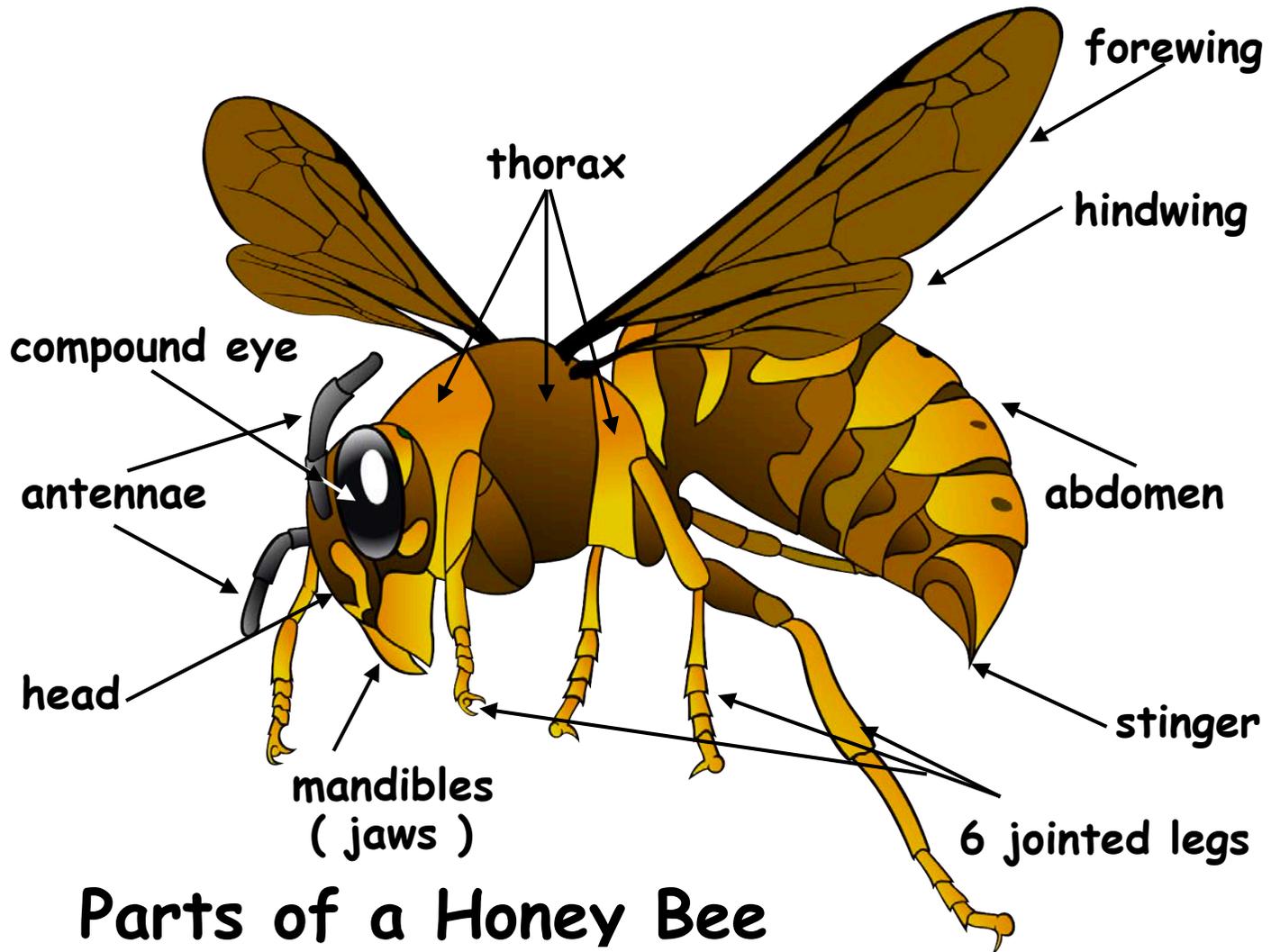


Parts Of A Honey Bee Anchor Chart

Plus Bee Book Bibliography & Educational Bee Video Links

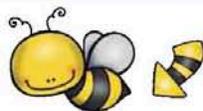
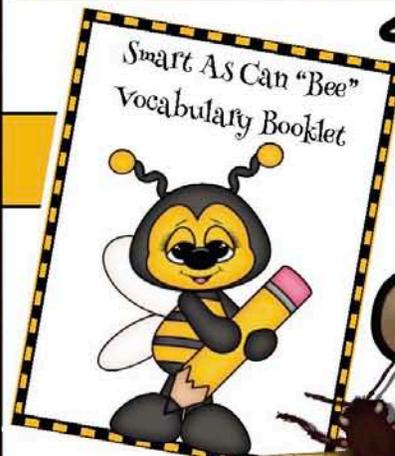


Parts of a Honey Bee

This FREEBIE comes from my JUMBO "Big Bee" packet: "Honey Bees!"
For your convenience I've included a PREVIEW.
Click this cover for a link to the entire packet.

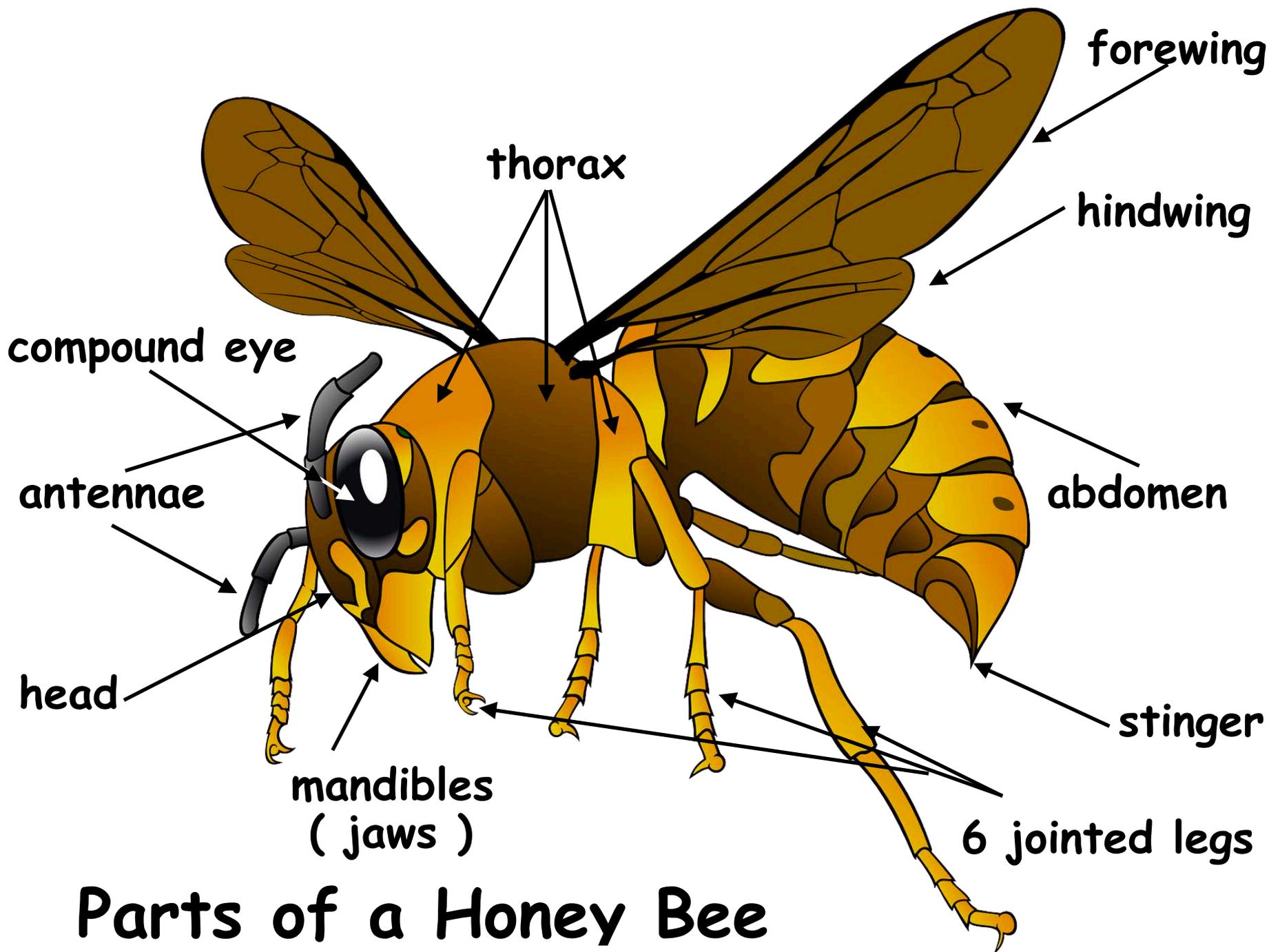


Honey Bees!



stinger

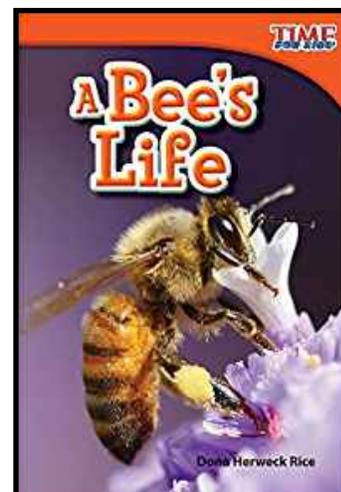
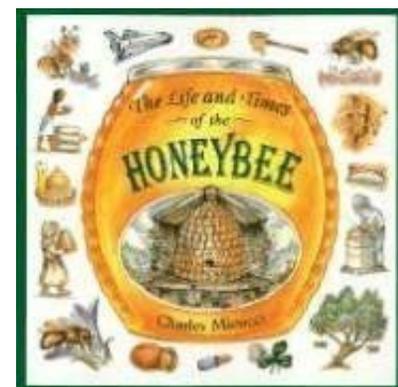
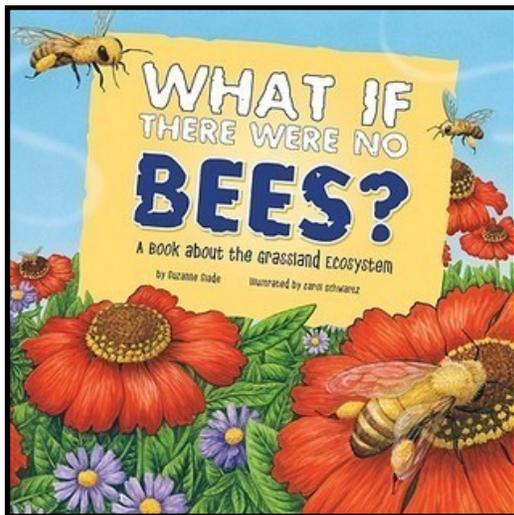
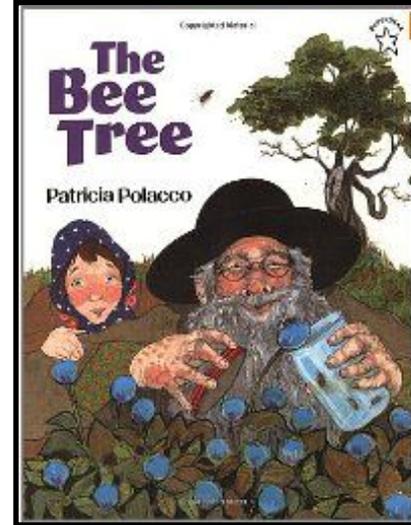
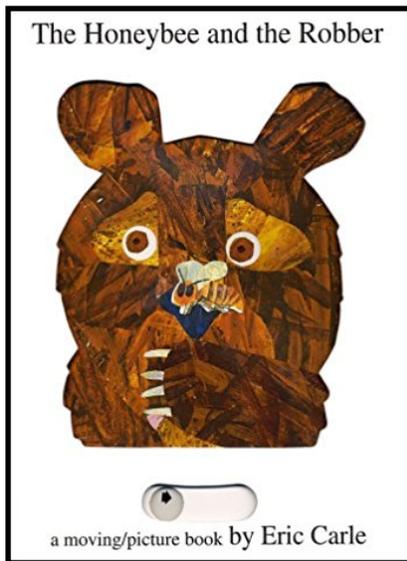
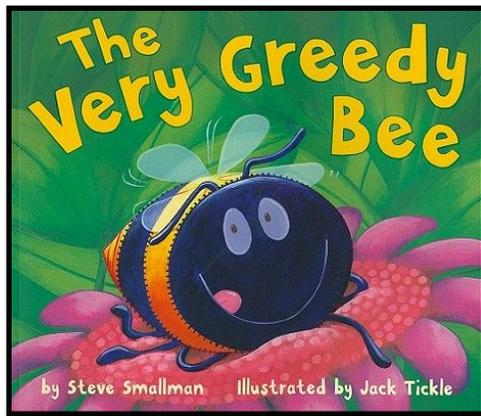
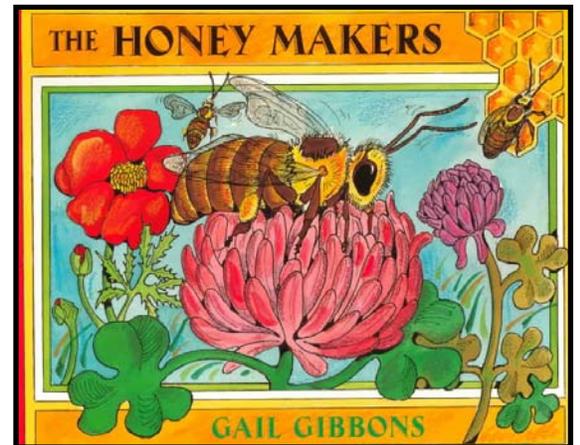
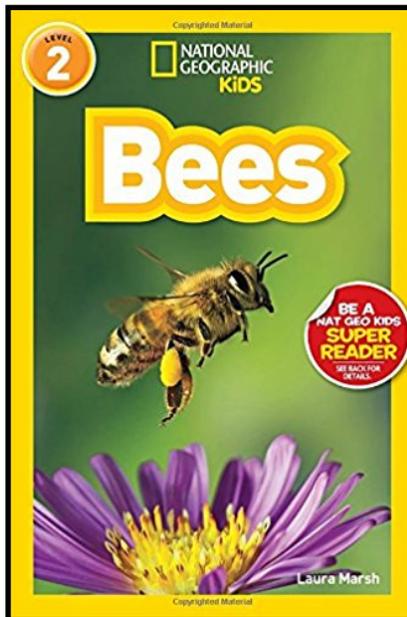
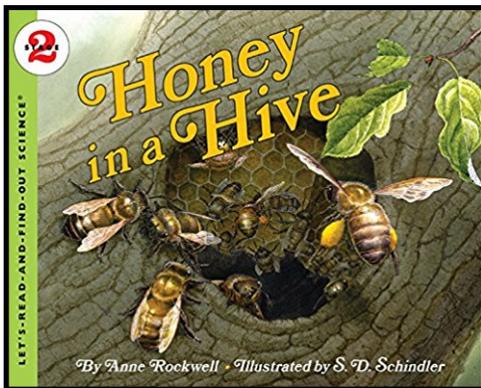
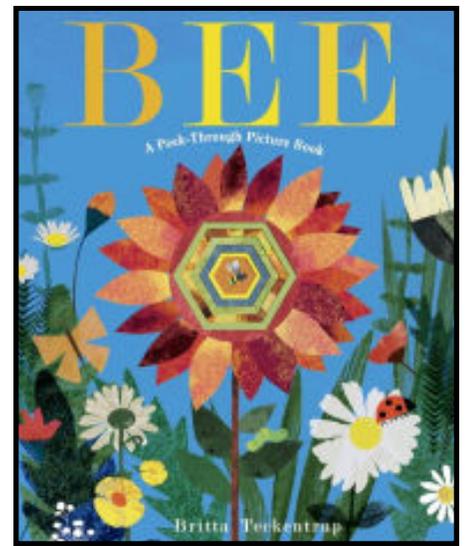
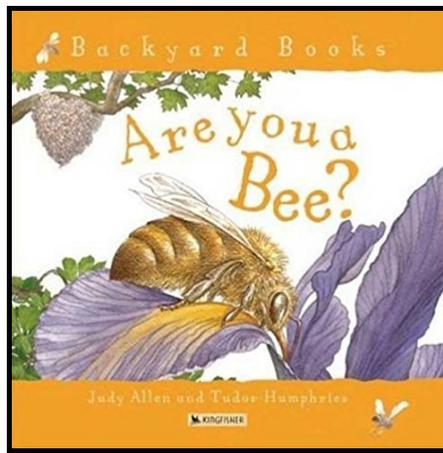
Diane Henderson

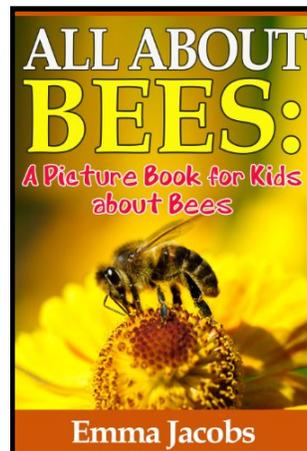
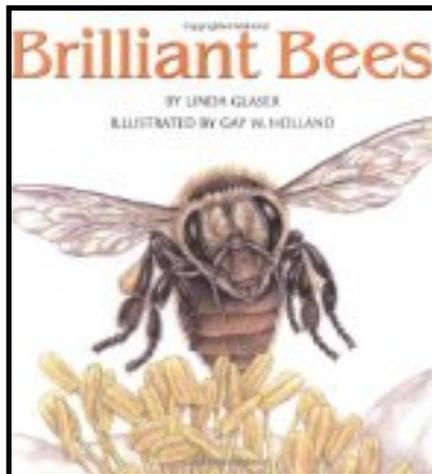
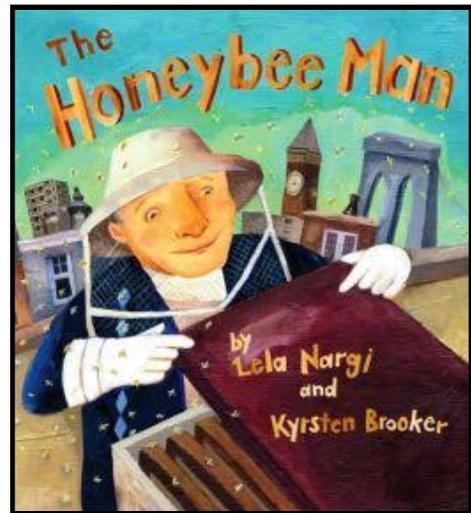
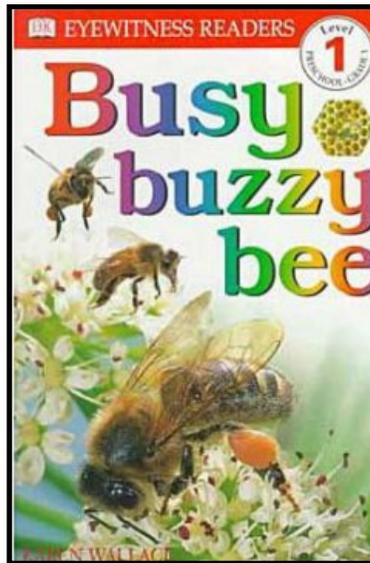
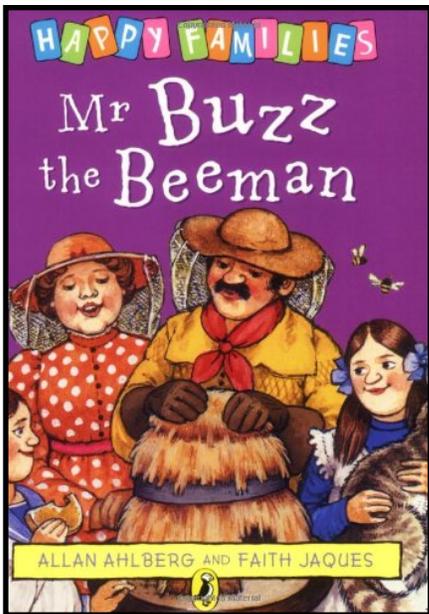
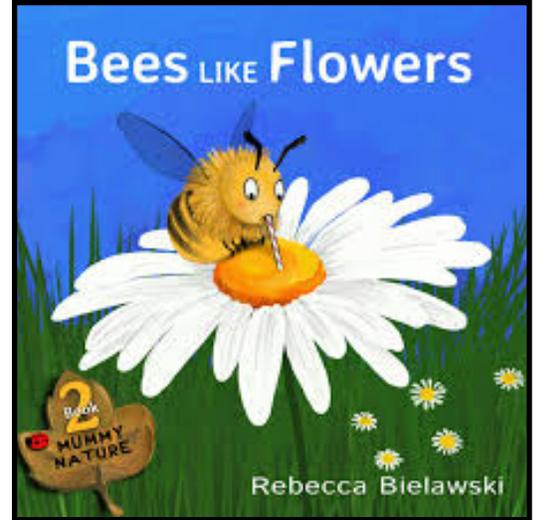
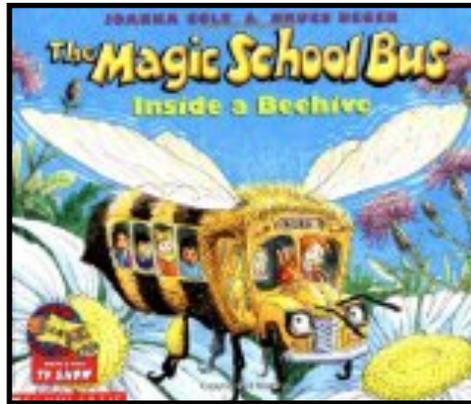
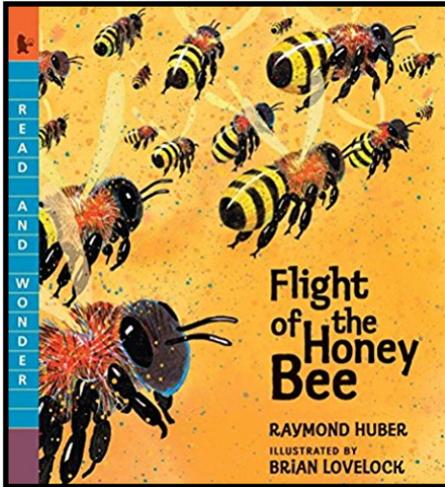
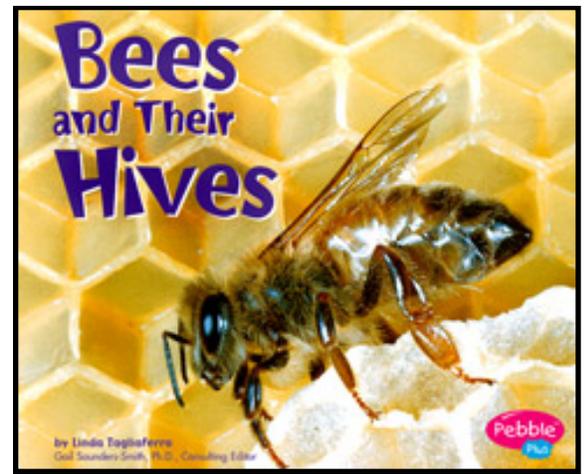
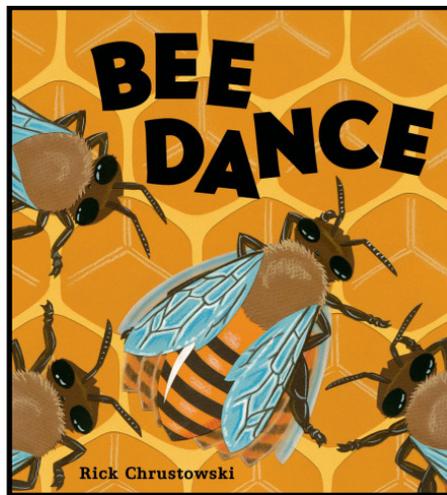
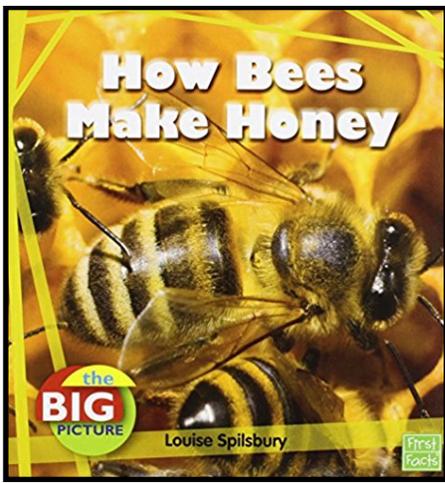


Parts of a Honey Bee

My FAVORITE Books About BEES

Click on the cover to see details.





Short Educational YouTube Videos



Really cute honey bee life cycle rap song.

<https://www.youtube.com/watch?v=XZQmE0B7gFQ>

3:42



<https://www.youtube.com/watch?v=bFDGPgXtK-U>

7 minutes

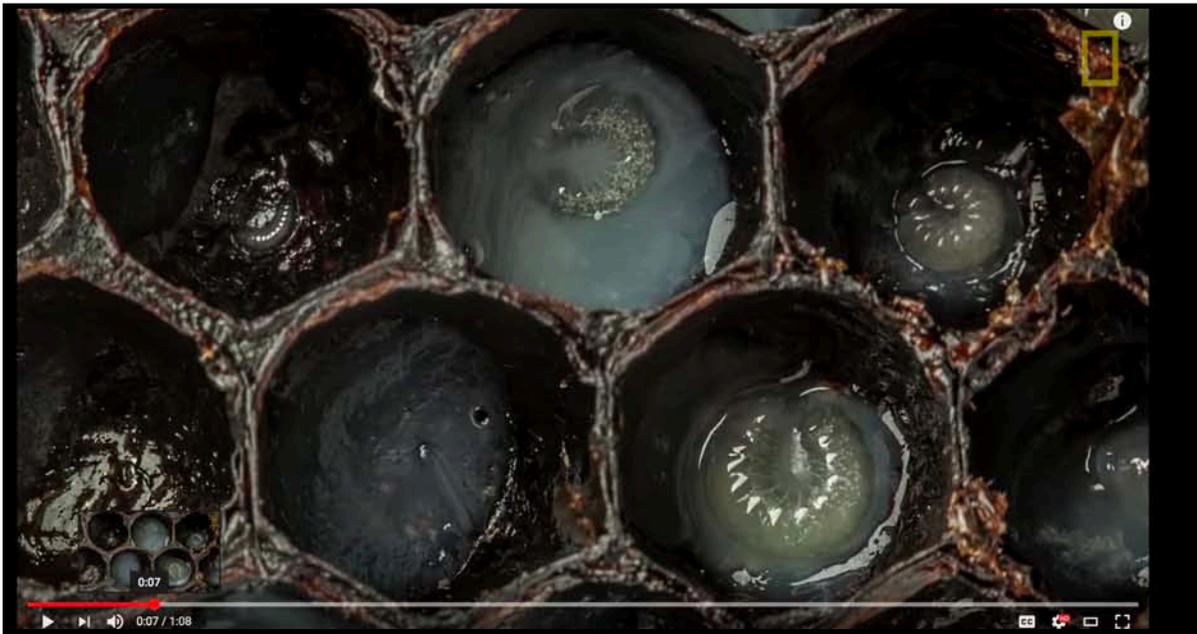
An excellent documentary of the "Waggle Dance" of the honey bee.



“Busy Bees” A simple & interesting look at bees. 3:59
<https://www.youtube.com/watch?v=ta154f5Rp5Y>



“Honey Bees” by Natural History A nice over view.
Wonderful, simple to understand information. 4:11
<https://www.youtube.com/watch?v=x7cX2cjFunw>



National Geographic.

Amazing time lapse of the bee's life cycle.

Shows close ups inside the hive's cells. 1:08

<https://www.youtube.com/watch?v=f6mJ7e5YmnE>



Science Online

Very interesting clip about being a beekeeper. 15:30

<https://www.youtube.com/watch?v=l0YrVUSPVhY>



Science Online "A Honey Bee's Life Cycle" 9:56

Very interesting and easy to understand.

Shows a beekeeper explaining the complete life cycle process.

https://www.youtube.com/watch?v=sSk_ev1eZec



Science Online "Extracting Honey" 7:41

Very interesting and easy to understand.

<https://www.youtube.com/watch?v=AfC1JBGx2TY>



The bee's stripes show an ABAB color pattern.

The black stripes were made by ripping & tearing strips of black paper into little squares, then gluing them to the bee's striped body pattern.

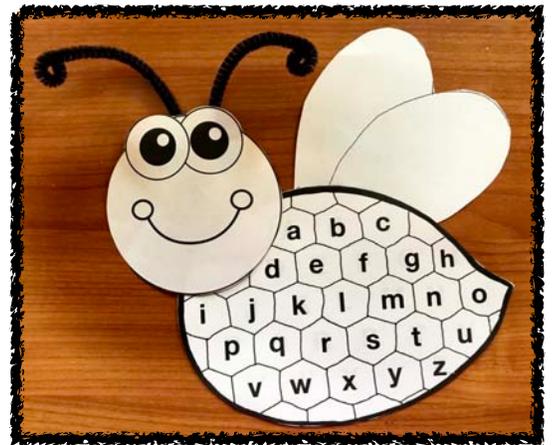
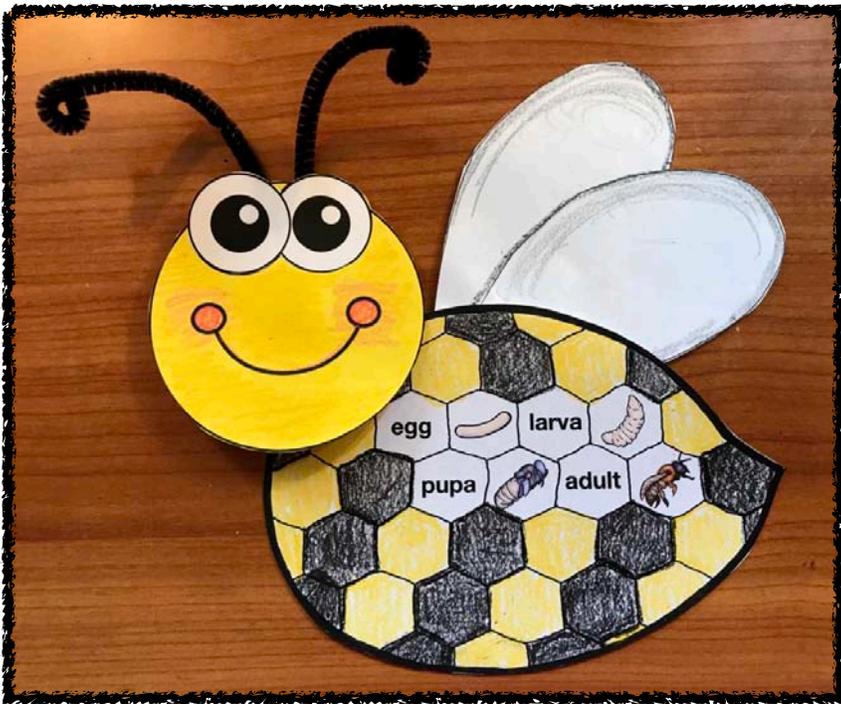
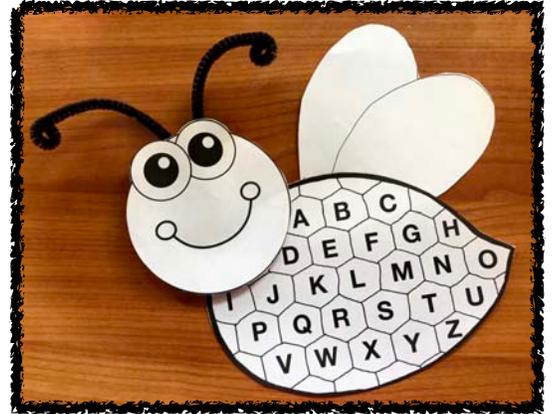
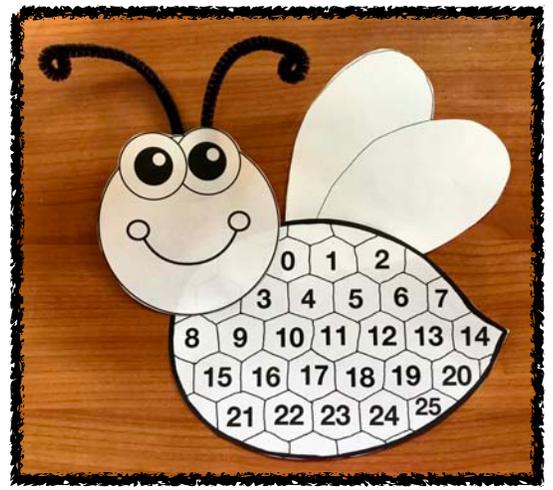
This is a super-fun way for students to improve their fine motor skills, at the same time strengthening their finger & hand muscles.



Build vocabulary & reinforce the 4 stages of the bee's life cycle, by having students write the phases in sequential order on the yellow stripes.

Completed projects make a sweet bulletin board.

I've included a "Bee-utiful Work!" poster for the center of your display.



Besides the "rip & tear" option, the bee's body also comes with several hexagon versions. Since this is a somewhat toughie shape for my students to learn, I decided to help reinforce it by designing this pattern.

It works perfectly as a segue for science, as bees build their honeycombs in the shape of a hexagon. This is called a cell, where the queen bee lays a single egg. Younger students can simply color the "honeycomb body" any way they want. I encourage my students to use at least 6 colors, as that's how many sides the hexagon has, and it makes their completed bee so much prettier. You can also have students color each line of hexagons in an ABAB color pattern, using black and yellow crayons. To reinforce the life cycle of the honey bee, I've also included a labeled pattern with graphics. The blank pattern can also be filled in with numbers or letters. I've included already filled-in patterns, which provide a quick, easy & fun way to whole group assess. Call out a letter or number. Students find it and color that hexagon in, then raise their hand. You can see at a glance who is having difficulty. Continue to have students call out letters or numbers 'til they are all colored in. Give them a few more minutes to fill in the few empty cells. Playing this game makes coloring less tedious & a lot more fun too.

The

Life Cycle

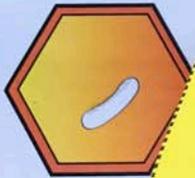
Of A

Honey Bee!



Life Cycle

Honey Bee!



egg

larva

pupa



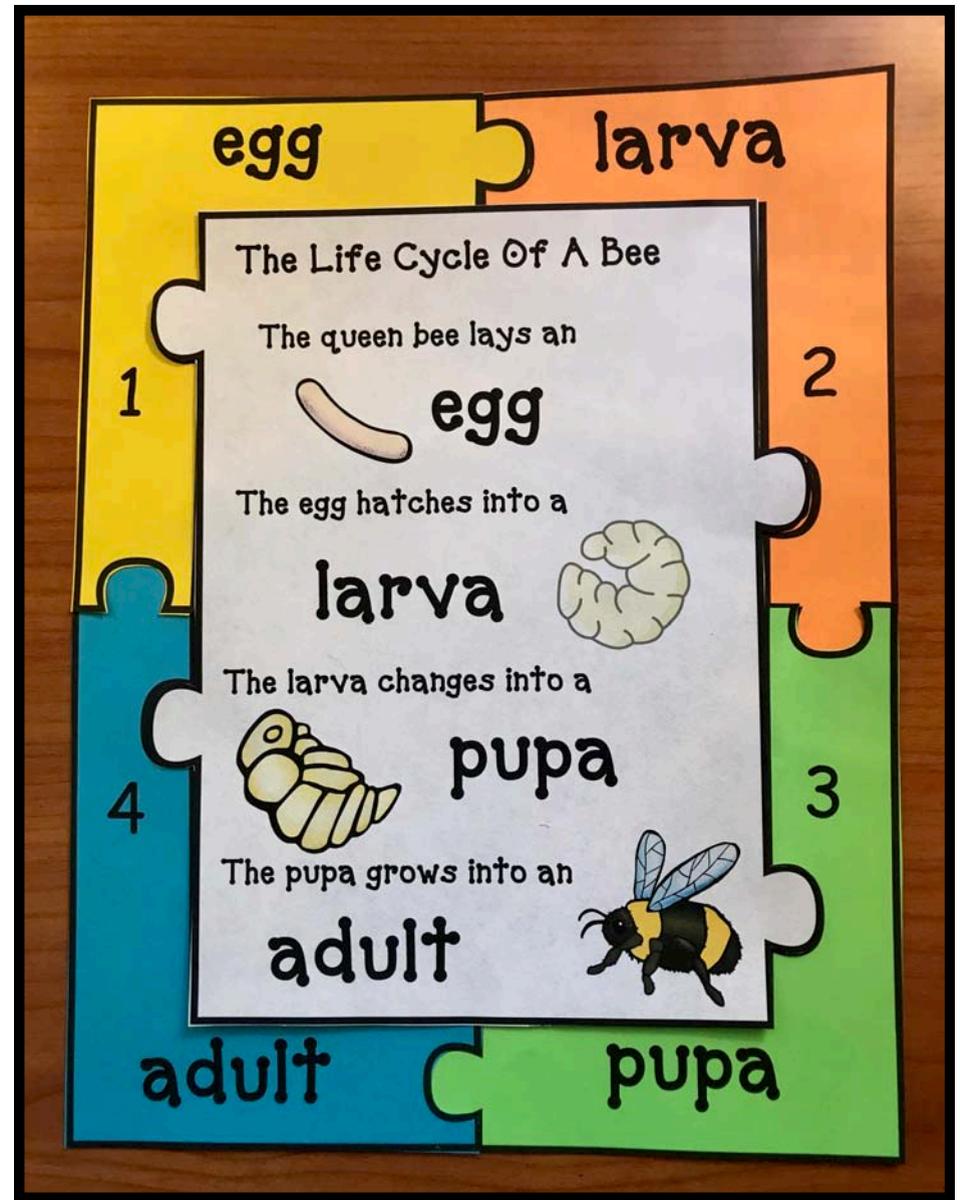
egg

larva

pupa

adult

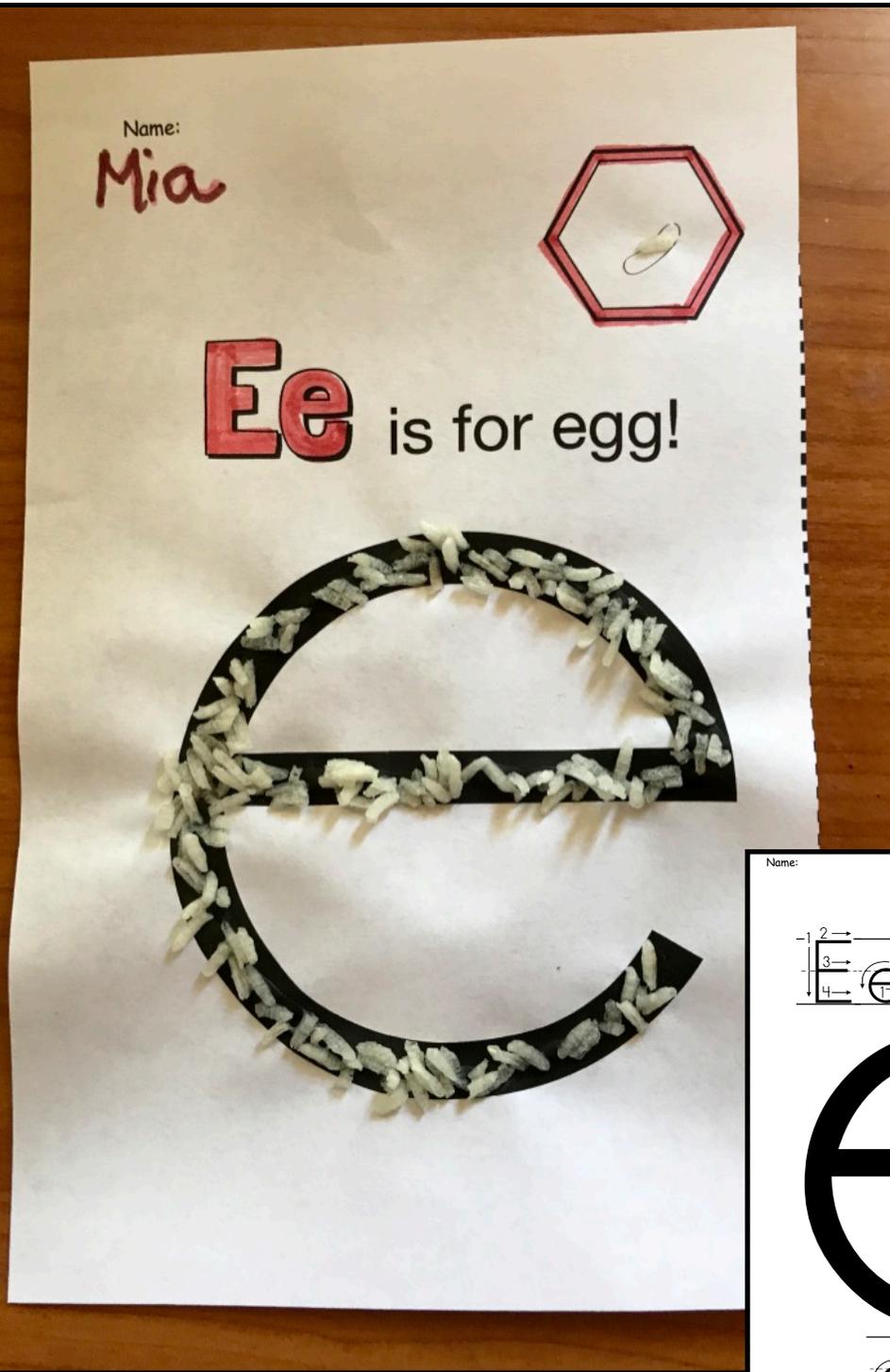
As you can see, when you lift the flaps up, there is plenty of room for older students to explain a bit about each of the stages of the life cycle. This is great writing practice, as well as a way for you to easily check comprehension.



So that you can diversify your lessons, I've included patterns where students color, trace & write the 4 stages, as well as a template where students fill in the blanks and label their own puzzle frames. There's also a blank one, if you want your students to draw their own graphics.

So that you can quickly & easily make an example to share, I've included a full color pattern as well.

I print the frame template on 4 different colors of construction paper, and the center puzzle piece on white, then laminate and cut out. Your frames can all be one color, or mix them up to add pizzazz, and showcase each stage, by using a piece from each frame to make a multi-colored puzzle frame. I use mine as an independent science center; later, my students are excited to make their own as a whole group.



A honey bee's egg is very small.
They average 1 to 1.5mm long. (0.039-0.059 of an inch)

This is a difficult size for an adult to picture, let alone a child.

Because a single grain of white rice is about the same size and also looks a bit like a bee's egg, I designed this quick, easy & fun little craftivity to help explain and show what a bee's egg sort of looks like.

There are 2 worksheets on a pattern page, which will save ink, paper & make things just-the-right-size for youngsters.

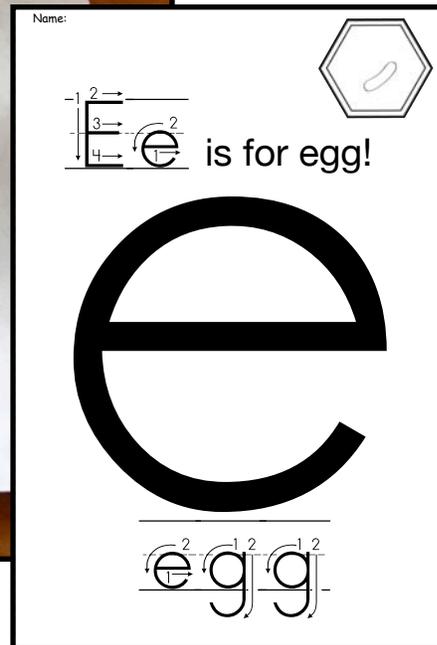
There are 2 template options.

I set this station up as a center activity, and call 3 students up at a time to my long table.

They bring their semi-completed worksheet with them.

Using an Elmer's glue bottle, students outline the letter then sprinkle instant "Minute Rice" on top of the glue, carefully pressing the pieces down with the palm of their hand, then shaking the excess off in a box. A dot of glue inside the honeycomb cell along with a single piece of rice, completes the project.

Set aside to dry.





The flower doesn't dream of the bee.

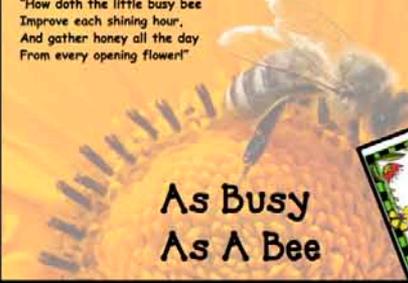
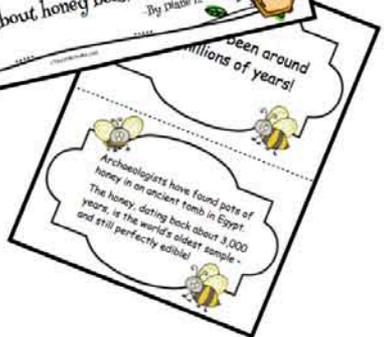
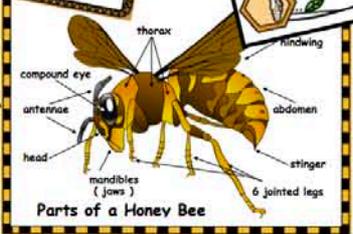
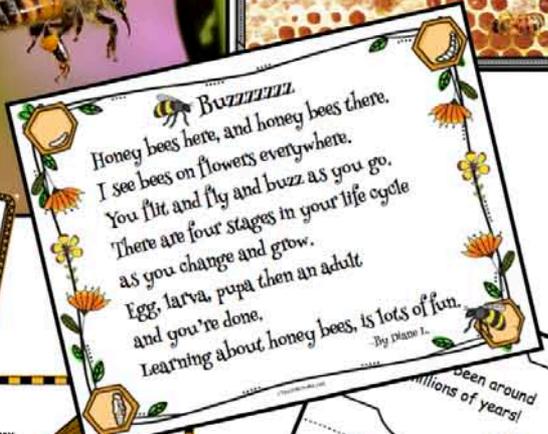
It blossoms and the bee comes.

-Mark Nepo



Bees are known for being very industrious. Because of that, busy people have been compared to the 16th century. In 1715, Isaac Watts, an English poet, used the phrase advising against idleness and mischief.

"How doth the little busy bee Improve each shining hour, And gather honey all the day From every opening flower!"



Adult Stage of the Life Cycle

When a bee is older than the pupa, it is in the adult stage of its life cycle. The adult bee is the one that can fly and collect nectar.

For example, a queen bee will lay eggs that will develop into larvae. The larvae will then develop into pupae. The pupae will then develop into adult bees. The adult bees will then lay eggs and the cycle begins again.

The adult stage of a bee's life cycle is the longest. It can last for several weeks. The queen bee can live for up to 5 years. The worker bees can live for up to 6 weeks. The drone bees can live for up to 3 months.



Three Bee Facts

1. Bees are important pollinators.

2. Bees can fly up to 20 miles per hour.

3. Bees can see ultraviolet light.

The Life Cycle

1. Egg

2. Larva

3. Pupa

4. Adult

Stage of the Life Cycle

1. Egg

2. Larva

3. Pupa

4. Adult




Honey Bees

can have are

Queen Bees

can have are

Worker Bees

can have are

Drone Bees

can have are





Queen Bees

can have are

Worker Bees

can have are

Drone Bees

can have are





Three Bee Facts

1. Bees are important pollinators.

2. Bees can fly up to 20 miles per hour.

3. Bees can see ultraviolet light.

Why Are Bees Important?

1. Bees are important pollinators.

2. Bees can fly up to 20 miles per hour.

3. Bees can see ultraviolet light.




1st Stage of the Life Cycle

egg

2nd Stage of the Life Cycle

larva

3rd Stage of the Life Cycle

pupa

4th Stage of the Life Cycle

adult






1st Stage of the Life Cycle

egg

2nd Stage of the Life Cycle

larva

3rd Stage of the Life Cycle

pupa

4th Stage of the Life Cycle

adult






1st Stage of the Life Cycle

egg

2nd Stage of the Life Cycle

larva

3rd Stage of the Life Cycle

pupa

4th Stage of the Life Cycle

adult






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4th Stage of the Life Cycle

adult






1st Stage of the Life Cycle

egg

2nd Stage of the Life Cycle

larva

3rd Stage of the Life Cycle

pupa

4th Stage of the Life Cycle

adult






Smart As Can "Bee" Vocabulary Booklet



Smart As Can "Bee" Vocabulary Booklet



Label The Bee



compound eye head antenna hindwing leg stinger
forewing thorax abdomen

Label The Bee



compound eye head antenna hindwing leg stinger
forewing thorax abdomen

Why Are Bees So Important?

1. Bees are important pollinators.

2. Bees can fly up to 20 miles per hour.

3. Bees can see ultraviolet light.

4. Bees are important pollinators.

5. Bees can fly up to 20 miles per hour.

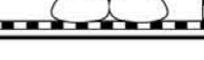
6. Bees can see ultraviolet light.




Smart As Can "Bee" Vocabulary Booklet



Smart As Can "Bee" Vocabulary Booklet



Label The Bee



compound eye head antenna hindwing leg stinger
forewing thorax abdomen

Label The Bee



compound eye head antenna hindwing leg stinger
forewing thorax abdomen

Why Are Bees So Important?

1. Bees are important pollinators.

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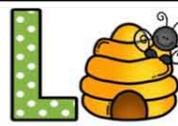
3. Bees can see ultraviolet light.

4. Bees are important pollinators.

5. Bees can fly up to 20 miles per hour.

6. Bees can see ultraviolet light.



What we KNOW.

What we WANT to know.

What we LEARNED!



What I KNOW.

What I WANT to know.

What I LEARNED!

An Interesting Fact About Honey Bees:

An Interesting Fact About Honey Bees:

"What'll It Bep?"
I'd rather be a _____ bee than a _____ bee because...

Name: _____

If you get stung by a bee . . .

First: _____

Next: _____

Last: _____

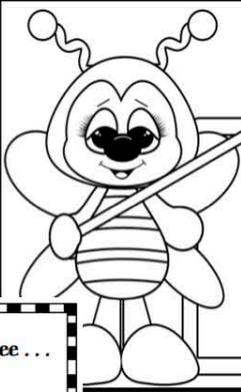
Name: _____

If you get stung by a bee . . .

First: _____

Next: _____

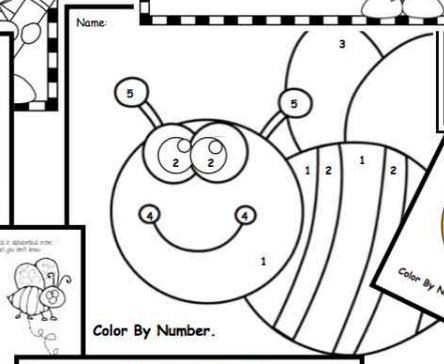
Last: _____



An Interesting Fact About Honey Bees:
The buzzing sound that bees make comes from the rapid beating of their wings!

flowers need bees

- Name: _____
- Trace the words in alphabetical order. Look up any words that you don't know.
- egg
 - larva
 - pupa
 - adult
 - pollen
 - bee
 - hive
 - honey
 - stinger
 - antenna
 - insect
 - drone
 - dance
 - worker
 - flowers
 - wings
 - legs
 - jelly
 - colony
 - hexagon
 - cap



Color By Number.



Color By Number.

- 1 yellow
- 2 blue
- 3 black
- 4 white
- 5 green

Name: _____

Things I Like To Be Busy At:

Name: _____

Things I Like To Be Busy At:

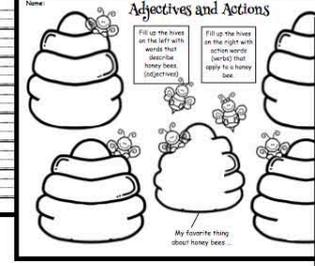
Name: _____

Things I Like To Be Busy At:

Name: _____

Things I Like To Be Busy At:

- Name: _____
- Trace the words in alphabetical order. Look up any words that you don't know.
- thorax
 - abdomen
 - buzz
 - cell
 - insect
 - drone
 - dance
 - worker
 - flowers
 - wings
 - legs
 - jelly
 - colony
 - hexagon
 - cap



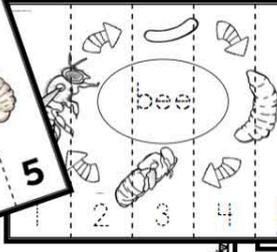
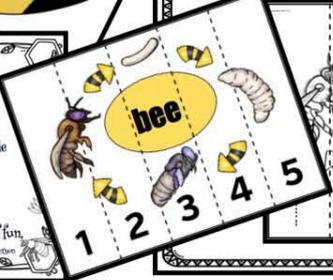
Adjectives and Actions

Fill in the boxes on the left with adjectives that describe honey bees (together).

Fill in the boxes on the right with action words (verbs) that apply to a honey bee.

Bzzzzzzz.
Honey bees here, and honey bees there. I see bees on flowers everywhere. You fly and fly and buzz as you go. There are four stages in your life cycle as you change and grow. Eggs, larva, pupa, then an adult and you're done. Learning about honey bees, is lots of fun.

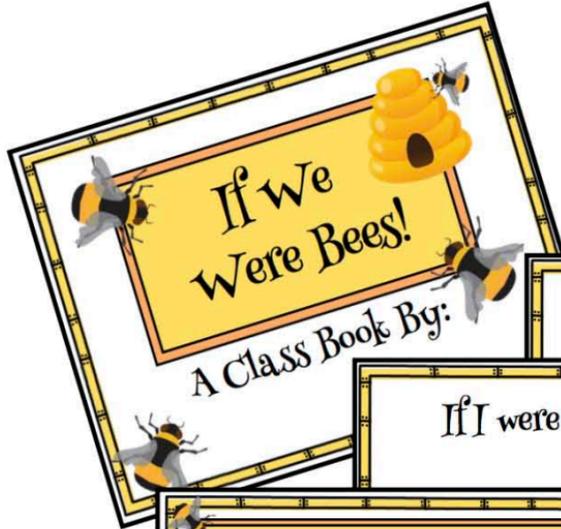
By Diane L. Henderson



"What'll It Bep?"
I'd rather be a _____ bee than a _____ bee because...

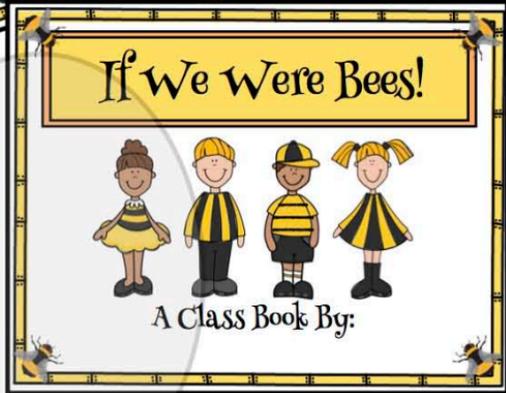
queen
worker
drone

Sample



If We
Were Bees!

A Class Book By:



If We Were Bees!



A Class Book By:



If I were a honey bee...



If I were a honey bee...



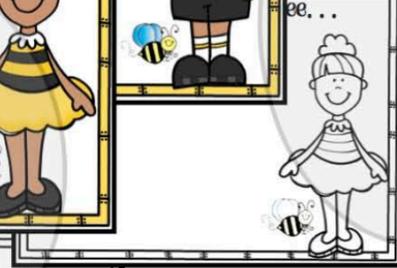
If I were a honey bee...



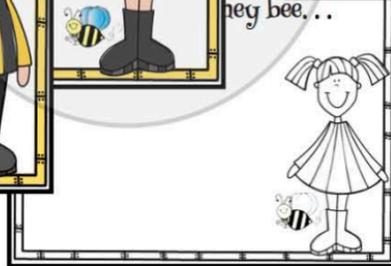
If I were a honey bee...



... bee...



... ee...



... neg bee...



Sample

The Worker Bee

Workers are the "backbone" of the hive, without them nothing would get done. They are the smallest and most numerous of the honey bees, making up over 90% of the colony's population.

Worker bees are all females that never mate. They live for about 6 weeks then die—they quite literally work themselves to death to help the hive survive.

They are equipped with a variety of body parts, which are necessary for doing the many jobs that are essential to running the colony efficiently and effectively.

They have a longer tongue than the queen and drones. This is because workers are the ones that forage for food, sucking nectar from flowers.

They have large legs attached to carry the nectar from the field to the hive.

Their pollen baskets, which are located on their hind legs, help to transport the pollen to the hive.

Osmia in their head produce the royal jelly that is used as food for the larvae.

The glands in their stings secrete a substance necessary for repairing the honeycomb.

They also have wax glands, located inside the last four segments of their abdomens. They produce wax for comb construction, and capping off cells.

Unlike drones, workers have bristly stingers which help them defend the hive.



The Drone Bee

The analogy "body as a bee" was definitely a description of a worker bee, not of a drone, who are often considered somewhat lazy and relatively useless, after they have served their purpose of mating with the queen.

All drones are males, and are larger and fatter than the workers.

Drones are missing all sorts of body parts that a worker bee is equipped with to carry out her many duties.

Drones do not have a suitable proboscis for gathering nectar or feeding larvae. They have no stinger for defense, nor pollen baskets for collection of special glands that secreted wax to help construct cells.

Despite the fact that drones do not work within the hive, they are fed because of their size. They eat large quantities of food. After a big meal they can be seen loitering about in the sunshine.

The very important and only real function drones have is to mate with the queen, so that she can lay eggs. Even then, only a few drones succeed at this.

Just as the workers are equipped for their jobs, the drones are well suited for getting the queen.

The drone's compound eyes are twice as large as those of a queen or worker bee. Unlike them, a drone's eyes meet at the tip of his head.

The drone has to see the queen during the mating flight. The drone also has larger wings, which help them to reach her.



The Queen Bee

There is only one queen bee per hive. They are the largest and longest lived.

Her wings are much shorter than her body and cannot cover all of her abdomen.

Because of her long tapering body, she resembles a wasp.

The hairs on her body are shiny and golden.

A queen does not leave the hive, so like a drone, she doesn't have many of the body parts that a worker bee does, like special glands and pollen baskets.

However, like a worker bee, she does have a stinger, but only uses it to fight rival queens.

In fact, immediately after a queen emerges from her cell, she takes a tour of the hive in search of any other potential queens that may be hiding. If she finds one, the two queens will fight 'til one is killed.

To make sure no queens are in a capped cell, she gives a special sound. The un-emerged potential queen hears, and is then killed.

Five days after the queen emerges from her cell, she starts to fly out of the hive, making an orientation flight for about five minutes.



I really enjoyed doing research on the different castes of honey bees.

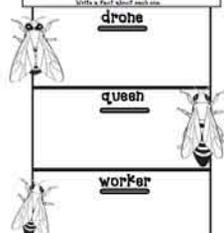
After countless hours of research, I condensed my findings and made 15 detailed "info-anchor chart posters".

There are 3 kinds of bees in every hive.
With a fact about each one.

drone

queen

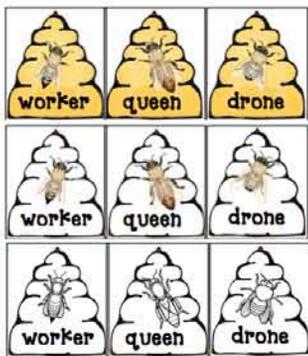
worker



As you peruse them, highlight the information that you want to share with your students, then check their comprehension by having them fill in the worksheet, or by taking the "worker-drone or queen bee" quiz, which can be given orally to younger students.

You simply read each question and students hold up the appropriate hive showing a worker, queen or drone.

To make a Popsicle stick hive puppet, run the pattern off.



Children trim and glue the worker and queen hives back-to-back on one end of the stick, and the drone hive on the bottom.

Afterwards, students can pick a partner and take turns sharing a fact that they remember, and seeing if their partner can identify which honey bee that is by using their "hive puppet". There are 3 patterns to choose from.

Comprehension can also be checked via the "What'll It Bee?" writing prompt, as well as the various Venn diagrams that can be done as a whole group activity to reinforce the information yet another way.

"What'll It Bee?"

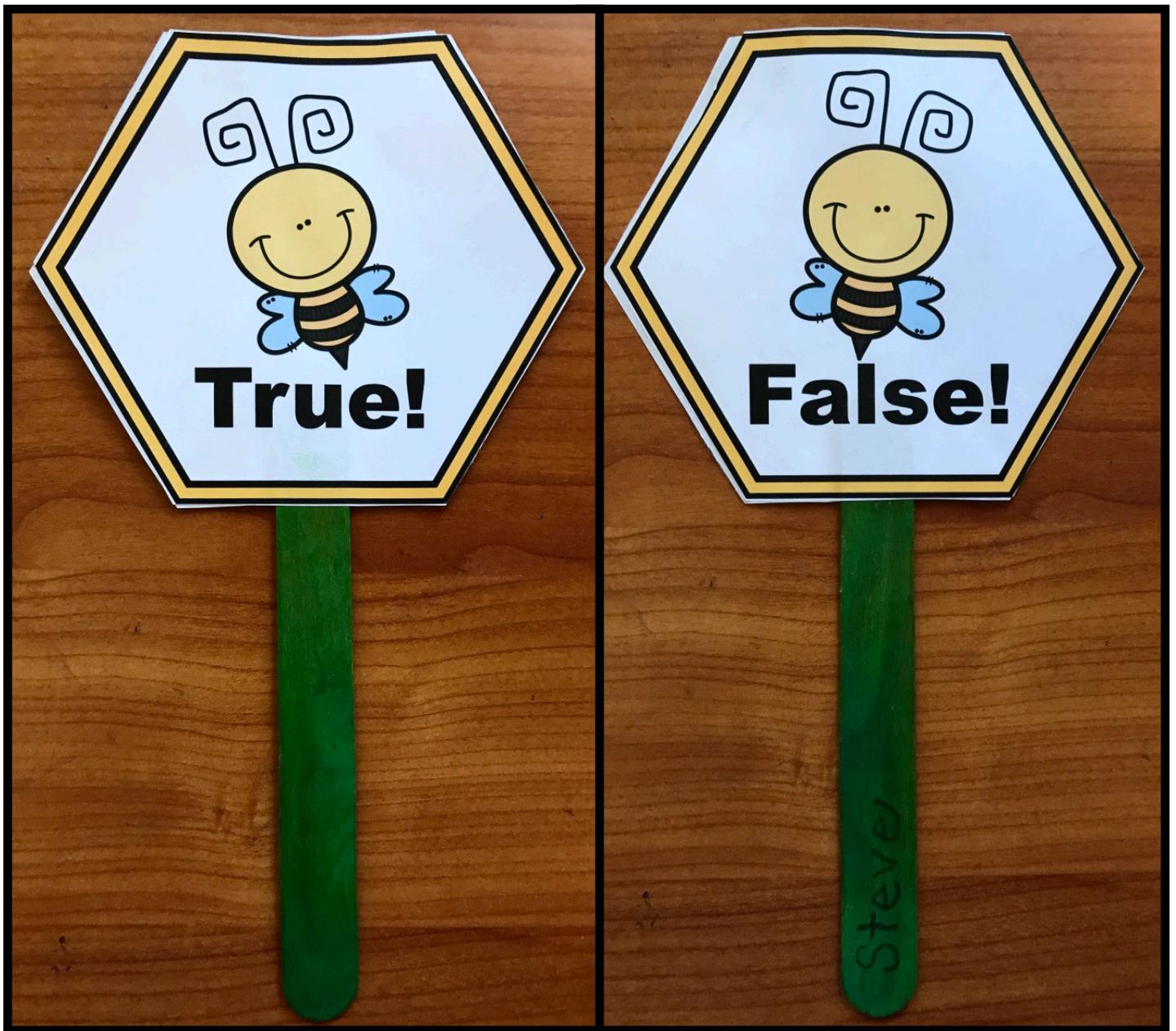
I'd rather be a **worker** bee than a **drone** bee because ...

workers are really the ones in charge. They even control the queen! Although they do a ton of work, a lot of their jobs seem really interesting and fun. I wouldn't want to be a drone because they don't live that long and are later starved and killed by the workers.

worker **queen** **drone**

which bee is which? Label them.





As a time-saver for you, I've made a list of true or false questions which you can use to assess comprehension. These are based on the interesting facts and background information that I've included in the packet.

For a quick, easy & super-fun way to quiz your kiddos, at the same time reinforcing the facts, students can flip a true or false Popsicle stick puppet pal.

Simply read a statement. Students decide if it's true or false, then face that "honeycomb" towards the teacher. You can see at a glance who's having difficulty.



After sharing the interesting information about the 3 types of bees in a colony and the various jobs they do, check comprehension with this craft stick hive paddle.

Read one of the 3 descriptive statements. Students decide which bee you are describing, then hold up that hive, so that it's facing the teacher. You can see at a glance who is having difficulty. Share the correct answer, then do another statement. Hives are glued back-to-back, and on both ends.