



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 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:

Parts of a Bee: <https://www.youtube.com/watch?v=I41sTHD2bx8>

All about Bees!: <https://www.youtube.com/watch?v=ta154f5Rp5Y>

Photosynthesis:

Bee’s Role: <https://www.youtube.com/watch?v=zc8jiCJILFI>

*Bee’s Role

Photosynthesis song: <https://www.youtube.com/watch?v=xuivYRmIACM>

* What is photosynthesis

Photosynthesis: <https://www.youtube.com/watch?v=68b1HAIfX08>

Please feel free to contact us at tours@countylineorchard.com if you have any feedback regarding this curriculum. Thank you for allowing us at County Line Orchard the opportunity to bring our passion of growing to your classroom.

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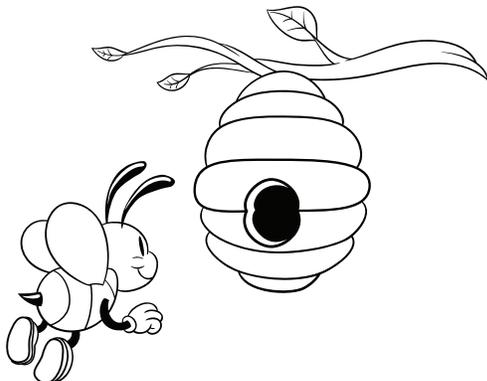


BEE BUSINESS

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. Honey bees 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 that 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 bees are called _____.
10. A group of bees living together in a nest hive is called a _____.



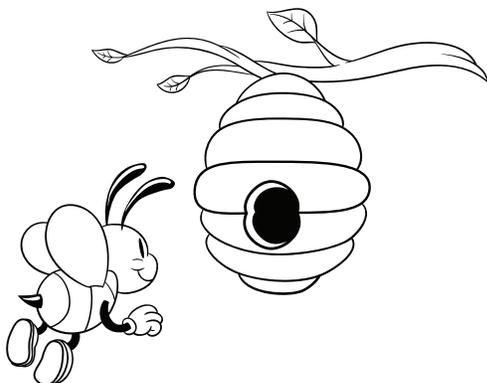


BEE BUSINESS

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

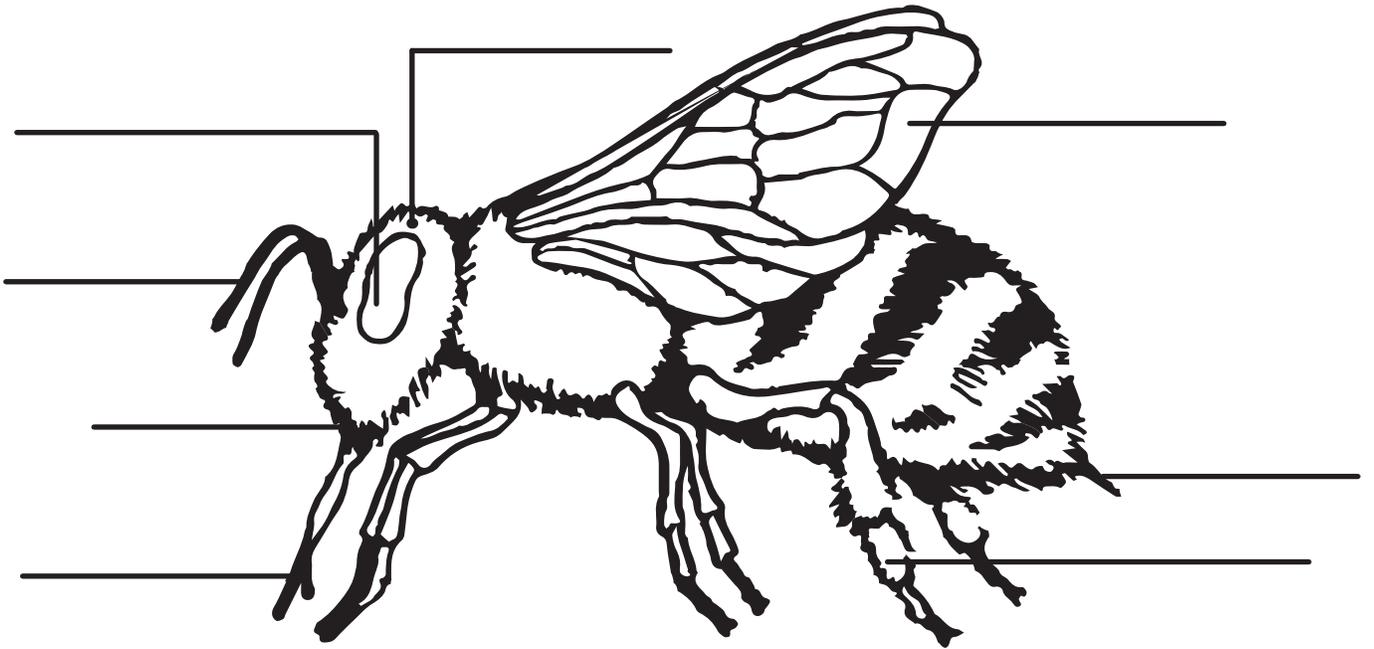
1. Bees have 5 eyes and 2 pairs of wings.
2. Bees collect nectar and pollen from flowers.
3. Honey bees use nectar from flowers to make honey.
4. Bees beat their wings 200 times per second.
5. It is believed that bees pollinate a third of the food that we eat.
6. Bees make egg cells from wax.
7. Most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





BUSY BEE BODIES

Directions: Correctly identify the different parts of the honey bee's body.



Word Bank

Compound Eye

Forewing

Mandible

Antenna

Hind Leg

Simple Eye

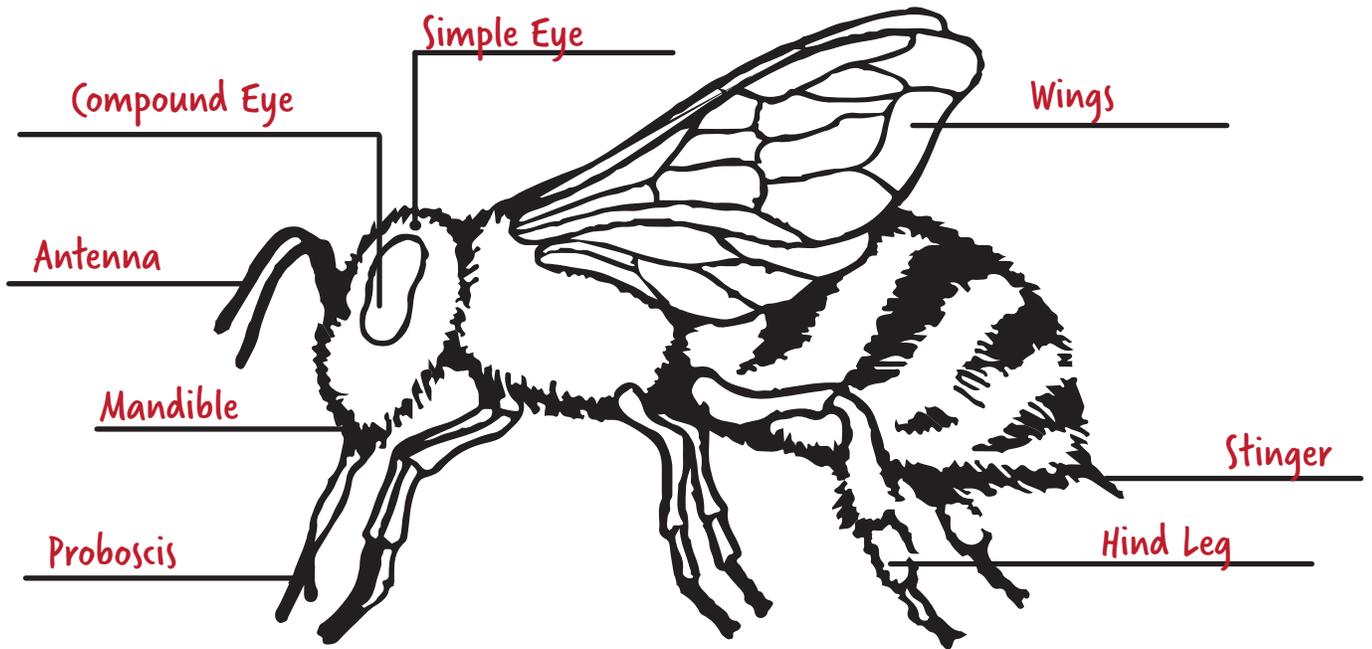
Stinger

Proboscis



BUSY BEE BODIES

Directions: Correctly identify the different parts of the honey bee's body.



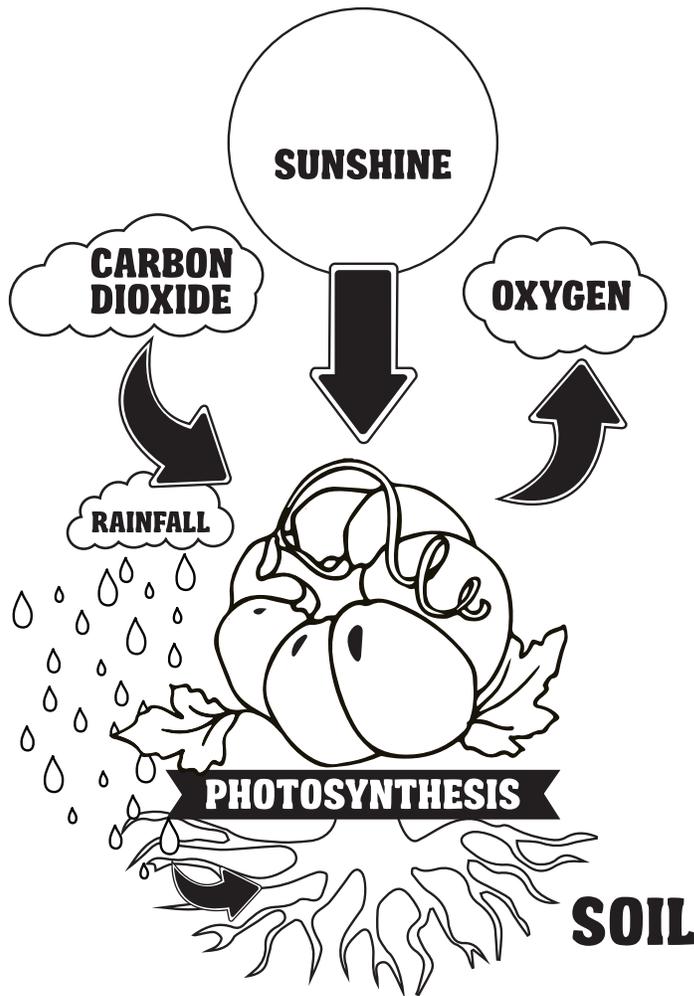
Word Bank

Compound Eye	Forewing	Mandible	Antenna
Hind Leg	Simple Eye	Stinger	Proboscis



WHAT IS PHOTOSYNTHESIS?

Directions: Look at the diagram. Use the word bank to fill in the blanks.



Word Bank

Water

Sugar

Light

Carbon Dioxide

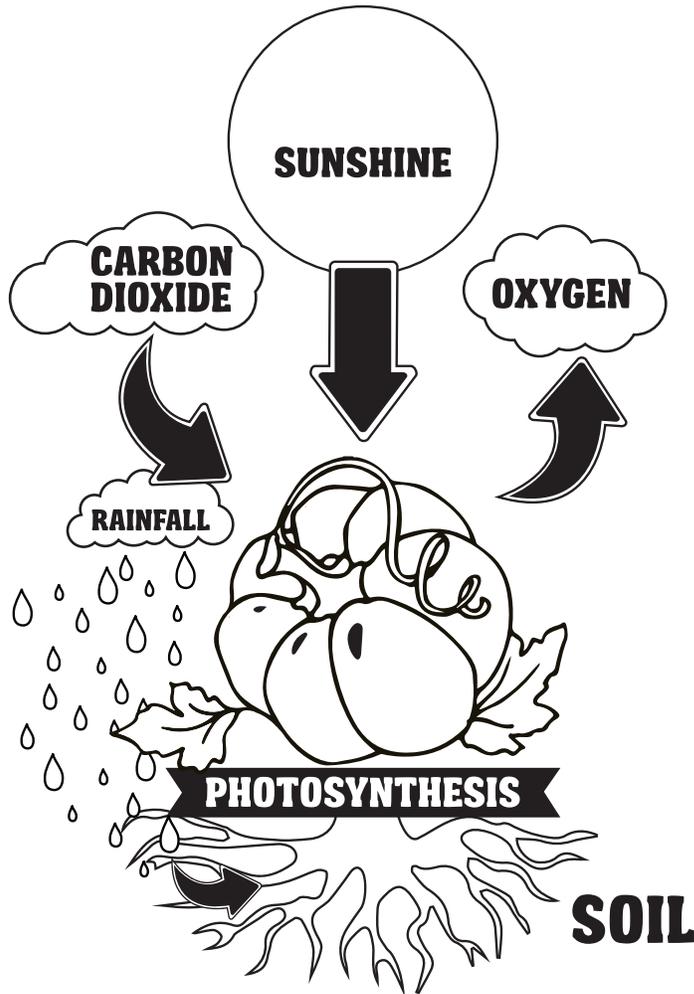
Oxygen

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



WHAT IS PHOTOSYNTHESIS?

Directions: Look at the diagram. Use the word bank to fill in the blanks.



Word Bank				
Water	Sugar	Light	Carbon Dioxide	Oxygen

Photosynthesis is a process where plants need Light from the sun to change Carbon Dioxide from the air and Water from the soil into Sugar to feed the plant and oxygen is given out in the air.



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 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 for our apple production, bees and apple and pumpkin growing.

Helpful Websites:

Parts of a Bee: <https://www.youtube.com/watch?v=I41sTHD2bx8>

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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.

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.

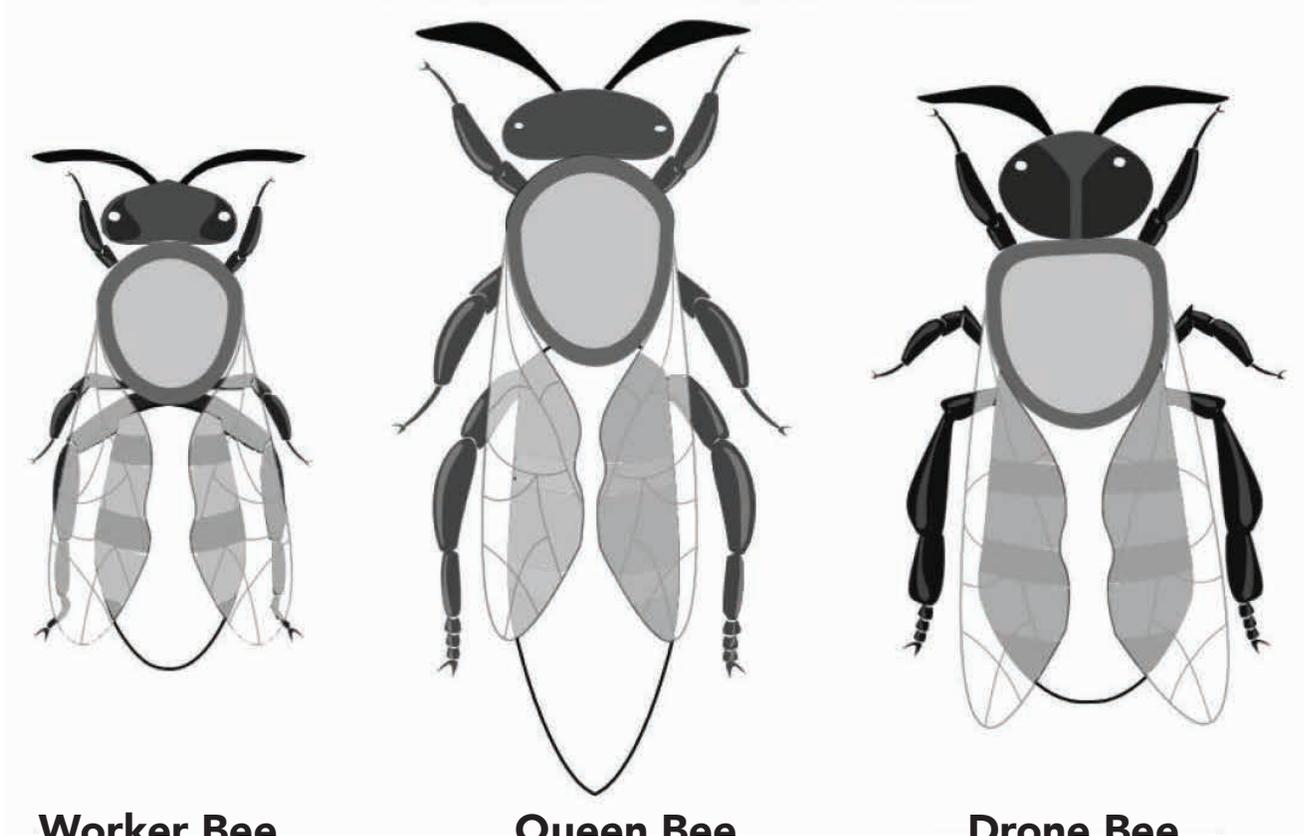
Assessment:

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



BEE QUALITIES

Directions: Write the qualities of each bee you learned about.



Worker Bee

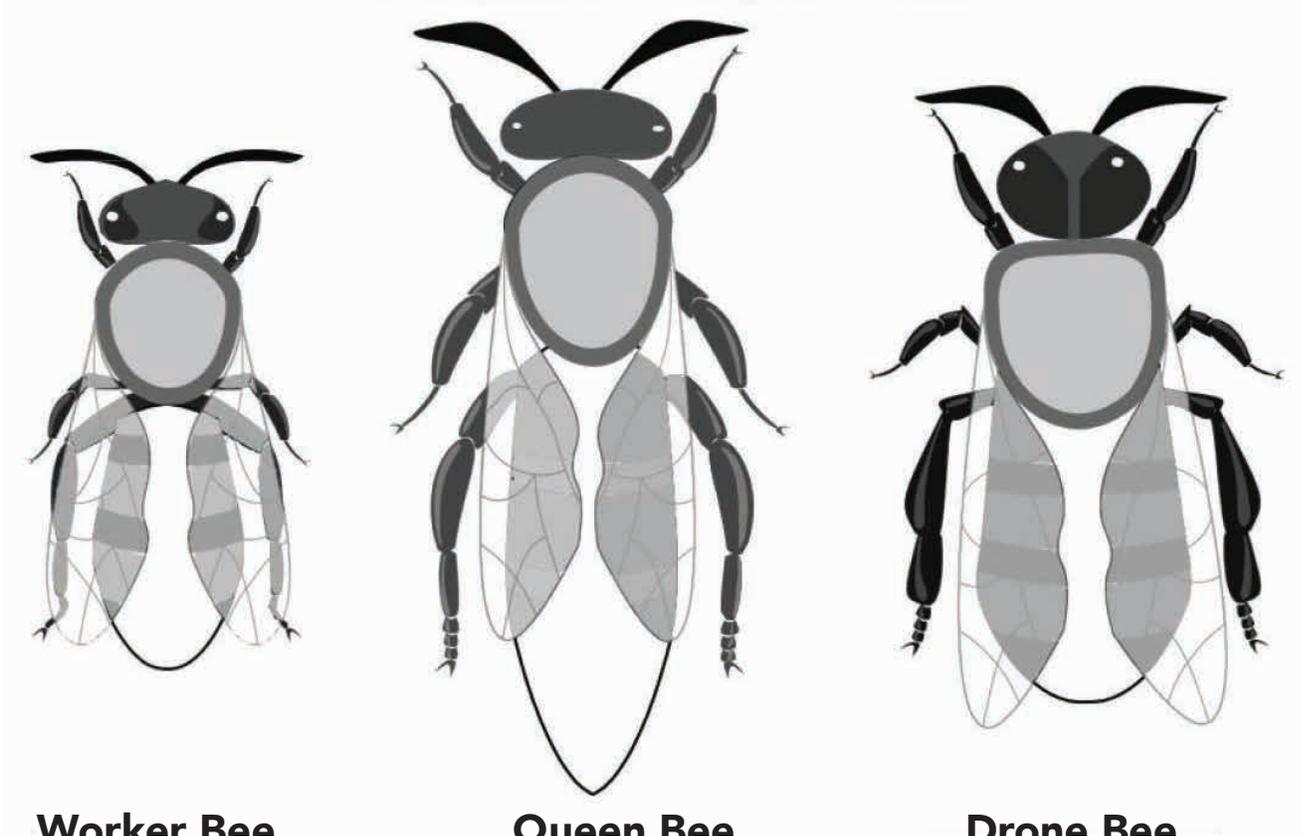
Queen Bee

Drone Bee



BEE QUALITIES

Directions: Write the qualities of each bee you learned about.



Worker Bee

Queen Bee

Drone Bee

Female

Collects pollen

Makes wax

Takes care of hive

Lives for six weeks

Female

Lays Eggs

2,000 eggs per day

Eats royal jelly

Lives up to 4 years

Male

Doesn't make honey

Doesn't collect pollen

has very large eyes

Lives for eight weeks



1st – 2nd GRADE LESSON #2: APPLE CHART

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.NSW.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 Chart Worksheet

Procedure:

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

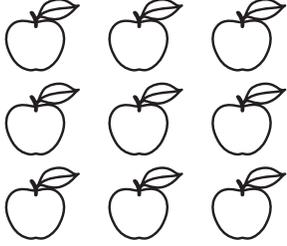
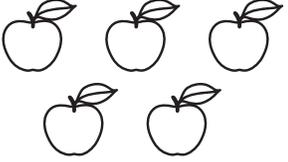
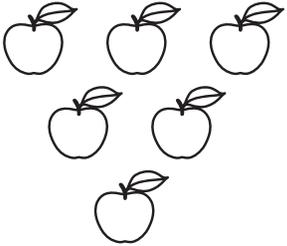
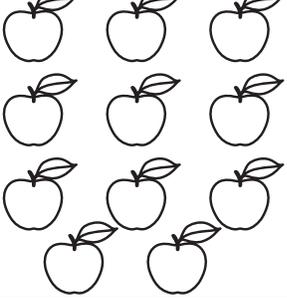
Assessment:

- 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 size of the apples they saw at County Line Orchard by correctly answering the questions on the work sheet.



APPLE CHART

Directions: Use the chart to answer the questions.

			
 Brody	 Lisa	 Melissa	 Doug

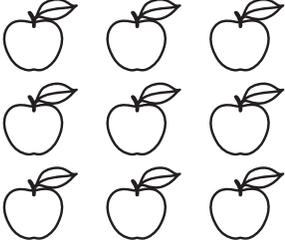
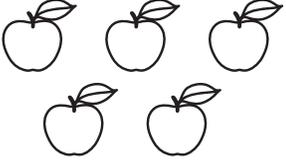
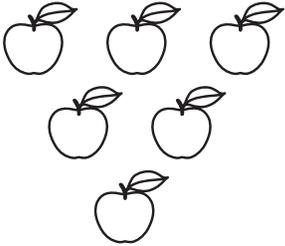
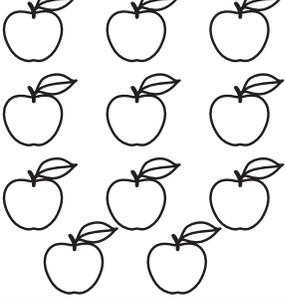
 = 2 Apples

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? _____



APPLE CHART

Directions: Use the chart to answer the questions.

			
 Brody	 Lisa	 Melissa	 Doug

 = 2 Apples

- How many apples did Melissa pick? 6
- How many apples did Brody pick? 9
- Who picked the most apples? Doug
- Who picked the fewest apples? Lisa
- How many more apples did Doug pick than Lisa? 6
- How many more apples did Doug pick than Brody? 2



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 the plant.



PLANTS

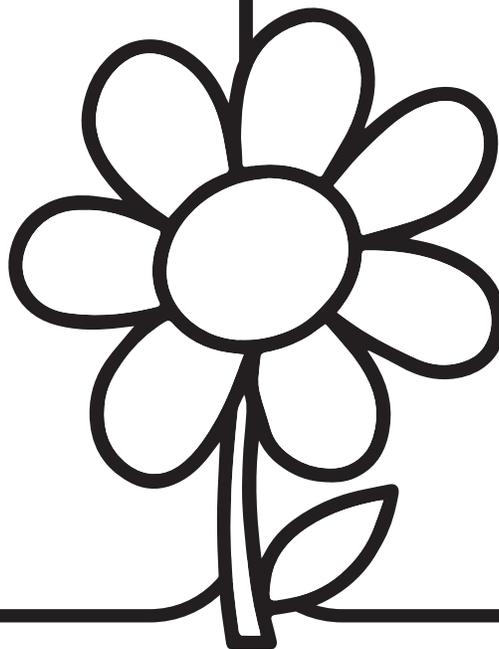
Directions: Place each word from the word bank in the corret column.

Word Bank

Seeds	Leaves	Air	Roots	Carbon Dioxide
Sunlight	Water	Soil	Stem	Petal

Plants HAVE

Plants NEED





PLANTS

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

Word Bank

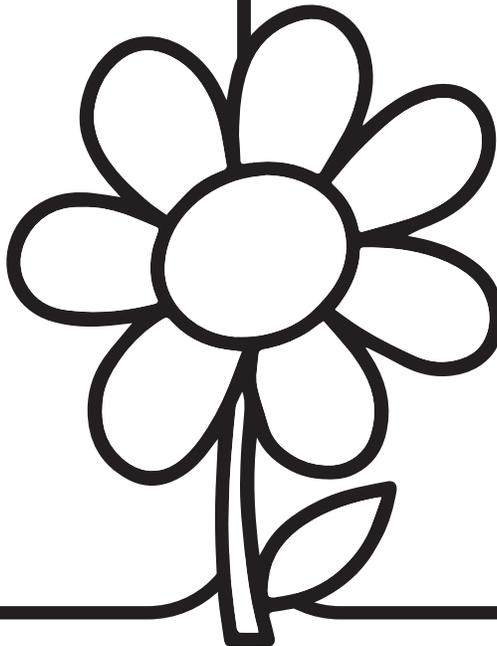
Seeds	Leaves	Air	Roots	Carbon Dioxide
Sunlight	Water	Soil	Stem	Petal

Plants HAVE

Seeds
Leaves
Stem
Roots
Petals

Plants NEED

Carbon Dioxide
Sunlight
Water
Soil
Air





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.

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:

- Cut outs
- Crayons or Markers
- Hole Punch
- Scissors
- Yarn

Procedure:

- Cut out each item and color: seed, tree, blossom, bee, little apple.
- Punch hole on each side of the items. The seed only gets one hole punch.
- Using the yarn, tie the little green apple to the bee
- Tie the bee to the little apple, then
- Tie the blossom to the bee, then
- Tie the bee to the tree, then
- Tie the tree to the seed. These should form a chain.

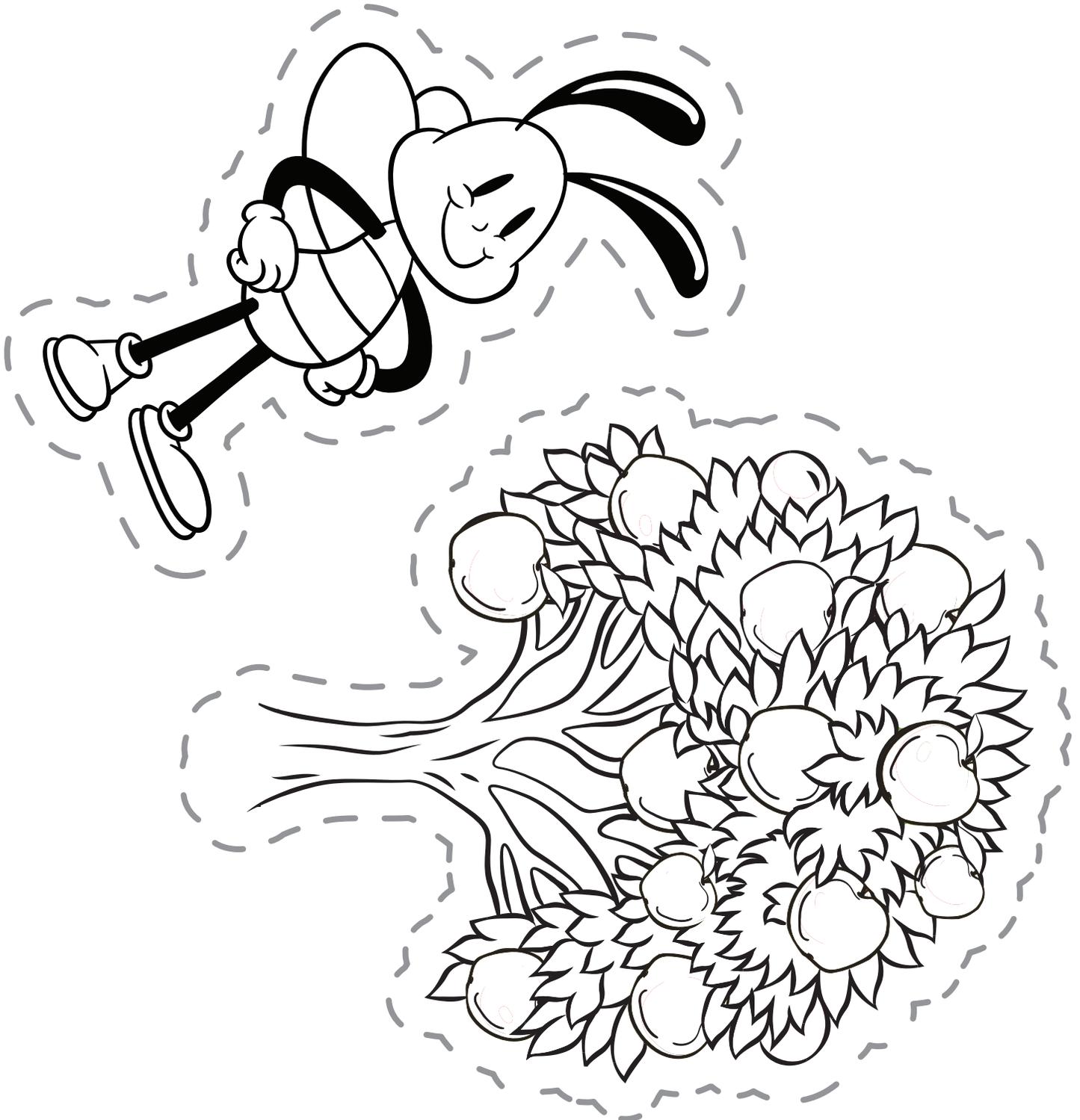
Assessment:

- 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

Directions: Color & cut out all images. Punch holes on both sides of each image. Using string or pipe cleaners, connect all images in the order that apples grow.





APPLE CHAIN CUT OUTS

Directions: Color & cut out all images. Punch holes on both sides of each image. Using string or pipe cleaners, connect all images in the order that apples grow.

