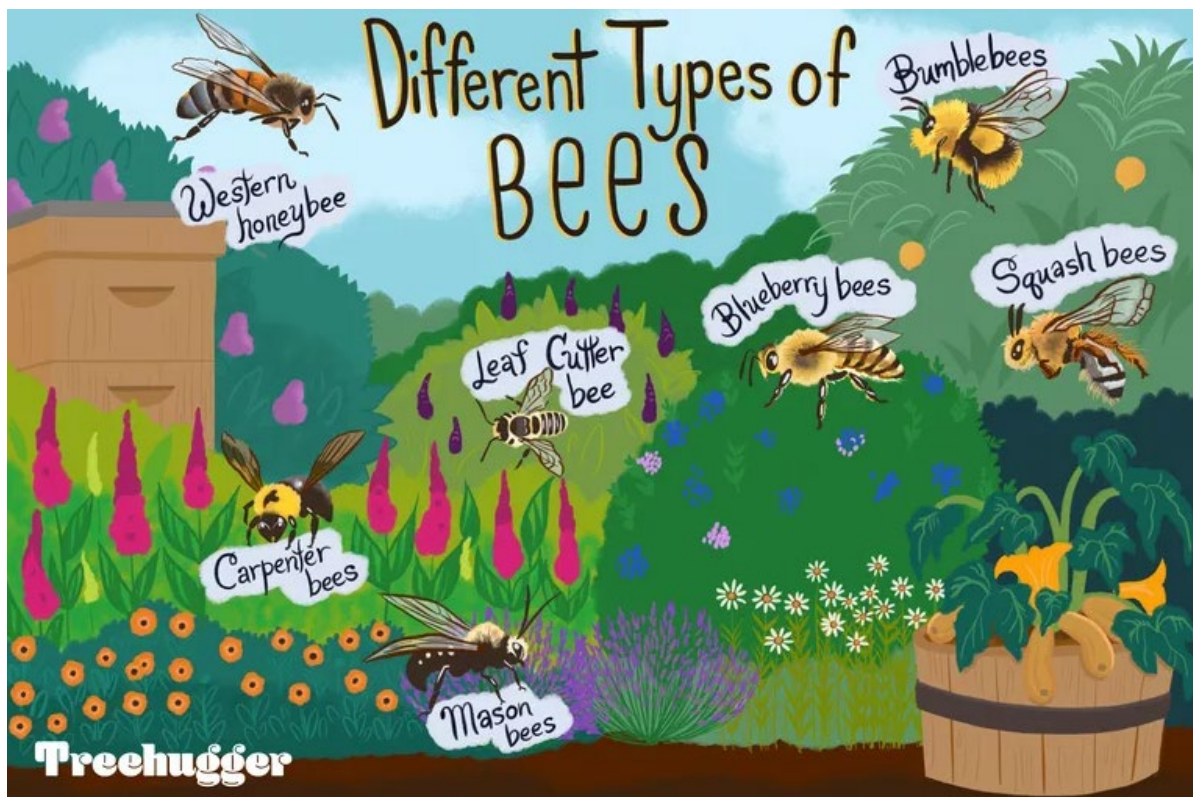
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### Some facts about California's bees and flowers!

California has over 1,600 different species of bees! See a few of them illustrated here.

California has about 6,500 species of plants! About 2,000 of those only grow in California. Many of these plants grow flowers that depend on bees for pollination.



Each flower needs a bee. Draw a line to connect the bee that has the best body shape for pollinating each flower.



Which bee has the right mouth to feed on the nectar deep inside this long, tube-shaped fuchsia flower?



These blueberry flowers will only release their pollen if the bee can BUZZ hard enough to shake the pollen out! This is called "buzz pollination."



Look at the bees below....

What do all of these bees have in common? \_\_\_\_\_

How are they different? \_\_\_\_\_

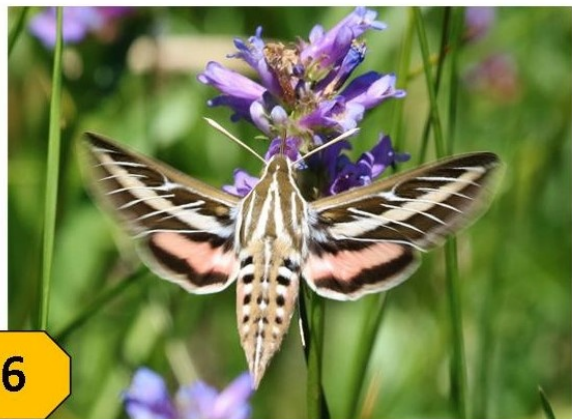




## ACTIVITY 5

Bees aren't the only animals pollinating flowers! On the next page, write the names of each of these pollinators.

Tip: Don't let one of these animals fool you into thinking it's a bee!



Animal #1 is a \_\_\_\_\_

Animal #2 is a \_\_\_\_\_

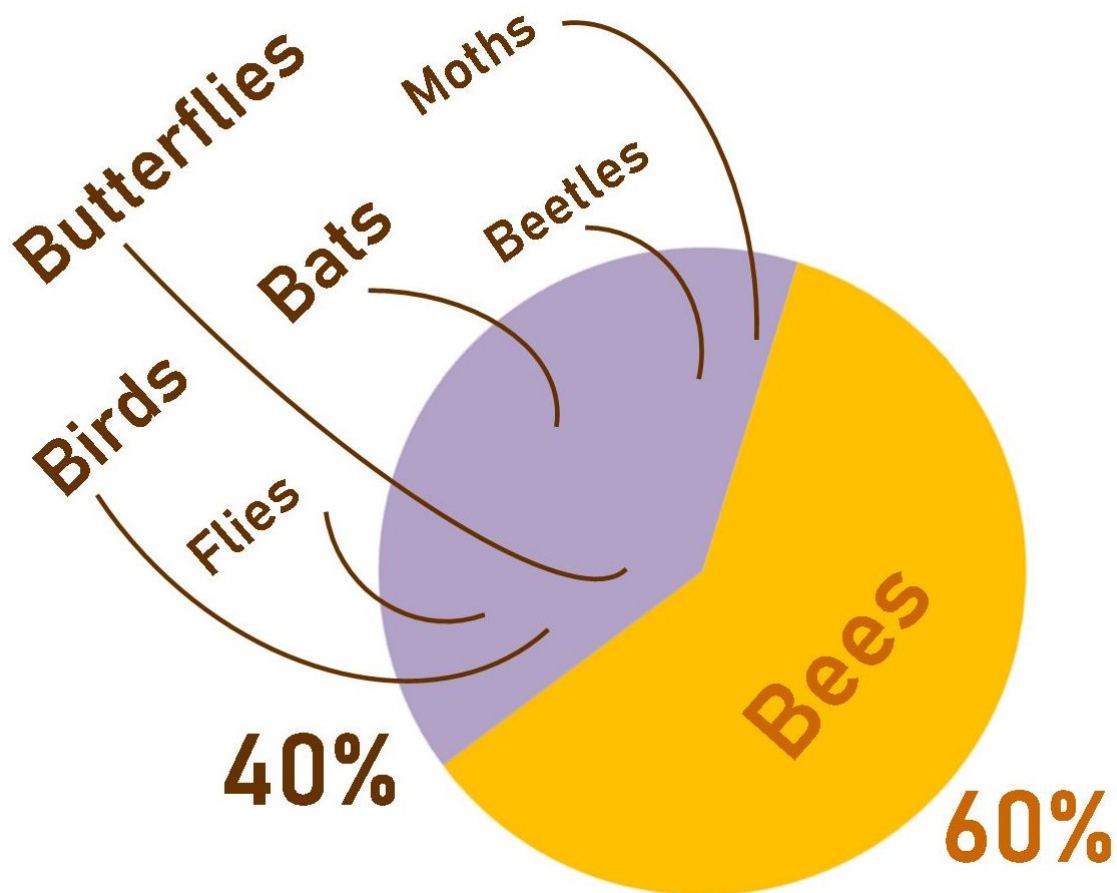
Animal #3 is a \_\_\_\_\_

Animal #4 is a \_\_\_\_\_

Animal #5 is a \_\_\_\_\_

Animal #6 is a \_\_\_\_\_

**Fun Fact:** Bees pollinate about 60% of the world's flowers. The other 40% are pollinated by other animals! These other pollinators are very important to our ecosystem.



## ACTIVITY 6 – Homes for Bees!

Why do you think bees live in many different kinds of nests?

Write your ideas here.

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Bees live in a variety of different homes! Some live in the ground, some in wood, some in dry grass.....

Use these pages to think about the different kinds of homes that bees live in. How are these homes similar to each other? How are they different?

Do you think it could be a good thing that bees don't always live in the same kind of home?

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How about you? What kind of home do you live in? Is your home different from the homes of your friends, family, or other people you know? Have you ever visited someone who lives somewhere different than the place you are used to (could be somewhere else in the world)?

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## Bee homes



## People homes





## ACTIVITY 7 – Dangers!

What kinds of dangers do you think bees face?

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How can you protect bees from **dangers** by making **refuges** (hiding places) in your neighborhood?

Use these pages to think about the dangers and refuges in your neighborhood. Then, write down ideas about how you could make your neighborhood safer for bees!

Does your neighborhood have more of these dangers than it has refuges? Draw a circle and make a note about each of the dangers present in your neighborhood.

**Paved lots**



**Pesticides**



**New homes replace  
open fields**



**Drought**



## ACTIVITY 8 – Refuges!

Does your neighborhood have any of these safe refuges for bees? Draw a circle and make a note about each of the refuges present in your neighborhood. Think about how you could grow or build these refuges if you do not have them already.

### Flower patches



### Water



### Fields and trees

### Fallen logs and sticks

## How you can make your neighborhood safer for bees?

Here are some ideas. Which of these would be a good fit for your neighborhood?

- ☐ Plant flowers on sidewalks, in planter boxes, in parks and schools -- anywhere!
- ☐ Plant trees on sidewalks, in planter boxes, in parks and schools -- anywhere!
- ☐ Build ponds, bird baths (these are good for bees, too!) and water fountains
- ☐ Tell farmers not to spray harmful chemicals (like pesticides) on their crops
- ☐ Volunteer to take care of your neighborhood's parks, creeks, and community gardens
- ☐ Other ideas? \_\_\_\_\_

## Journal Reflection

- Video starts @1:13:40 minutes –

# Thank you for being a part of the TEAM....

## Thank you for being a part of the TEAM...

You have to really know something to appreciate it. Take a moment to think about what you enjoyed and appreciated about your virtual experience at Open Field Farm. The TEAM Trip was made possible because our Ag + Open Space sales tax preserves agricultural and open space land like Open Field Farm and the James Family invited us onto their property.



Write a letter about what you appreciated, enjoyed and learned at Open Field Farm.....

Dear Open Field Farm, Ag + Open Space, and the RCD,

What I learned on my field trip:

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What I enjoyed about the field trip:

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What I appreciated about the field trip experience:

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From: \_\_\_\_\_



Draw your favorite farm memory in the box below:

## TEAM translations: *A glossary of vocabulary*

pumpkin | calabaza

pollinator | polinizadora

conservation | conservación

protect | proteger

open space | espacio abierto

environment | ambiente

agriculture | agricultura

bee | abeja

insect | insectos

crop | cosecha

plants | plantas

flower | flor

vegetable | vegetal

fruit | fruta

wildlife | fauna silvestre

county | condado

energy | energía

producer | productor

product | producto

animals | animales





# LAND FOR LIFE PLEDGE

*Teaching Environmental & Agricultural Memories*



**I make a difference in the world every day.  
What I do everyday matters to my environment and home...  
planet Earth.**

**I am part of a TEAM that is conserving  
our local environment and agriculture.  
I am part of a TEAM that is protecting local open space and farms.**

I pledge to help whenever I can:

Support local agriculture (farms) by buying local food

Conserve (save) water

Take care of plants and trees around me

Throw away my trash and use reusable items at home

**Sonoma County sales tax helps Ag + Open Space preserve farms,  
ranches, and open space land forever!  
Thank you for being on our TEAM.**



TEAM, did you find all 12 bees?!



**Thank you for being a part of the TEAM  
at Open Field Farm!**



**AG + OPEN SPACE**  
SONOMA COUNTY

TEAM is funded by Ag + Open Space.  
Visit [sonomaopenspace.org](https://sonomaopenspace.org) to learn more!

