



1ST, 2ND GRADE EXPERIENCES

Thank you for visiting us at County Line Orchard. Below you will find educational resources to conclude your learning adventure at County Line Orchard. While at the Orchard, our tour guides focused on the “P” words: Pollination, Packing, Press, Photosynthesis, and Picker People Picker Upper.

The Post-Learning Lessons below will focus on the Common Core standards. The goal of this curriculum is to follow up on what the students learned about the inner workings of our apple production, bees, and apple and pumpkin growing.

Helpful Websites:

- Education.com
- Story of Johnny Appleseed <https://www.youtube.com/watch?v=2AuotNxGoG8>
- Pinterest

Please feel to contact us at orchardtours@countlylineorchard.com if you have any feedback regarding this curriculum. Thank you for allowing us at County Line Orchard to bring our passion of growing to your classrooms!

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1ST, 2ND GRADE LESSON #1: BEE QUALITIES

Objective: Students will apply their knowledge of what they learned about bees and Pollination at County Line Orchard.

Science Standards

1.3.1 Classify living organisms according to variations in specific physical features (e.g., body coverings, appendages) and describe how those features may provide an advantage for survival in different environments. English Standards:

1.RL.2.2 Retell stories, fables, and fairy tales in sequence, including key details, and demonstrate understanding of their central message or lesson.

Materials:

- Bee Quality Worksheet

Procedure:

1. Review the 3 types of bees: Drones, Workers, and Queen Bee.
2. Ask students to work in groups to write down the characteristics they learned about each bee.

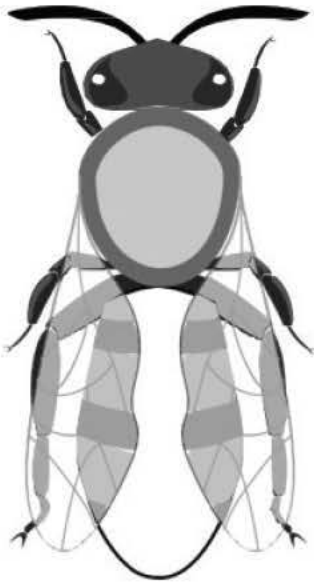
Assessment:

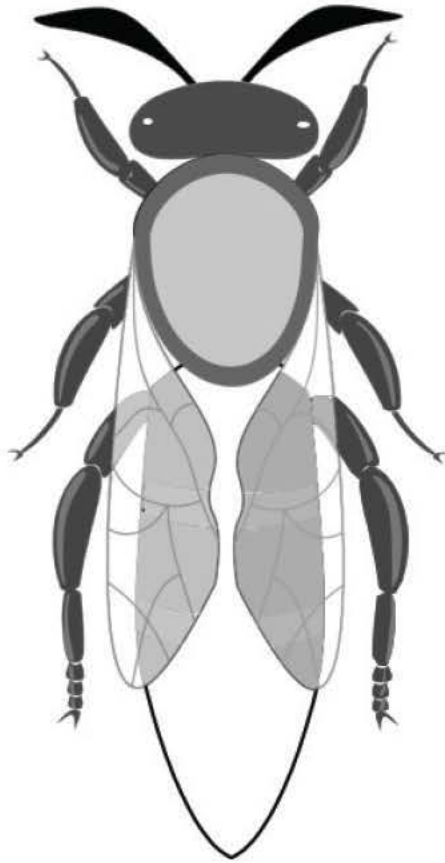
- Students will demonstrate their knowledge about the three types of bees and Pollination they learned about at County Line Orchard.

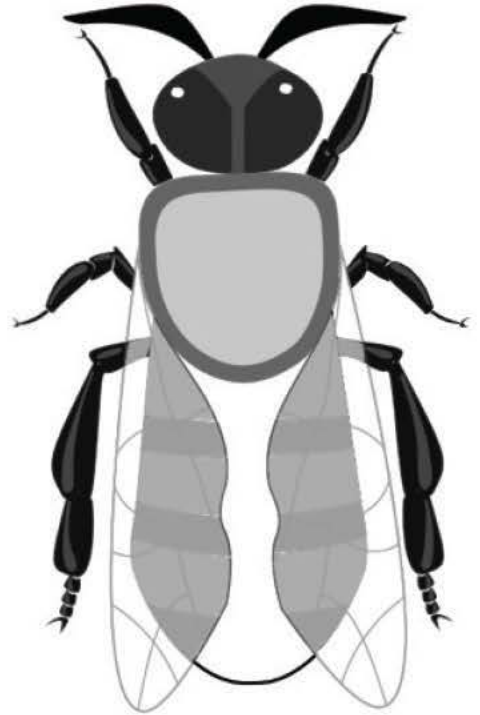


BEE QUALITIES

Directions: Label each bee correctly: drone, worker, queen.
Then write the qualities of each bee you learned about.









1ST-2ND GRADE LESSON #2: APPLE GRAPH

Objective: Students will apply their knowledge of what they learned about Packing by comparing the different sizes of apple they saw at County Line Orchard.

Math Standards

MA.K.NS.5 Count up to 20 objects arranged in a line, a rectangular array, or a circle. Count up to 10 objects in a scattered configuration. Count out the number of objects, given a number from 1 to 20.

MA.PS.2: Reason abstractly and quantitatively. Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved.

Materials:

- Apple Graph Workshee

Procedure:

1. Review the Apple Graph worksheet and the objects represented there.
2. Have student compare the students on the graph and answer the questions below the graph.
3. Review the correct answers with your students.

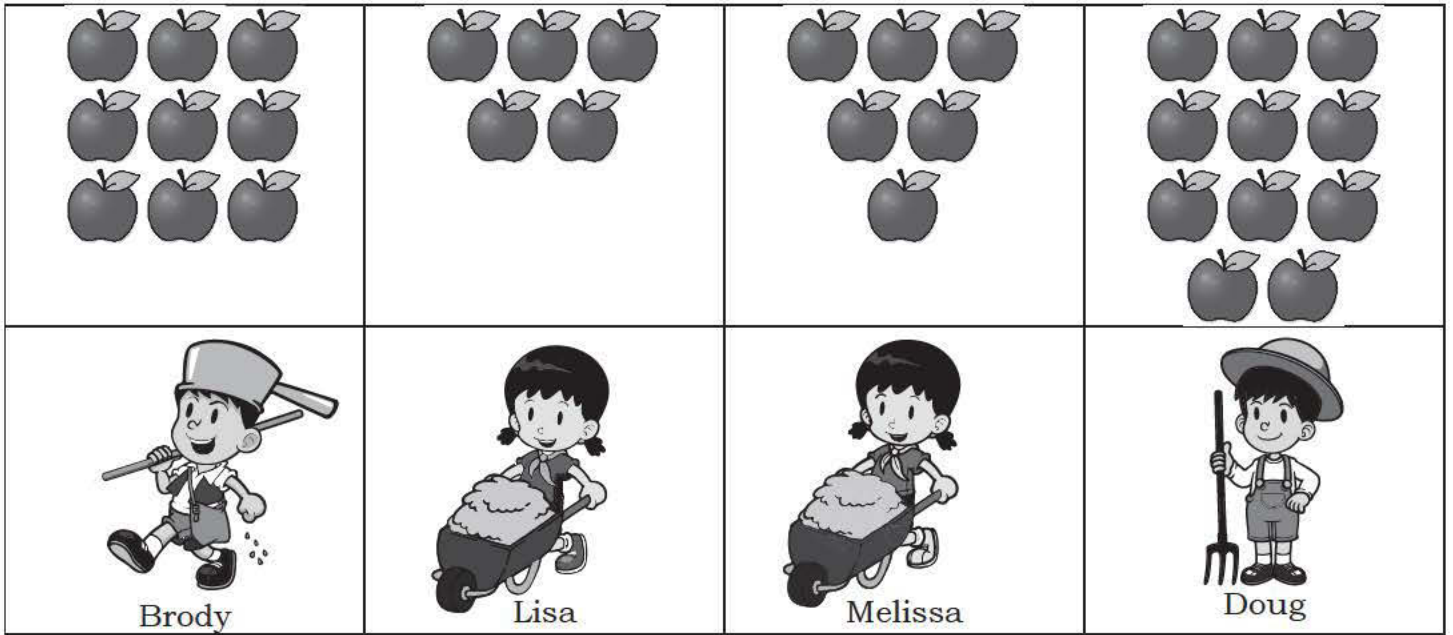
Assessment:


- Students will demonstrate their reasoning skills by correctly comparing the students represented on the chart.
- Student will demonstrate what they learned about Packing apples and comparing the sizes of apples they saw at County Line Orchard by correctly answering the questions on the work sheet.



APPLE GRAPH

Directions: Use the graph to answer the questions.



 = 2 apples

1. How many apples did Melissa pick? _____
2. How many apples did Brody pick? _____
3. Who picked the most apples? _____
4. Who picked the fewest apples? _____
5. How many more apples did Doug pick than Lisa? _____
6. How many more apples did Doug pick than Brody? _____



1ST, 2ND GRADE LESSON #3: PLANTS

Objective: Students will apply their knowledge of what they learned about Photosynthesis at County Line Orchard by writing about what plants have and need to grow.

Science Standards

1.3.1 Classify living organisms according to variations in specific physical features (e.g., body coverings, appendages) and describe how those features may provide an advantage for survival in different environments. English Standards:

1.RL.2.2 Retell stories, fables, and fairy tales in sequence, including key details, and demonstrate understanding of their central message or lesson.

Materials:

- Plants Worksheet

Procedure:

1. Review Photosynthesis and the different parts of the plant.
2. Ask students to work in groups to write each word from the word bank where it belongs.

Assessment:

- Students will demonstrate their knowledge photosynthesis and the different parts of a plant.



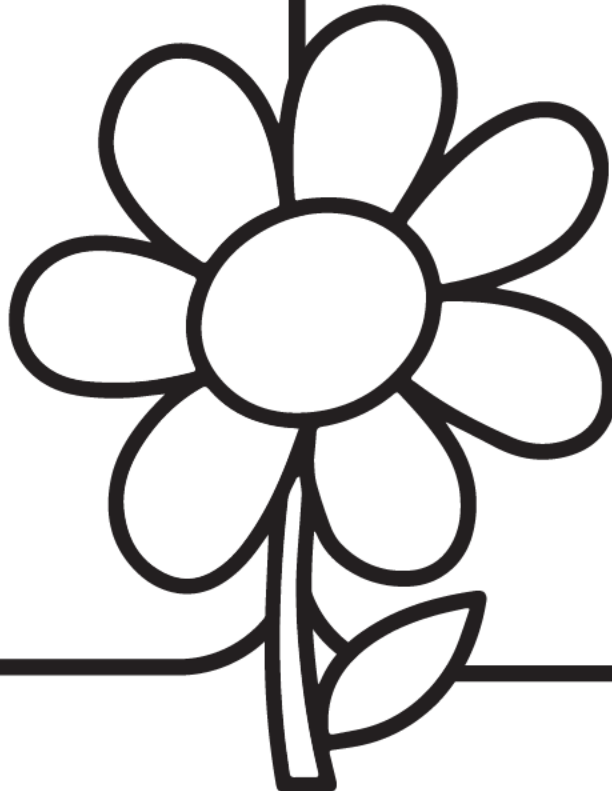
PLANTS

Directions: Place each word from the word bank in the correct column.

Word Bank: seeds, sunlight, leaves, water, air, soil, roots, stem, carbon dioxide, petal

PLANTS HAVE:

PLANTS NEED:





1ST, 2ND GRADE LESSON #4: APPLE CHAIN

Objective: Students will apply their knowledge of what they learned about Photosynthesis at County Line Orchard by recreating the apple tree cycle.

Standards

1.3.1 Classify living organisms according to variations in specific physical features (e.g., body coverings, appendages) and describe how those features may provide an advantage for survival in different environments. English

Standards:

1.RL.2.2 Retell stories, fables, and fairy tales in sequence, including key details, and demonstrate understanding of their central message or lesson.

Materials:

- Cut outs
- Glue
- Scissors
- Yarn
- Construction Paper (brown, green, pink, and yellow)
- Hole Punch
- Tape
- Stapler
- Crayons

Procedure:

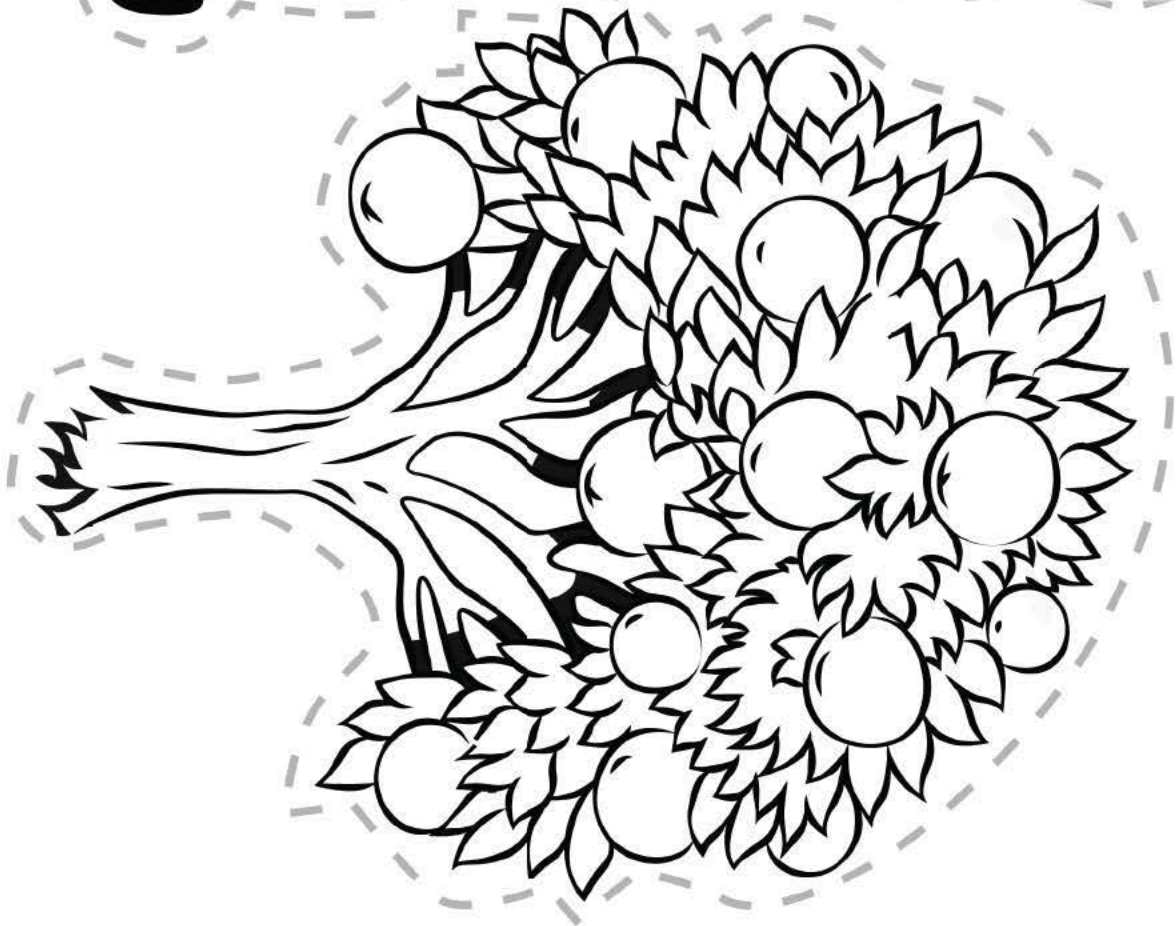
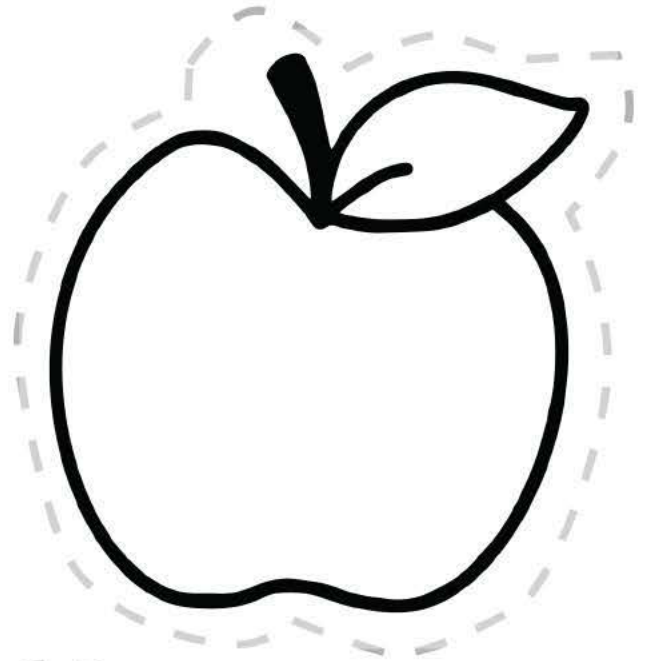
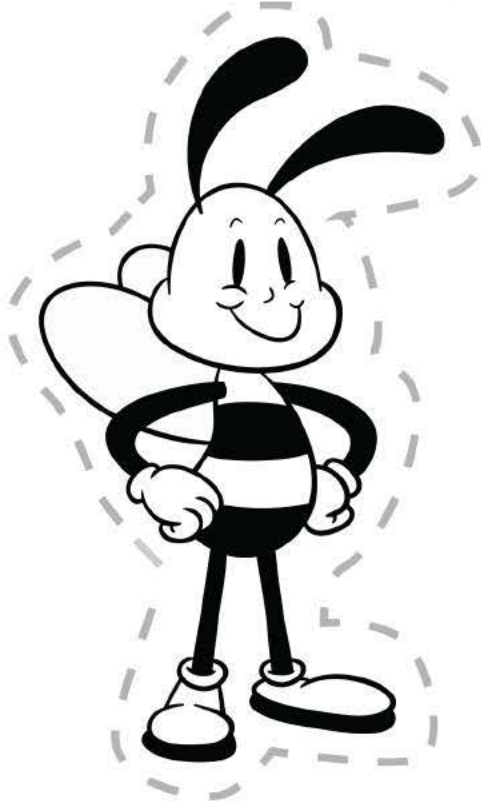
- Cut out each item out of construction paper: seed, tree, blossom, bee, little green apple
- Punch a hole on each side of the items you made with construction paper. The brown seed only gets one hole punch.
- Glue two red paper plates together around 2/3 of the edge. Leave the other 1/3 open. Allow time for it to dry. Can also skip glue and staple plates together depending on age of student.
- Tape or staple a piece of yarn to the inside of the paper plates and extend the yarn out of the opening.
- Add a stem and leaf to the red paper plates to make them look like an apple.
- Tie the little green apple to the yarn coming out of the apple.
- Tie the bee to the little green apple.
- Tie the blossom to the bee.
- Tie the bee to the tree.
- Tie the tree to the seed. These should all form a chain.
- Tuck the green apple, bee, blossom, tree, and seed into the apple.
- Starting with seed, slowly pull shapes out of the apple and tell the story of how apples grow.

Assessment:

- Students will demonstrate their knowledge about how apples grow by completing apple chain project.
- Student will demonstrate the process of Photosynthesis they learned about at County Line Orchard by correctly putting the objects in the correct order.

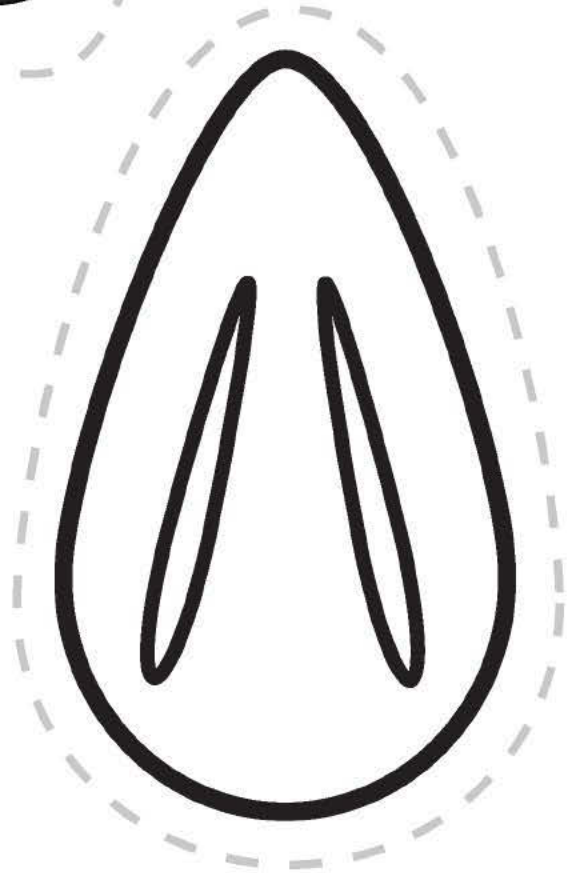
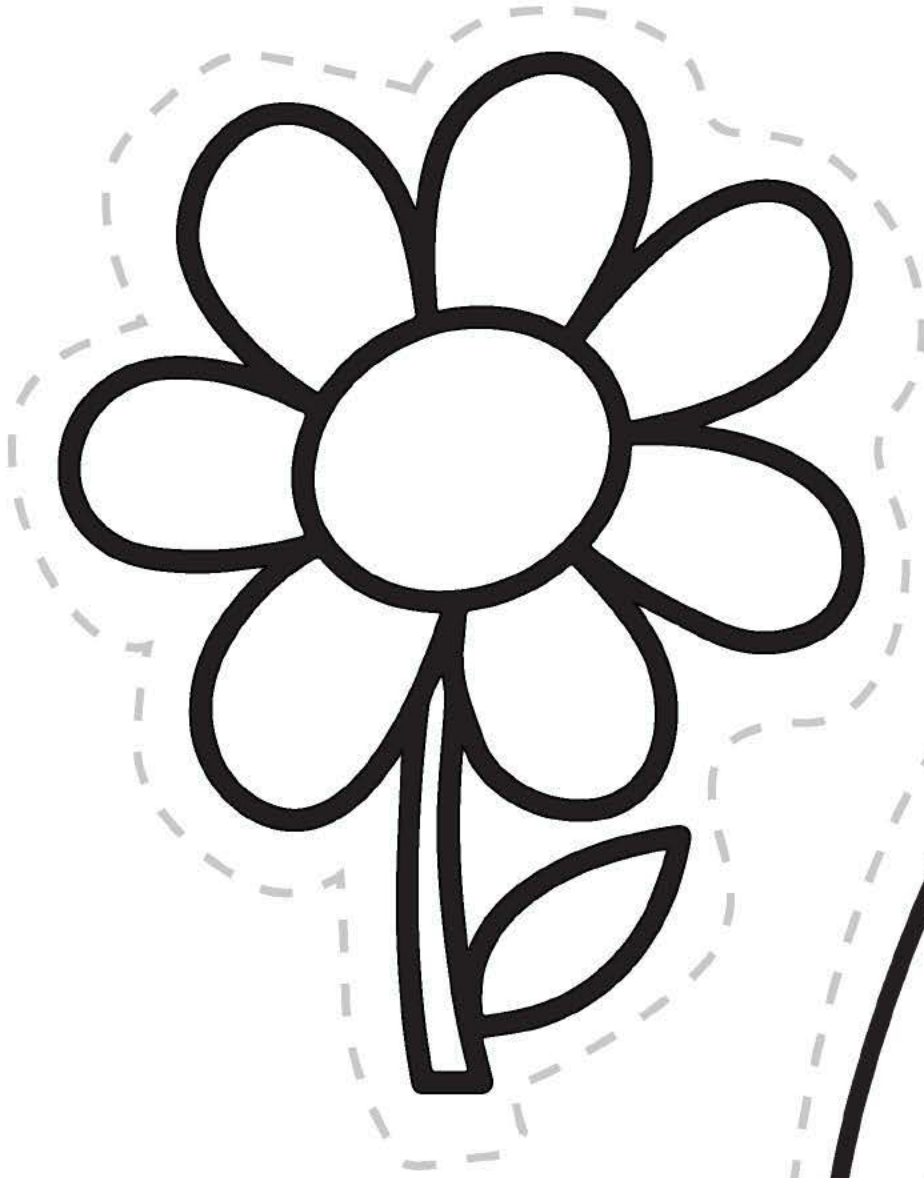


APPLE CHAIN-CUT OUTS





APPLE CHAIN-CUT OUTS





1ST-2ND GRADE EXPERIENCES

Thank you for booking a School Tour with us at County Line Orchard. Below you will find educational resources to prepare your students for their adventure at County Line Orchard. While at the Orchard, our tour guides will focus on the “P” words: Pollination, Packing, Press, Photosynthesis, and Picker People Picker Upper.

The Pre-Learning Lessons below will focus on the Common Core standards. The goal of this curriculum is to engage as they learn the inner workings of our apple production bees, and apple and pumpkin growing.

Helpful Websites:

- Education.com
- <https://www.youtube.com/watch?v=zc8jiCJILFI>

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1ST, 2ND GRADE LESSON #1: BEE BUSINESS

Objective: Students will learn and identify the different parts of the bee and their role in pollination. This lesson will set the context for learning about Pollination at County Line Orchard.

Standards: Science

1.3.1 Classify living organisms according to variations in specific physical features (e.g., body coverings, appendages) and describe how those features may provide an advantage for survival in different environments.

Materials:

- Bee Business Worksheet

Procedures:

- Ask students what they know about honeybees.
- Share some fun facts with them.
- Have them complete the “The Bee Business Worksheet”.
- Explain what bees are and identify the different parts of the bee. Have students complete the “Vocabulary Parts of a Bee Worksheet.”

Assessment:

- Students will demonstrate their knowledge about bees by completing the blanks with the words they found in the crossword puzzle.
- Students will follow up this lesson by learning about the role bees play in Pollination at County Line Orchard.

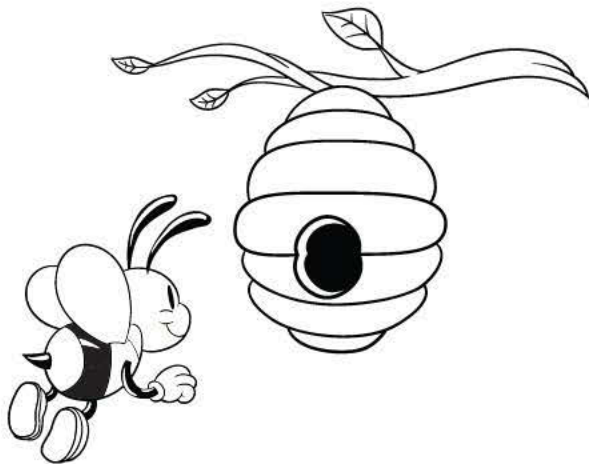


BEE BUSINESS

Directions: Answer the questions, then find the answers in the grid. They may appear up, down, backwards and forwards.

w	i	n	g	s	p	s
o	p	s	h	l	o	e
r	o	o	l	x	l	n
k	l	l	s	i	l	o
e	l	i	p	n	i	r
r	e	t	y	d	n	d
s	n	a	n	w	a	x
b	c	r	o	r	t	s
x	d	y	l	x	e	m
s	e	c	o	n	d	c
b	n	e	c	t	a	r

1. Bees have 5 eyes and 2 pairs of _____.
2. Bees collect nectar and _____ from flowers.
3. Honeybees use _____ from flowers to make honey.
4. Bees beat their wings 200 times per _____.
5. It is believed that bees _____ a third of the food we eat.
6. Bees make egg cells from _____.
7. Most bees in a bumblebee or honey bee colony are _____.
8. The leafcutter bee is a type of _____ bee.
9. Male honey bee are called _____.
10. A group of bees living together in a nest hive is called a _____.





1ST, 2ND GRADE LESSON #2: WHAT'S IN A BEE?

Objective: Students will learn and identify the different parts of the bee. This lesson will set the context for learning about bees and Pollination at County Line Orchard.

Science Standards:

1.3.1 Classify living organisms according to variations in specific physical features (e.g., body coverings, appendages)

and describe how those features may provide an advantage for survival in different environments.

English Standards:

1.RL.2.2 Retell stories, fables, and fairy tales in sequence, including key details, and demonstrate understanding of their central message or lesson.

Materials:

- “What’s in a Bee ?” Worksheet
- Read/ Watch “The Honeybee Race” book

Procedures:

- Explain what bees are and identify the different parts of the bee.
 - Have students complete the “Vocabulary Parts of a Bee Worksheet.”
 - Students will read/ watch “The Honeybee Race” book to learn about the role bees play in photosynthesis. <https://www.youtube.com/watch?v=zc8jiCJlLFI>. Students should be able to answer the following questions.
1. Why did the honeybees get together? What were they celebrating?
 2. What were the bees looking for?
 3. What did they bring back to the finish line?
 4. What did Honeybee #3 win?

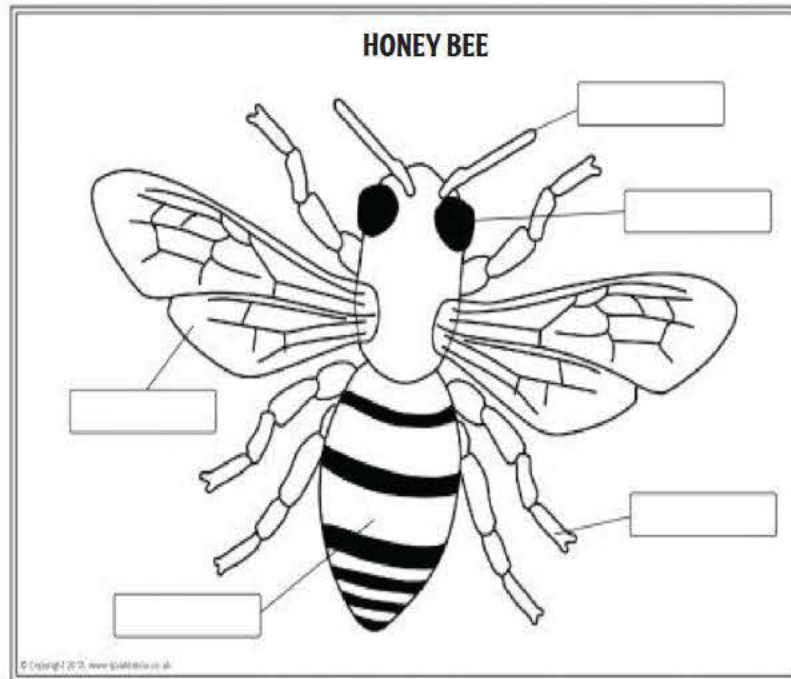
Assessment:

- Students will demonstrate their knowledge of bee vocabulary by labeling the parts of the bee correctly and placing the correct term in the blank.
- Students will follow up this lesson by learning about the bee dances and Pollination at County Line Orchard.



WHAT'S IN A BEE?

Directions: Label the parts of the honey bee correctly.



Place each term correctly in the blank below.

1. The rear body section composed of 9 segments and contains the organs used for digestion, reproduction, and respiration.
2. The moveable, sensitive feelers on the bee's head which pick up smell and movement.
3. It is made up of thousands of tiny lenses that allows a honeybee to see ultraviolet light and visible light, except red.
4. A honeybee has 3 sets, which are used for walking, dusting off their antennae, brushing pollen off their tiny hairs, and storing pollen.
5. There are 2 sets of these on the honeybee that are strengthened by various veins.

Word Bank

- wing
- compound eye
- leg
- antennae
- abdomen



1ST-2ND GRADE LESSON #3: WHAT IS PHOTOSYNTHESIS?

Objective: Students will learn what photosynthesis is and how the cycle of photosynthesis works. This lesson will give the students context for learning about Photosynthesis at County Line Orchard.

Science Standards:

1.3.4 Describe how animals' habitats, including plants, meet their needs for food, water, shelter and an environment in which they can live.

Materials:

- Photosynthesis Worksheet

Procedures:

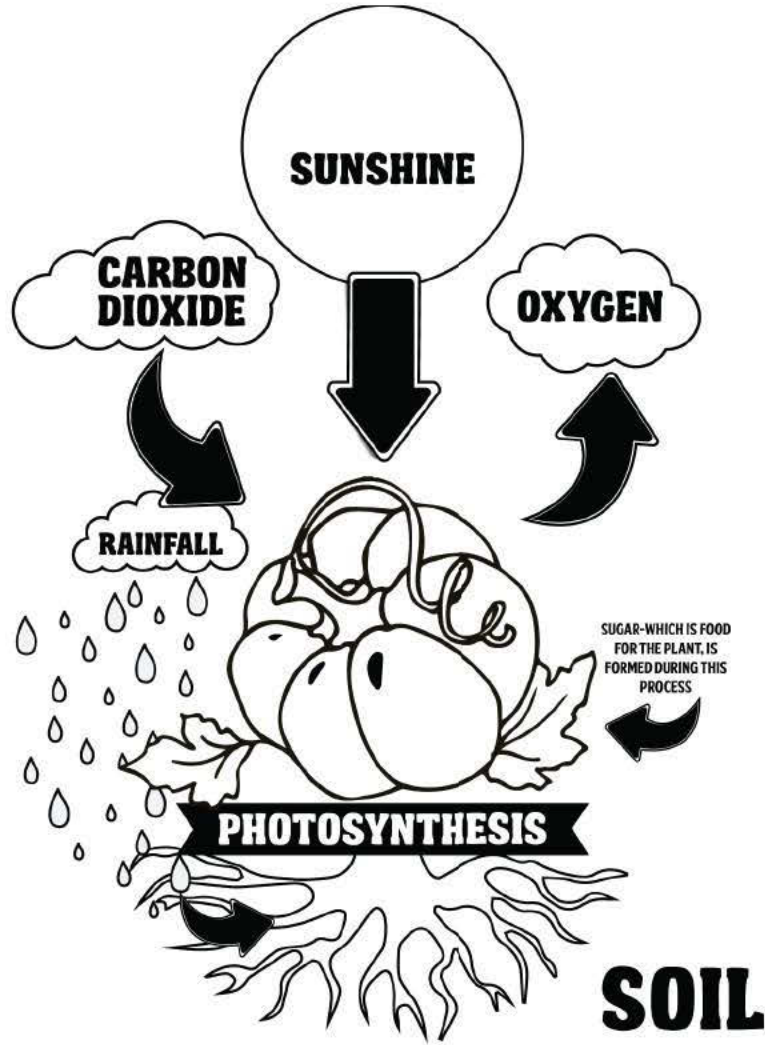
- Describe the process of Photosynthesis.
- Explain the cycle with emphasis on the sun's role and the carbon dioxide needed for the plant to convert food in to energy.
- Discuss the by product of oxygen that occurs with photosynthesis.
- Have students complete the "Photosynthesis Worksheet."

Assessment:

- Students will demonstrate their knowledge of photosynthesis by completing the blanks of the process correctly.



WHAT IS PHOTOSYNTHESIS?



Photosynthesis is a process where plants _____
 from the sun to convert _____ from the air and
 _____ from the soil into _____
 to feed the plant and _____ is given out in the air.

Word Bank				
•water	•sugar	•carbon dioxide	•light	•oxygen