

Opera Xpress

Presents

# A Busy Bee

Learning Guide



*Pre-  
Performance  
Activities*

*Performance  
Day  
Activities*

*Key Vocabulary*

**Rap-** words spoken in rhythm

**Opera-** drama/play that is sung

**Soprano-** a female voice that is very high

**Mezzo-** a female voice that sings in the middle range

**Baritone-** a male voice that is low

**Tenor-** a male voice that is high

**Solo-** one singer singing by themselves

**Ensemble-** a group of singers



*Post-  
Performance  
Activities*

*Thank you!*

for participating in Opera Carolina's Opera Xpress program. Opera is a wonderful teaching tool that integrates every area of learning and curriculum, from history, language, math, and science, to 21<sup>st</sup> Century learning skills such as innovation, communication, and collaboration. The materials in this teacher's guide are designed to help you use the 35-minute opera production as a rich classroom resource, and the activities are aligned with Common Core Standards in order to provide meaningful connections between the production and your classroom goals. Every classroom is different, and we encourage you to adapt and edit the lessons to best fit the specific needs of your classroom.

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## Activate with the Arts!

This Guide's lessons and activities enhance student engagement and learning through arts-based skills. Activate with the Arts activities are not additions to the lessons, but alternate strategies for teaching the lessons.

## Pre-Performance

# Story, Themes, Listening

## Teacher Preparation

- Print *A Busy Bee* (optional), *Summary Worksheet*, *Listening Worksheet*
- Cue up song excerpts for listening activity

## Introduction to the main themes of the story (5 min)

Discuss the following questions as a whole group OR allow small groups of 3 or 4 to discuss, letting one or two groups share their answers between each set of questions:

### Grades K-2

- When was a time that you had to work hard at something and not give up?

### Grades 3-5

- What is one thing you're good at?
- When was a time that you had to work hard at something to succeed at it? Did you need any help from others like friends, family, or teachers to succeed?

## *A Busy Bee* (20 min)

**Read** the summary of, *A Busy Bee* as a whole group (use the story on pages 22-24).



## Activate with the Arts: *A Busy Bee* in ONE minute!

**Rather than just reading the summary as a whole group, use the following activity to encourage students to interact with the story of *A Busy Bee* in an active way.**

(Best suited to grades 3-5)

1. Put students into small groups of 4-5.
2. Ask each group to work together to identify the main action of each paragraph Note: depending on the needs and skill level of the class, teachers may need to support this step by working together as a whole group.
3. Each group uses the main actions of each paragraph to act the story out in one minute or less for the whole

## Discuss:

### Grades: K-2:

- Discuss the following question with students: What is one lesson you could learn from this story? Ask students to draw a picture to represent their answer.

### Grades 3-5:

- Split students into small groups of 3 or 4 to discuss and write their answer to the following question: Describe one lesson you could learn from this story (there are lots of possible answers to this question!). Use at least one example from the text to support your answer. Allow two or three of the small groups to share their answer with the whole group.

## Pre-Performance: Continued

**Complete:** Plot and Summary Worksheet (page 13)

**Grades: K-2:**

- As a class, fill in the Plot and Summary Worksheet. Allow time for students to individually illustrate each plot point. Arranging the story chronologically and one-two sentence summary can be done aloud as a class if preferred.

**Grades 3-5:**

- Students may complete the Plot and Summary Worksheet individually, or in groups of 3-4.
- Allow groups, or a few students share their one-two sentence summary of the story once Plot Summary Worksheet is complete.

## Pre-Performance: Listening Activity



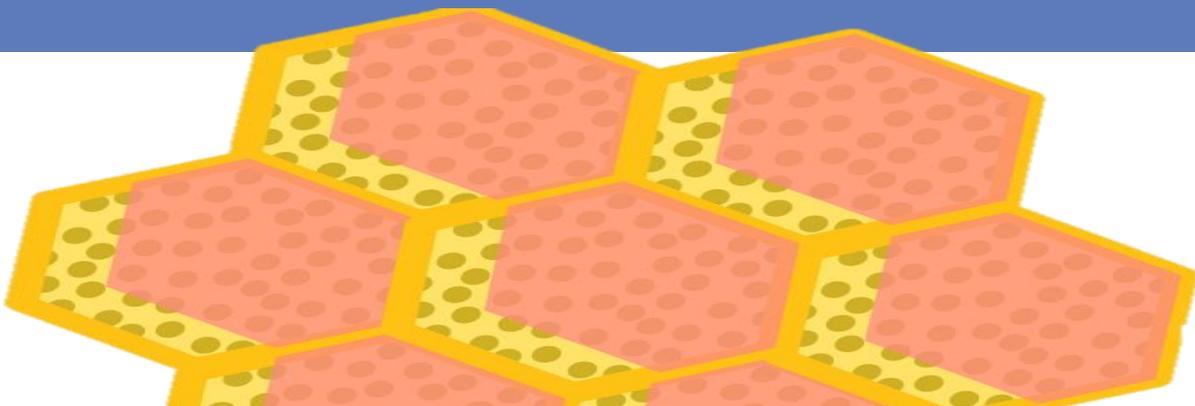
**Distribute** the Listening Worksheet (page 14) and review the instructions with the students:

Worksheet Directions: *Music tells the story in opera as much as the lyrics or dialogue. Circle your answers as you listen to each of the following songs. Then answer the questions that follow.*

## Listening Excerpts & Notes

Please share the following information with your students **BEFORE** listening/watching:

- These excerpts are from the opera, *A Busy Bee*.
- You'll notice that these are not professional recordings and there is no video of a performance. That is because this opera is **BRAND NEW!**
- *A Busy Bee* has only been performed in one other city in the whole world!
- The recordings you are hearing are called “workshop recordings”.
  - This means you get to hear what the songs sounded like while the composer was still working on the music and revising it.
  - This opera is **SO** new that you are hearing music no one else in the world has heard yet!



## Pre-Performance: Continued

**Play** the following excerpts of the major pieces from the opera to illustrate the ways the music tells something about the characters or events. Give students 30-45 seconds after each excerpt to answer the questions on the Listening Worksheet. Teachers may wish to let students share their answers with a partner.

### Activate with the Arts: Move!

While listening to each song excerpt, encourage students to move to the music. Depending on the size and needs of the classroom, teachers may wish to ask students to stay seated at their desks while moving their upper bodies or to stand up in one place to move their whole bodies. This activity is fun and highly engaging for students and will help them to understand how music helps tell the story.

### Listening Excerpts:

#### 1. Bee Ensemble: “We are Honey Bees”

- “We are Honey Bees”: <https://youtu.be/yOIsCE-w79E>
- This song is an ensemble song, written for all four of our singers. In our cast, we have one soprano, one mezzo, one tenor, and one bass. If you listen, you will hear some buzzing and even a bee rap!

#### 2. Finding Bella’s Job: “Try, Try, Try”

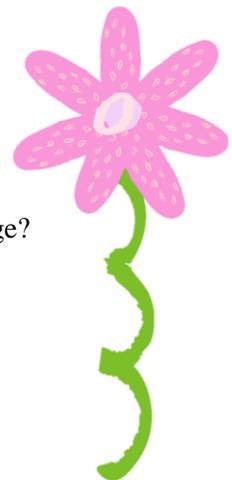
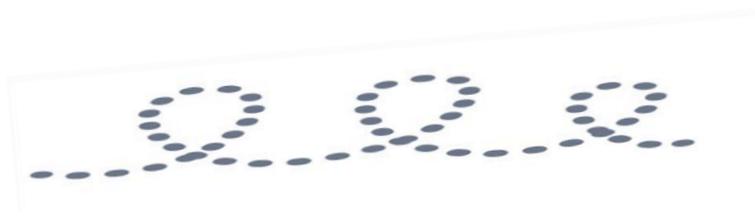
- “Try, Try, Try”: <https://youtu.be/wHeY6cIh0DE>
- Another fun ensemble song! But this time, some of our bee friends have solos, or moments when a singer sings all by themselves!

#### 3. How to be a Flower Scout: “Honey Bee Dances”

- “Honey Bee Dances”: [https://youtu.be/Yx2\\_GCMdfwA](https://youtu.be/Yx2_GCMdfwA)
- The Queen Bee is showing Bella how to be a Flower Scout! The Queen teaches Bella and her friends two important dances: Round Dance and Wiggle Waggle Dance!

**Discuss** the following as a class:

- What do you think of when you hear the word, “opera”?
- Did this music sound like your definition of opera?
  - Why or why not?
- Does the rap portion in “We are Honey Bees” fit into what you think of as “opera”?
- Based on the songs you heard, are you excited to see how these songs are done on stage?



# Performance Day

## Elements, Expectations & Engagement

### Teacher preparation:

- print *About the Opera* worksheet.



### Opera Elements

#### About the Opera (10 min)

**Relay** the following information to the students: *Opera is a drama (play), that is sung! Opera uses many different art forms to tell stories.*

**Discuss** the following questions as a whole group: How could each of these art forms be used to help tell the story in an opera?

Music  
Lyrics  
Dialogue  
Costumes  
Sets

**Music hint:** think about when you watch a movie how the music lets you know what's coming - loud, quiet, sad, happy, etc.

**Distribute** the *About the Opera* worksheet to students and read the following directions: *Fill in the boxes below to answer the following question: What are the differences between, a. an opera vs. a play; b. watching a live performance vs. a performance on tv?* Teachers may allow students to work on this worksheet individually or with a partner.

### Expectations

#### Performance Expectations Discussion (5 min)

**Discuss** the following questions as a whole group:

- What does being a respectful audience member **look** like?
- What does being a respectful audience member **sound** like?
- What does being a respectful audience member **feel** like?
- Why is it important to be a respectful audience member?

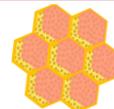
### Get Engaged

#### What to listen for/look for in the performance (5 min)

**Review** the following terms from the previous lesson:

Rap  
Opera  
Soprano  
Mezzo  
Tenor  
Baritone  
Solo  
Ensemble

### Composer Fun Facts: J. Ruben Piirainen



- John Ruben Piirainen is a pianist and composer.
- He began piano lessons at age five.
- He holds college degrees in piano.
- He teaches piano and other music classes at the college/University level.
- He plays piano for professional recordings and live performances.

- Ruben Piirainen played a toy piano for the 2012 Make Music New York festival.
- He composes his own music for piano, opera, choruses and even hand bells!
- He works with the Florentine Opera in Milwaukee, Wisconsin.

## Post-Performance



Grades PreK-5

# Classroom extensions- Writing Extension

## Teacher preparation:

- print *Writing Reflection* worksheet

## Reflections on the performance (30 min)

**Distribute** Writing Reflection Worksheet and read the following directions to students:

**Grades K-5:** (can be oral response for K-1)

- What did you learn about opera that you didn't know before?

**Grades 4-5:**

- In the Opera Xpress performance of *A Busy Bee*, Bella has to keep trying to find her purpose in the hive. Do you feel like you have a purpose in your community or are you still looking? Explain your answer.

## Post-Performance (30 min)

Grades PreK-K

# Classroom extensions- What Do Bees Do?

## Teacher preparation:

- cue up YouTube video for students to view as a class:  
<https://www.youtube.com/watch?v=ta154f5Rp5Y>
- gather one piece of paper and one writing utensil for each student
- print *A Busy Bee* (optional)

## Introduction (5 min)

**Discuss** the experience of seeing the opera, *A Busy Bee* as a class. (reference *A Busy Bee* on pages 22-24, if needed)

- What do you remember from the opera, *A Busy Bee*?
- Do you recall any music, drama, etc. that went with this story?
- What was your favorite part?
- Who was your favorite character? Least favorite character?
- Do you remember any of the jobs the bees talked about in the opera? (drone, nurse, cleaning, flower scout)

## Post-Performance: Continued

### Activity (20 min)

**Watch** the YouTube videos via the link below:

- “Busy Bees” (~ 3 mins)- SciShow Kids: <https://www.youtube.com/watch?v=ta154f5Rp5Y>

**Discuss** the jobs of bees within the hive.

- Queen bee? (*lays eggs*)
- Worker bees (*builds hive, cleans hive, looks for food*)
- How does a bee get food? (*collecting nectar and pollen from flowers and plants*)

### Activate with the Arts: Draw!

**Distribute one piece of paper and a writing utensil to each student. Students are to show with lines, squiggles, circles, etc. how bees move as they fly. Once each student has completed their drawing, each student is to explain (to fellow student, teacher, or to entire class), why they chose to represent the bee’s movement in that manner.**

- Why did you use that line/shape?
- What kind of bee were you drawing? (Queen, Worker?)
- Where is this bee flying to? (The hive, a flower, away from danger, around the hive?)
- If you were drawing how a bird flies instead of a bee, would you use the same kind of lines, or different? If different, what kind of lines, shapes, etc. would you use instead?
- Why would a bird flying look different from a bee flying?



### Conclusion (5 mins)

**Review** the different types of movements or drawings shown through the activities. The teacher can pose this question to be written response, or oral response, depending on time and preference

- How did your classmates demonstrate the bees’ movements?
- Did everyone have the same kinds of bee movements, or did some classmates have different ideas of how bees move?
- Who flies around the world more, Queen bees, or Worker bees?
- What are the Worker bees looking for when outside of the hive?
- Now that you know more about bees and how they move, when you see a bee outside, will you react differently?
- Do you think bees are flying around to sting you? If no, what are they doing?

## Teacher preparation:

- cue up YouTube video for students to view as a class:  
<https://www.youtube.com/watch?v=dA05LOfPbIY>
- gather one piece of paper and one writing utensil for each student
- print *A Busy Bee* (optional)

## Introduction (5 min)

**Discuss** the experience of seeing the opera, *A Busy Bee* as a class. (reference *A Busy Bee* on page \_\_\_\_, if needed)

- What do you remember from the opera, *A Busy Bee*?
- Do you recall any music, drama, etc. that went with this story?
- What was your favorite part? Who was your favorite character? Least favorite character?
- Do you remember any of the jobs the bees talked about in the opera? (drone, nurse, cleaning, flower scout)

## Activity (20 min)

**Watch** the YouTube video via the link below:

- “BEES” (~ 4 mins)- All Things Animal TV: <https://www.youtube.com/watch?v=dA05LOfPbIY>

**Distribute** one piece of paper and one writing utensil to each student. Give students 5 minutes to think about and write down the job of the Queen bee, Drone bees, and Worker bees.

- When 5 minutes is complete, as a class, discuss each bee and their job based on what was seen in the video.
  - Queen bee: lays eggs, lives long time
  - Drone bees: male, build the hive
  - Worker bees: female, take care of young, clean the hive, groom the queen, collect pollen (w/ their tongues and “pollen baskets” on their bodies) and nectar (w/ their tongues) from flowers to make honey and feed the colony

## Activate with the Arts: Move!

### Divide class into 3 groups

Assign each group a bee job (Queen, Drone, or Worker). Each group is to work together and use their bodies and voices to demonstrate the job of their bee. (Ex. *Queen bee* “holding and rocking” a baby bee; *Drone bee* building a structure; *Worker bee* cleaning the hive, flying to get pollen, etc.)

Groups can demonstrate to their assigned bee to the teacher or entire class, depending on time and teacher preference.

## Post-Performance: Continued

### Conclusion (5 mins)

**Pose** this question to students and ask them to respond in writing or orally, depending on time and preference:

- Tell me about the video seen today and the opera that visited our school (the story read earlier). How did this story, opera, and video help you understand bees and how their “families” work together? Are bee families similar to our families? Why or why not?



### Post-Performance (30 min)

Grades 3-4

## Classroom extensions- Shapes of Bee Hives

### Teacher preparation:

- gather one piece of paper and one writing utensil or one personal dry erase board and marker for each student
- print *Bee Hives and Polygons Worksheet* and *Bee Hives and Polygons: But Why Hexagons? Worksheet*

### Introduction (3 min)

**Brainstorm:** Students write the answers the following questions on a scrap piece of paper, notebook, or personal dry erase board and then hold up their answers:

- Draw a square.
- Draw a triangle.
- Draw a hexagon

### Activity (20 min)

**Share** the following with students:

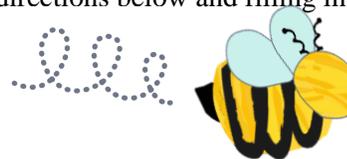
- There are only three geometrical shapes that bees could use to form a hive: triangles, squares, and hexagons. Bees choose hexagons every time. Why? We are going to explore these shapes to find out why.

## Post-Performance: Continued

**Distribute** “Bee Hives and Polygons” Worksheet (pages 17-18) and read the directions aloud with the whole group:

Examine the following attributes of each of these shapes by following the directions below and filling in the chart:

1. Cut out the 3 shapes on the next page.
2. Fold them to find lines of symmetry.
3. Measure the angles of each polygon.
4. Measure and calculate the perimeter of each polygon.



Allow students to work on the activities independently and then compare their answers with a partner.

**Group** students into small groups of 3 or 4. Distribute “Bee Hives and Polygons: But Why Hexagons?” Worksheet (page 19) and read the directions aloud with the whole group:

Follow the directions below to investigate what might be different about a hexagon.

Step 1: Observe - What would the hive look like if they made it out of triangles? Squares? Hexagons? Fill in each box using a pattern of each shape to see!

Step 2: Make a Hypothesis - Why do you think bees choose hexagons instead of triangles or squares?

Step 3: Experiment - Why wouldn't bees use circles? Use the circle pattern to fill in the box. What differences do you notice?

Step 4: Think about everything you have learned and observed about triangles, squares, and hexagons today. What conclusion can you make about why bees use hexagons?

## Conclusion (7 min)

**Invite** a few student groups to share their conclusions about why bees use hexagons. Then share the following with students:

- The question of why bees prefer hexagons to squares or triangles dates back more than 2,000 years! In 36 B.C., a Roman soldier/scholar/writer, [Marcus Terentius Varro](#), had a hypothesis: there is a purposeful reason why bees use hexagons to build hives. He thought a honeycomb built of hexagons could possibly hold more honey or requires less building wax. It took two thousand and thirty-five years for a mathematician at the University of Michigan, Thomas Hales, to finally solve the riddle. It turns out Varro was right! In 1999, [Hales produced a mathematical proof](#) that show a hexagon is the best way to divide a surface into regions of equal area with the least total perimeter. So, bees use hexagons because they are the most efficient use of their work and space.

## Activate with the Arts: Make Your Own Shape Tessellation!

*(Optional Extension Activity)*

**Student challenge:**

- Use any shape you want to create your own shape tessellation!
- Share your shape and shape tessellation with a partner or with the class.

Post-Performance (30 min)

# Classroom extensions- Similarities of Bees & Humans

Grade 5

## Teacher preparation:

- gather one piece of paper and one writing utensil for each student
- print *The Many Jobs of Bees Handout*

## Introduction (2 min)

**Share:** Give students the following prompt to discuss with a partner:

- With your partner, name as many bee jobs as you can remember from the opera.



## Activity (25 min)

**Divide** students into small groups of 3 or 4 and provide them with the following direction:

- With your group, use “The Many Jobs of Bees” handout (front and back) (pages 20-21) to further investigate the role of bees. There are some opportunities for humorous comparisons to humans in this information, so look for them!

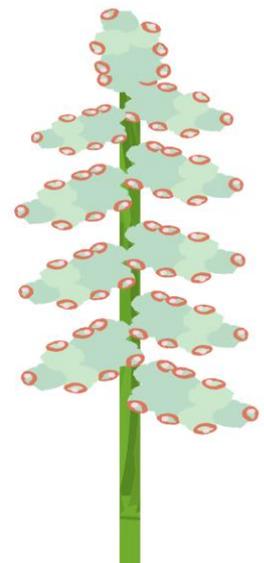
**Give** students the following writing prompts to complete individually once groups are finished investigating:

1. What similarities do you see between the way a hive functions and the way a human community function? What differences do you see?
2. Do bees search for their purpose, as in the Busy Bee opera. or do they find their roles in some other way? How do humans find their purpose in their community? Do you think this is the same in all communities? Explain your answer.

**Discuss** answers to the writing prompts with their original small groups.

## Conclusion (5 min)

**Share** findings from writing and discussion as a class.



# Plot & Summary

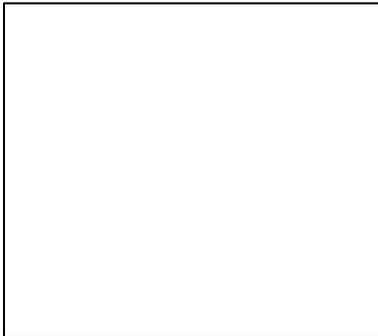
**Plot:** the main events of the story

**Summarize:** tell the story again using fewer words

1. On your own, draw pictures to illustrate the *plot* of the story.



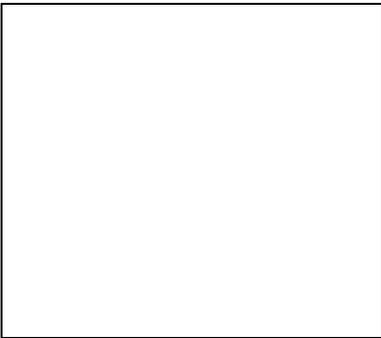
**A.** Bella flies off to do her new job and meets a child who is scared and runs away.



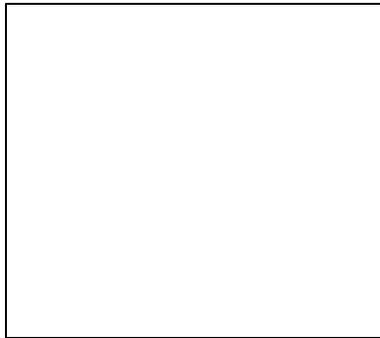
**B.** All the bees work together to find the food because they've learned to always help friends and never give up.



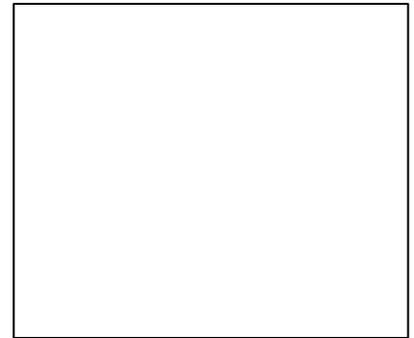
**C.** Bella is nervous about finding her place, so her friends, Sofia, Buzz, and Miguel try to help her.



**D.** Bella does a flower scout dance for her hive that shows that food is far away



**E.** Bella meets a bird who tries to eat her but she escapes and flies back to her hive



**F.** Bella doesn't do very well at most jobs for the hive, but loves to fly so she becomes a flower scout.

2. With a partner, fill in the blanks to put the events of the story in order.

- 1. \_\_\_\_
- 2. \_\_\_\_
- 3. \_\_\_\_

- 4. \_\_\_\_
- 5. \_\_\_\_
- 6. \_\_\_\_

3. On your own, write one or two sentences to *summarize* the story.

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# Worksheet

## Listening

Music tells the story in opera as much as the lyrics or dialogue. Circle your answers as you listen to each of the following songs. Then answer the questions that follow.

Song 1: "We are Honey Bees"

The music makes you think that the characters in this scene are probably:

**frightened**                      **having fun**                      **angry with someone**

What about the song makes you think of this?

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Song 2: "Try, Try, Try"

This music makes you think that the high voice (woman) singing this song is probably:

**nervous**                      **care free**                      **bored**

What about the music makes you think so?

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Song 3: "Honey Bee Dances"

This sounds like music for doing something:

**new**                      **romantic**                      **dangerous**

What about the music makes you think so?

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# Worksheet

## About the Opera

**Orchestra:** group of people play the music

**Maestro:** person who conducts the orchestra

**Ensemble/Chorus:** large group of singers that participate and help the story

1. Who are some of the important people in the opera other than the singers? (*Here are some hints!*)

This group of people play the music: \_\_\_\_\_

This person conducts them: \_\_\_\_\_

These people are a large group of singers that participate and help tell the story:

\_\_\_\_\_

2. Fill in the boxes below to answer the following question:

What are the differences between

- a. an opera vs. a play
- b. watching a live performance vs. a performance on tv

Opera	Play

Watching a Live Performance	Watching a Performance on TV



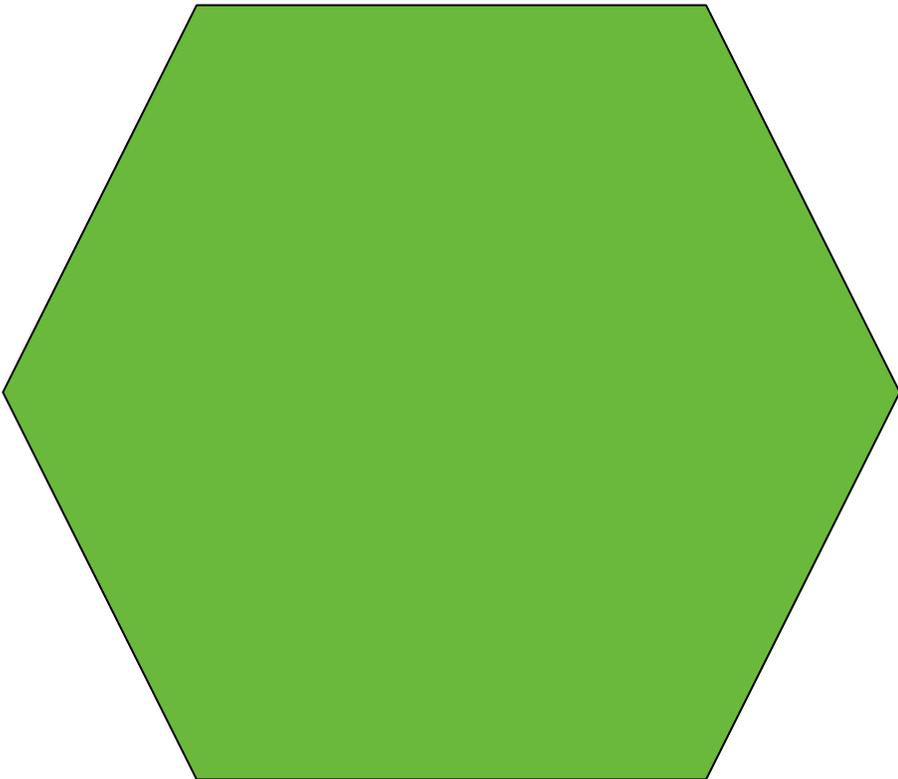
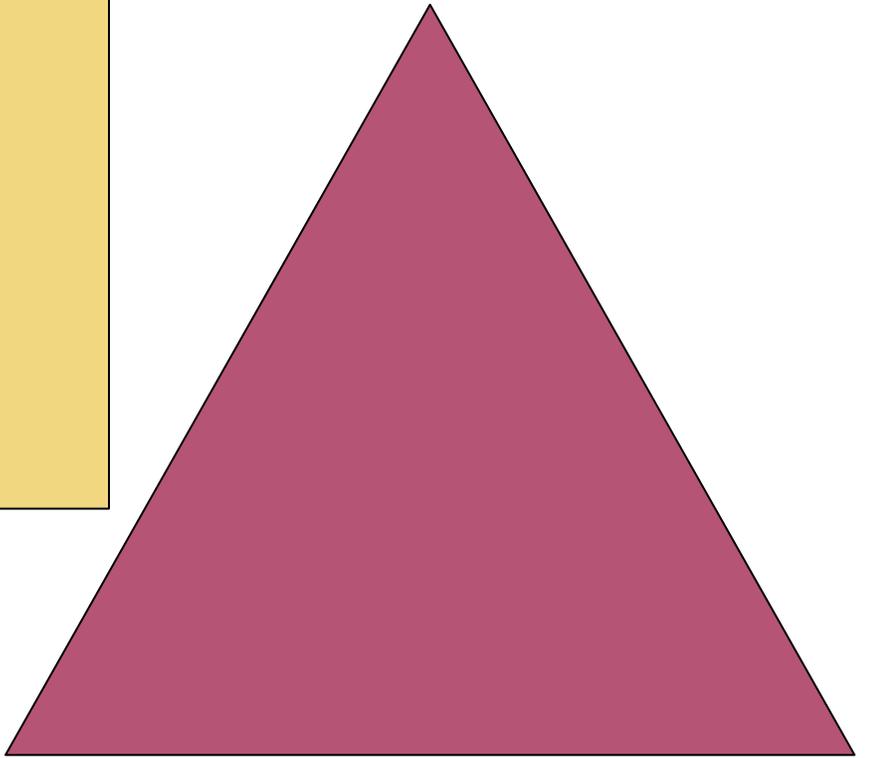
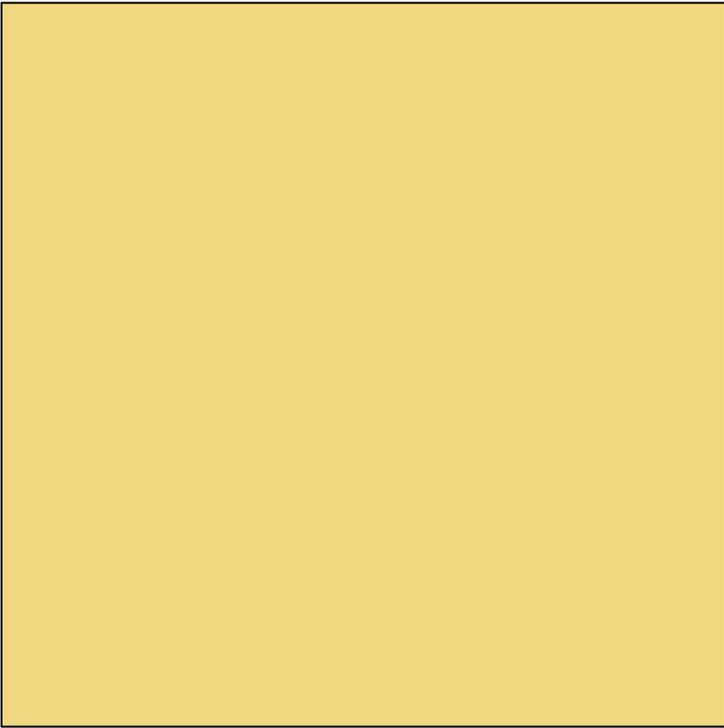
# Worksheet

## Bee Hives and Polygons

Examine the following attributes of each of these shapes by following the directions below and filling in the chart:

1. Cut out the 3 shapes on the next page.
2. Fold them to find lines of symmetry.
3. Measure the angles of each polygon.
4. Measure and calculate the perimeter of each polygon

	<b>Symmetrical (y/n)</b>	<b>How many lines of symmetry?</b>	<b>All angles are ___degrees</b>	<b>Perimeter measurement</b>
<b>Square</b>				
<b>Equilateral Triangle</b>				
<b>Hexagon</b>				

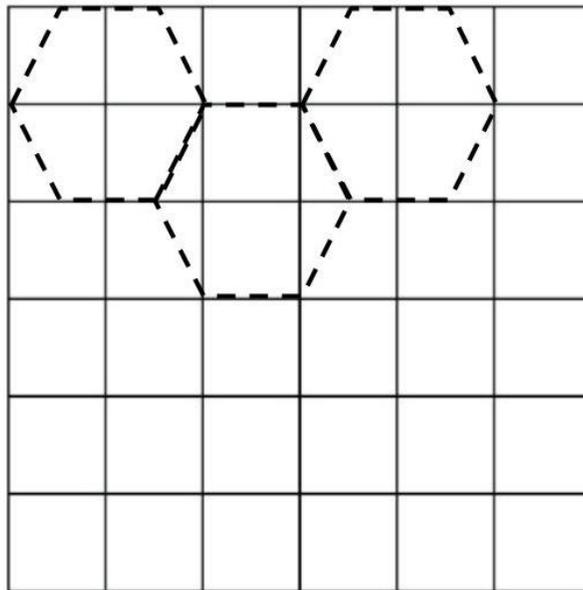
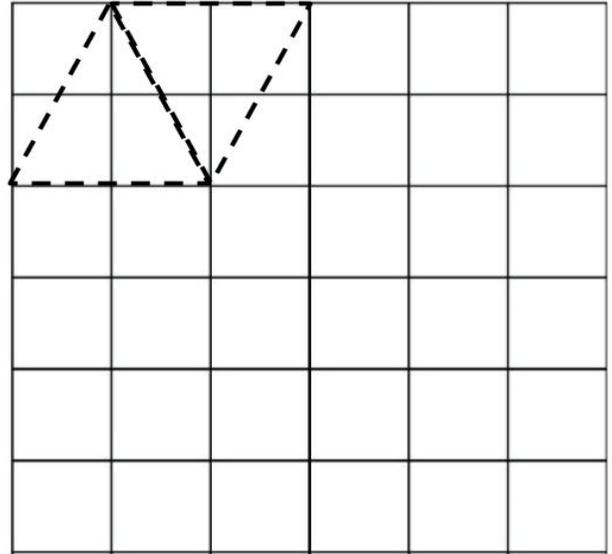
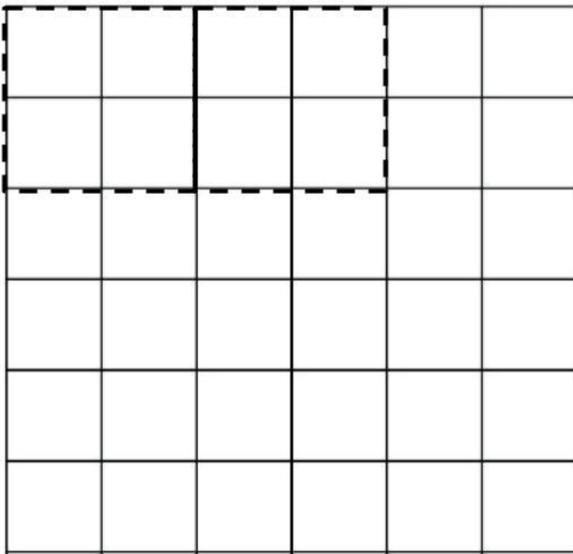


# Worksheet

## Bee Hives and Polygons: But Why Hexagons?

Follow the directions below with your group to investigate why bees might prefer hexagons.

- Step 1. Observe - What would the hive look like if it was made out of triangles? Squares? Hexagons? Fill in each box using a pattern of each shape to see!
- Step 2. Make a Hypothesis - Why do you think bees choose hexagons instead of triangles or squares?
- Step 3. Experiment - Why wouldn't bees use circles? Use the circle pattern to fill in the box. What differences do you notice?
- Step 4. Think about everything you have learned and observed about triangles, squares, and hexagons today. What conclusion can you make about why bees use hexagons?



## The Many Jobs of Bees

Adapted from: <https://www.hobbyfarms.com/9-hive-jobs-of-honey-bees-2/>

When you understand just how hard honey bees work, the phrase “busy as a bee” takes on new meaning. A healthy honey-bee hive is as a well-oiled machine, thanks to tens of thousands of bees performing their jobs dutifully.

The female worker bees in a honey bee colony make up the largest population (about 50,000 female workers to about 500 male drones). As an individual bee grows older, its age decides its role in the hive. Most female bees will work in each of the roles listed below at one point their lifetimes, beginning with nursing—an occupation that is taken on by newly hatched bees—and ending with foraging, which is a task reserved for the oldest bees only.



### Roles of Bees in a Hive:

1. **Nurse and House Bee:** As soon as it hatches, each new bee immediately cleans out its hatching cell to prepare it for the next egg. Once it is old enough, its first job is to care for and feed the younger larvae.
2. **Undertaker:** Honey bees are “neat freaks.” Undertaker bees are responsible for carrying out the hive’s dead, cleaning up bee parts and removing other debris.
3. **Architect:** Several tasks fall under this category. When a bee gets old enough, it is able to secrete wax and build comb. Wax-producing bees are also required to cap pupae and ripen honey cells. Bees in this category repair damaged comb and fill cracks in the hive.
4. **Cleaners and Honey Makers:** These bees are in charge of cleaning their sisters in the hive and tending to others when they return from foraging trips. They collect pollen and nectar from returning bees, pack it into cells and put it away for later. Some of these same bees are in charge of making honey from the nectar their forager sisters bring back.
5. **Queen’s Attendants:** Not many worker bees get this prestigious job. These workers’ job is to take care of the queen as she goes about the hive and keep her clean.
6. **Forager:** When a worker bee matures, it grows a working stinger stocked with venom. Foragers scour a 3-mile radius for nectar and pollen and bring it back to the hive. Then they leave again and start over, continuing as long as the sun shines. This work, flying hundreds of miles per day, will eventually leave its wings torn and tattered. Foraging is one of the last duties a worker bee will perform: It will work until it collapses from exhaustion.
7. **Guard:** The role of a guard bee is one of the few that requires a worker to develop a mature stinger. Guards allow foragers from the hive to enter, but keeps everyone else out: bumblebees, wasps, honey bees from other hives and even humans.

8. **Queen:** The queen’s job is crucial: She lays up to 2,000 eggs per day, choosing where to lay them and how many of each type (worker or drone eggs) to produce. Unlike a worker bee, which may live for three to six weeks, a queen bee can live between two and five years.
9. **Drones:** Drones are the only male bees in the hive and are often seen as lazy because they don’t make honey but they do eat it; they don’t protect the hive or the queen; and they don’t help care for the young. Their only job is to mate with neighboring queens outside of the hive and spread healthy genes. Any drones left in the hive by autumn are kicked out by their sisters, because stores of honey are too precious to waste on drones whose contributions have ended for the year.

<b>Job</b>	<b>Job Description</b>	<b>Male or Female</b>
Nurse + House Bee		
Undertaker		
Architect		
Cleaners + Honey Makers		
Queens Attendants		
Forager		
Guards		
Queen		
Drones		

# Summary: *A Busy Bee*

## Characters

Queen Camille - the queen bee

Bella - a young bee who is figuring out her role in the hive

Sofia - Bella's friend

Buzz - Bella's friend

Miguel - Bella's friend

Bird - smooth talker who wants to eat Bella

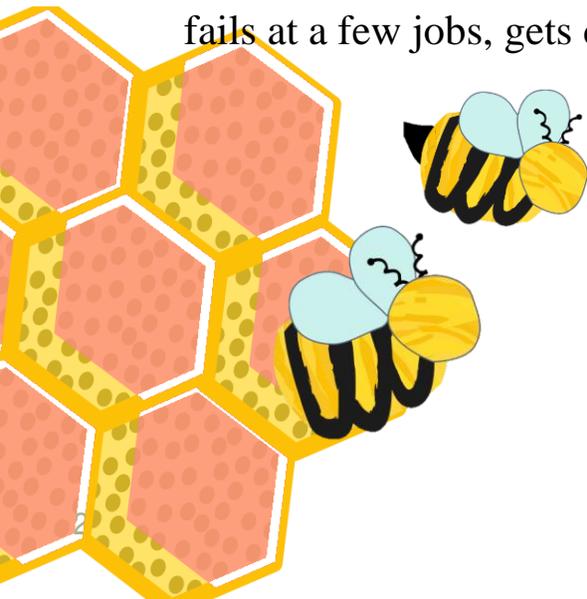
## *A Busy Bee*

A swarm of honey bees tell us some facts about themselves: they live in colonies, they work together toward their goals, they can be found around the world, and they are friendly.



Queen Camille shares a few life lessons: everyone has a purpose and can contribute to the greater good by working together, being diligent in school, and by always trying their best.

Bella is nervous about meeting with Queen Camille to discover her place in the hive. Her friends Sofia, Buzz, and Miguel try to help her discover her talents by explaining the different bee jobs. She fails at a few jobs, gets discouraged and just wants to be left alone.



## Summary: *A Busy Bee*



Bella feels like she is bad and that everyone is better than her. But, she remembers how much she likes to fly and decides to try being a flower scout, whose duty it is to find food for the rest of the colony. To her surprise and delight, she does it well.

Queen Camille introduces Bella as the newest flower scout. She teaches two dances the flower scout must know to communicate the distance of the food from the hive: The Round Dance (if the food is nearby) or the Waggle Dance (if the food is far away).



Bella meets a child who panics when Bella is near. After a brief, tense encounter, the child runs away, screaming.

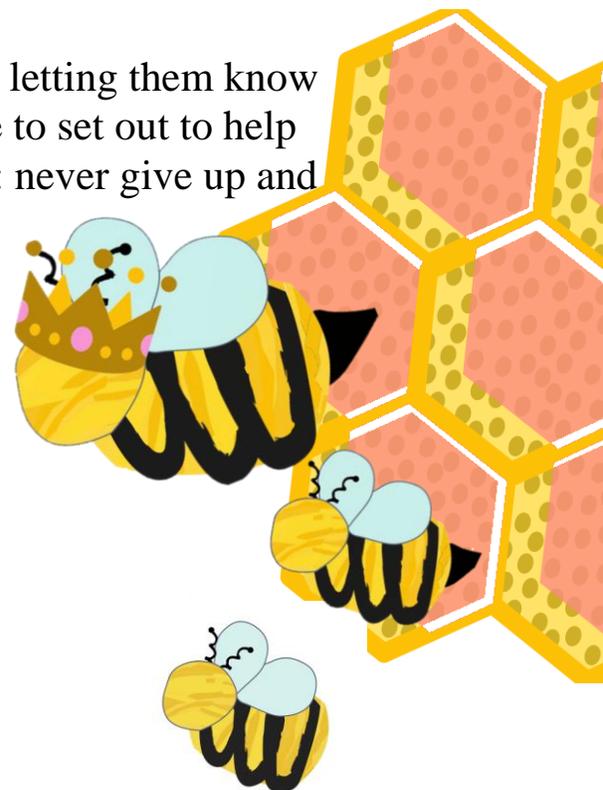
## Summary: *A Busy Bee*

Next, she meets a smooth-talking bird who wants to eat her. She gradually becomes aware of his motives and he chases her into the field of flowers for which she had been searching.



After the bird leaves, she picks a flower to bring back to the hive.

Bella performs the Waggle Dance for the colony, letting them know that the food is far from the hive. As they prepare to set out to help bring it back, they deliver the morals of the story: never give up and always help your friends.



# Answer Keys

## Plot and Summary Worksheet (20 points total)

*\*Teachers may wish to use this worksheet as a grade. Grade picture boxes for accurate portrayal of the corresponding plot points.*

1. On your own, draw pictures to illustrate the *plot* of the story. (6 points)  
(Boxes with the following headings beneath each box)
  - A. All the bees work together to find the food because they've learned to always help friends and never give up.
  - B. Bella flies off to do her new job and meets a child who is scared and runs away.
  - C. Bella is nervous about finding her place, so her friends, Sofia, Buzz, and Miguel try to help her.
  - D. Bella does a flower scout dance for her hive that shows that food is far away.
  - E. Bella meets a bird who tries to eat her, but she escapes and flies back to her hive.
  - F. Bella doesn't do very well at most jobs for the hive but loves to fly so she becomes a flower scout.
2. With a partner, fill in the blanks to put the events of the story in order. (6 points)  

1. <b>C</b>	2. <b>F</b>	3. <b>A</b>
4. <b>E</b>	5. <b>D</b>	6. <b>B</b>
3. On your own, write one or two sentences to *summarize* the story. (8 points)

## Listening Worksheet

*\*If teachers wish to grade this worksheet, it should be used as a completion grade only.*

Music tells the story in opera as much as the lyrics or dialogue. Circle your answers as you listen to each of the following songs. Then answer the questions that follow.

**Song #1:** This music makes you think that the characters in this scene are probably:

frightened

having fun

angry with someone

**Song #2 :** This music makes you think that the high voice (woman) singing this song is probably:

nervous

care free

bored

**Song #3:** This sounds like music for doing something:

new

romantic

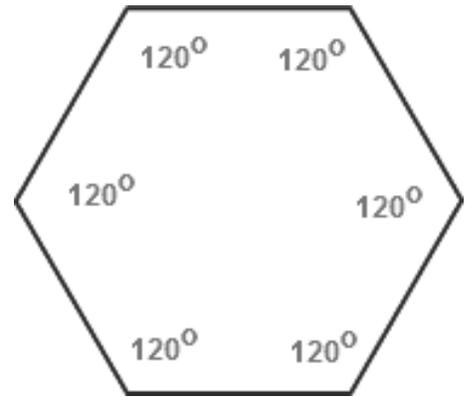
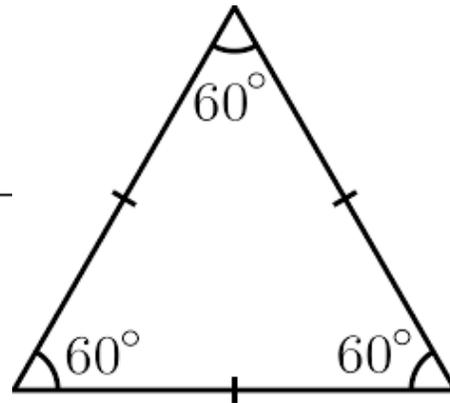
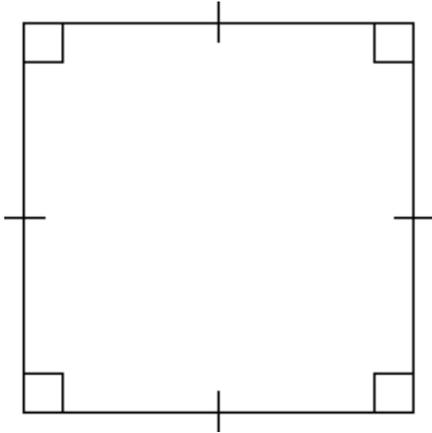
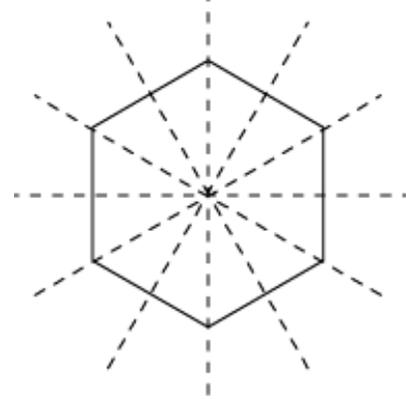
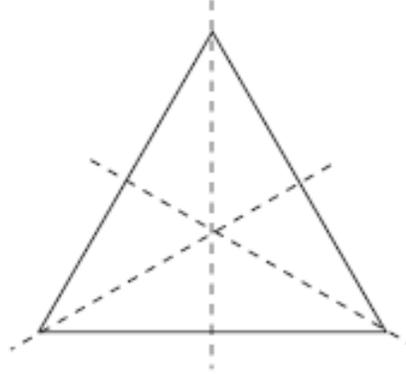
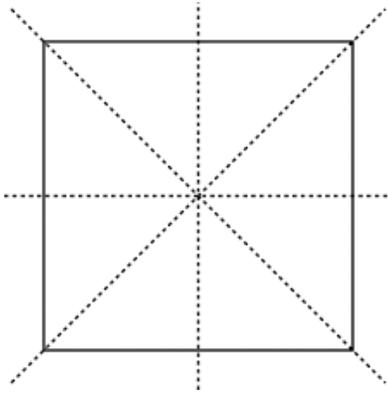
dangerous

## About the Opera Worksheet

*\*This worksheet is intended to help students engage in the discussion and should not be graded. Teachers may wish to use the worksheet as a completion grade.*

# Answer Keys

## Bee Hives and Polygons: Lines of Symmetry, Angle Measurements



	Symmetrical (y/n)	How many lines of symmetry?	All angles are ___ degrees	Perimeter measurement
<b>Square</b>	y	4	90	
<b>Equilateral Triangle</b>	y	3	60	
<b>Hexagon</b>	y	6	120	

# Curriculum Connections

**The following anchor standards provide a basis for all of our Learning Guide activities:**

CCSA.ELA-LITERACY.W.1.10

Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences

CCSA.ELA-LITERACY.SL.1.1

Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

CCSA.ELA-LITERACY.SL.1.2

Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

**The Pre-Performance activities in this guide connect to the following Common Core Anchor Standards:**

CCSS.ELA-LITERACY.CCRA.R.2

Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

CCSS.ELA-LITERACY.CCRA.R.7

Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

**The Post-Performance activities in this guide connect to the following Common Core and NC Essential Standards:**

**PK-K:**

NC ESSENTIAL STANDARDS

K.P.1 Understand the positions and motions of objects and organisms observed in the environment.

K.P.1.2 Give examples of different ways objects and organisms move (to include falling to the ground when dropped):

Straight, Zigzag, Round and round, Back and forth, Fast and slow

K.L.1 Compare characteristics of animals that make them alike and different from other animals and nonliving things.

K.L.1.1 Compare different types of the same animal (i.e. different types of dogs, different types of cats, etc.) to determine individual differences within a particular type of animal.

**Grades 1-2:**

COMMON CORE STANDARDS

CCSA.ELA-LITERACY.W.2

Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

CCSA.ELA-LITERACY.W.1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide closure.

CCSA.ELA-LITERACY.W.2.2 Write informative /explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.

NC ESSENTIAL STANDARDS

1.L.2 Summarize the needs of living organisms for energy and growth.

1.L.2.2 Summarize the basic needs of a variety of different animals (including air, water, and food) for energy and growth.

2.L.2 Remember that organisms differ from or are similar to their parents based on the characteristics of the organism.

2.L.2.2 Recognize that there is variation among individuals that are related.  
on specific information in the text.

# Curriculum Connections Continued...

## Grades 3-4:

### COMMON CORE MATH STANDARDS

CCSS.MATH.CONTENT.3.MD.C.5

Recognize area as an attribute of plane figures and understand concepts of area measurement.

CCSS.MATH.CONTENT.3.MD.D.8

Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

CCSS.MATH.CONTENT.4.G.A.1

Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.

CCSS.MATH.CONTENT.4.G.A.3

Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.

### NC ESSENTIAL SCIENCE STANDARDS

4.L.1.2 Explain how animals meet their needs by using behaviors in response to information received from the environment.

## Grade 5

### COMMON CORE STANDARDS

CCSS.ELA-LITERACY.RI.5.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.

CCSS.ELA-LITERACY.RI.5.9

Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.

CCSS.ELA-LITERACY.W.5.1

Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

CCSS.ELA-LITERACY.W.5.9

Draw evidence from literary or informational texts to support analysis, reflection, and research.