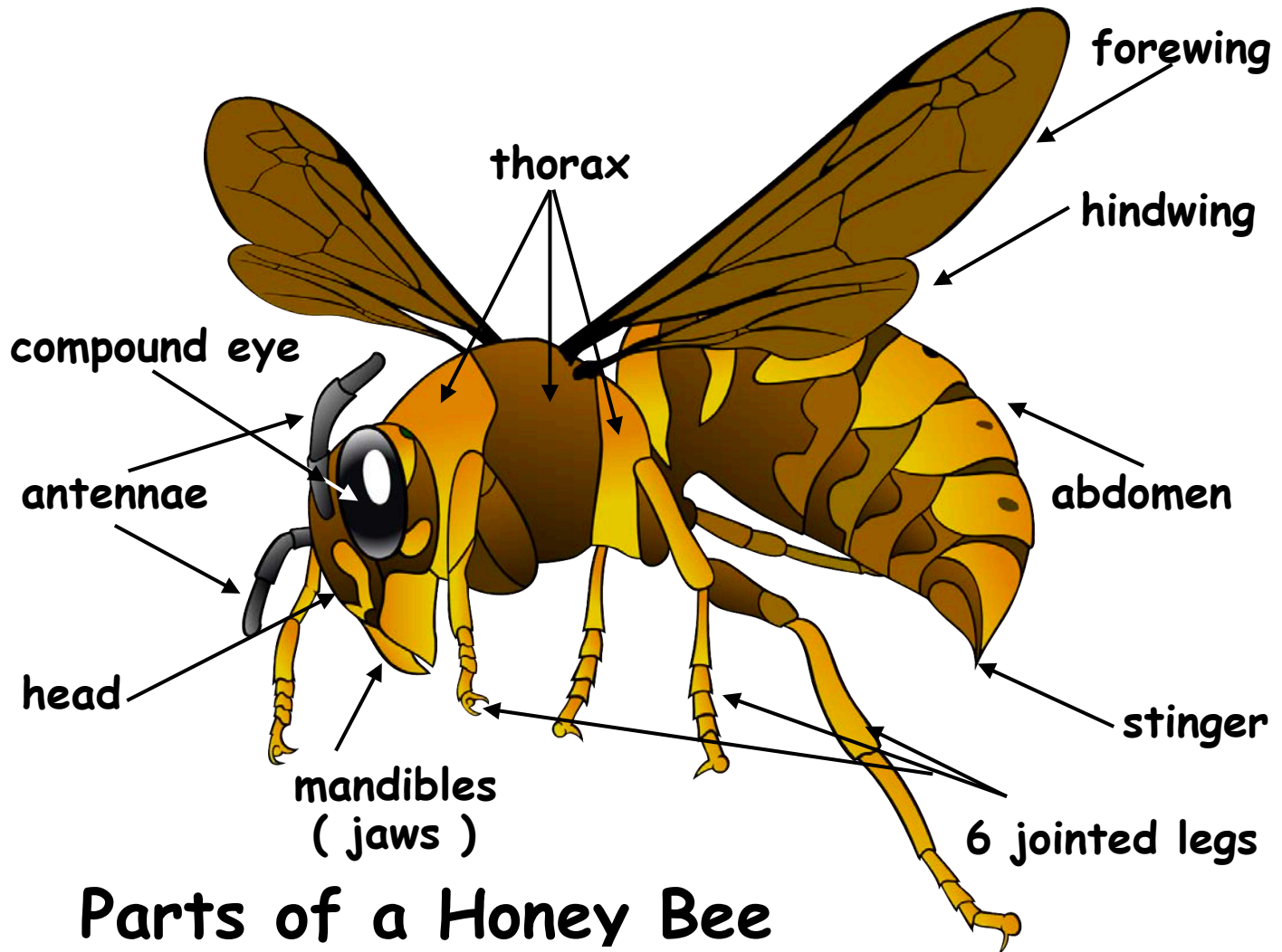


Parts Of A Honey Bee Anchor Chart

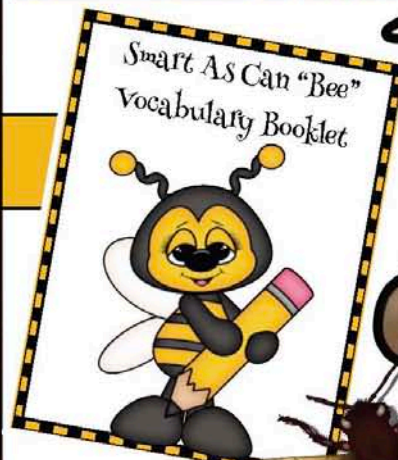
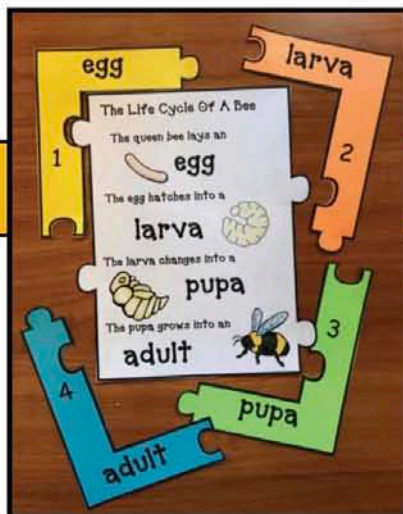
Plus Bee Book Bibliography & Educational Bee Video Links



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.

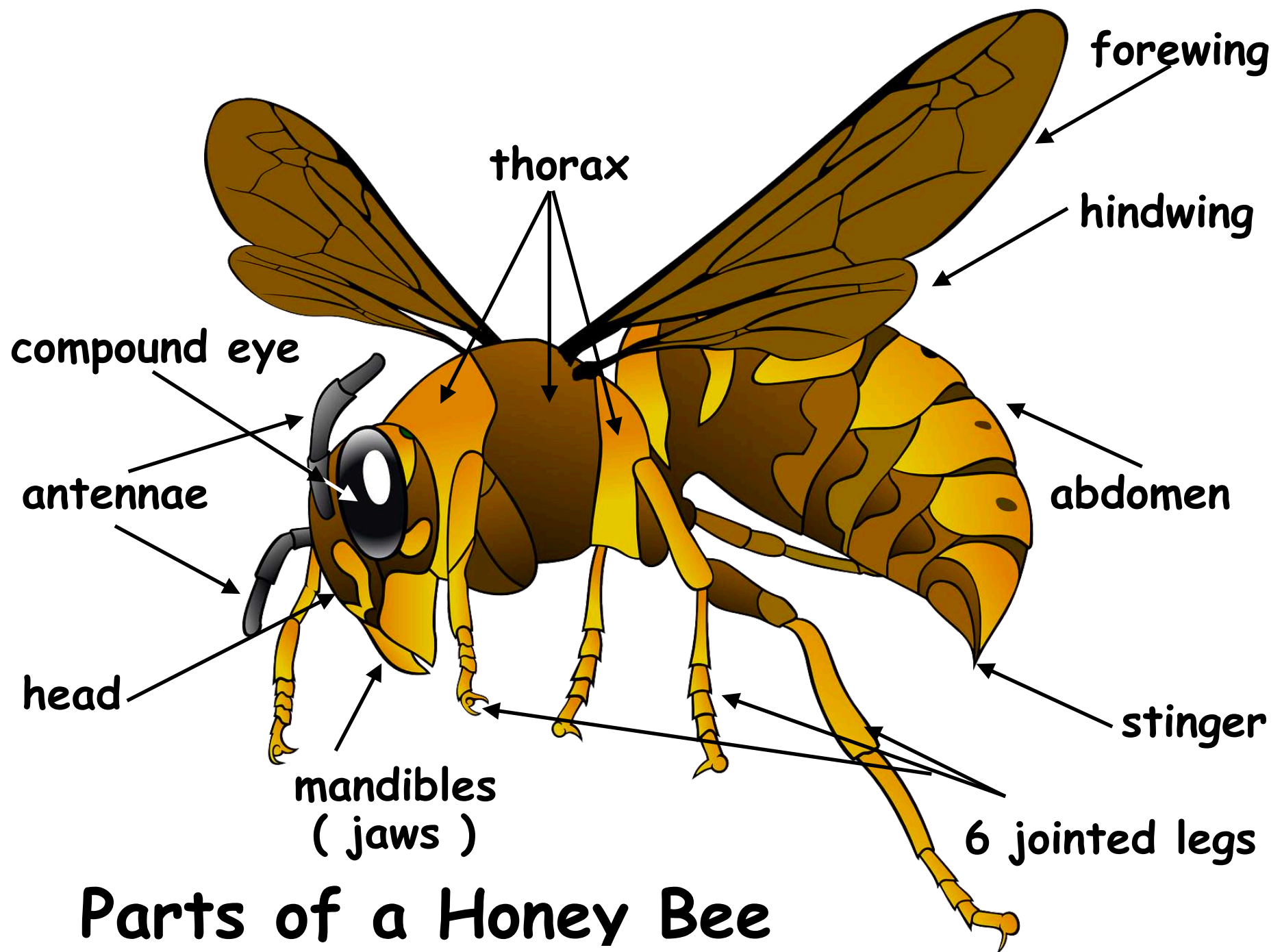


Honey Bees!



stinger

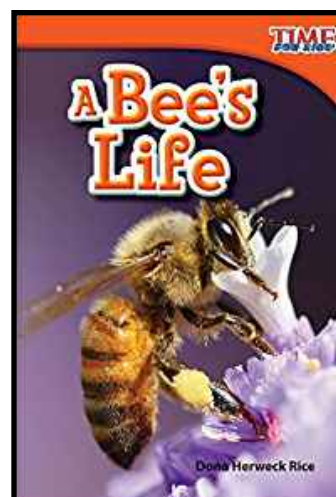
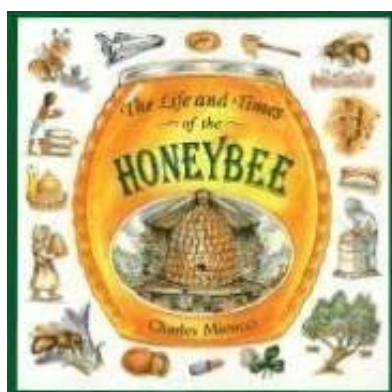
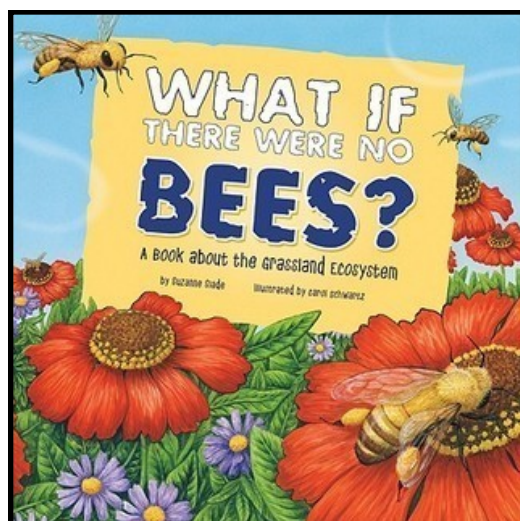
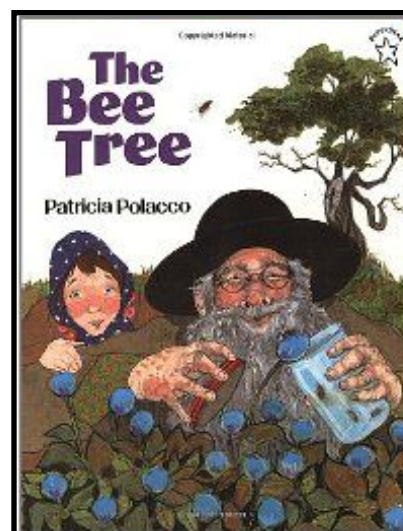
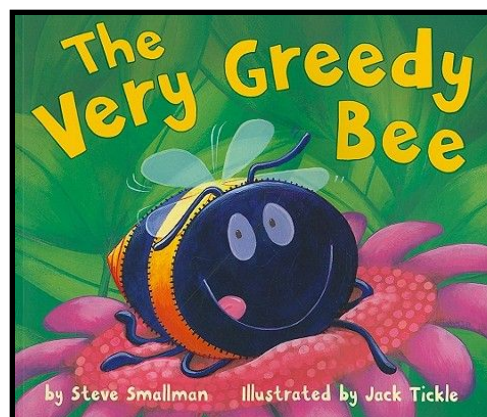
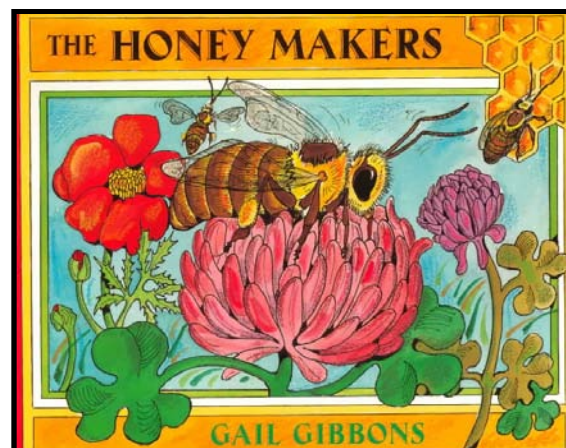
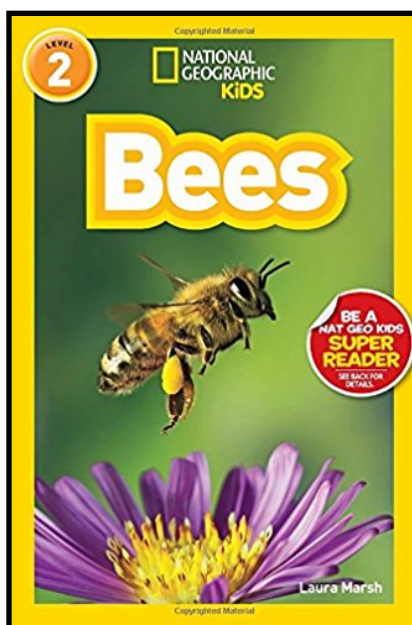
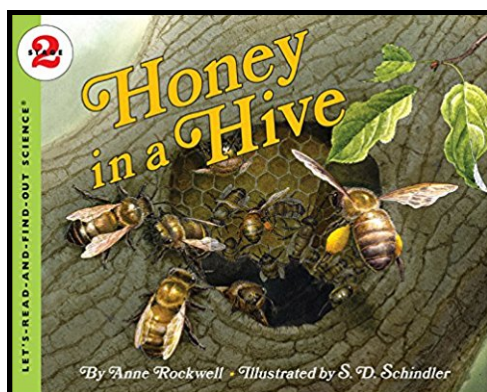
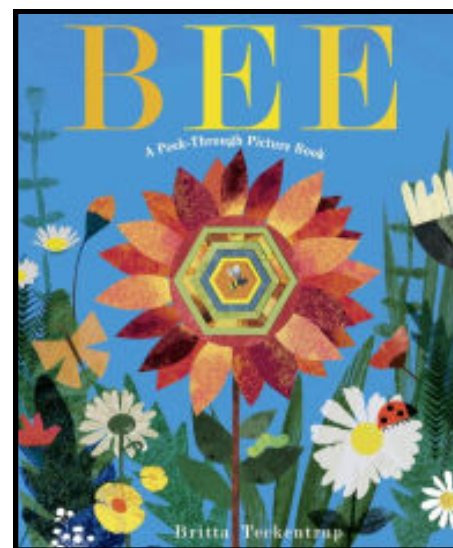
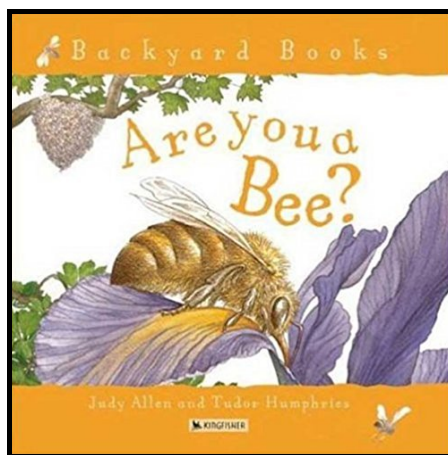
Diane Henderson

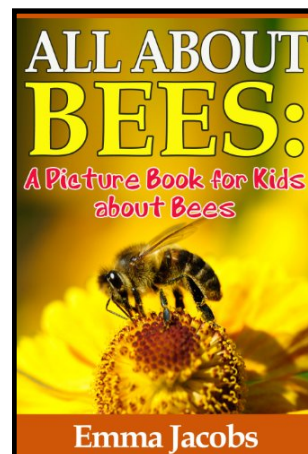
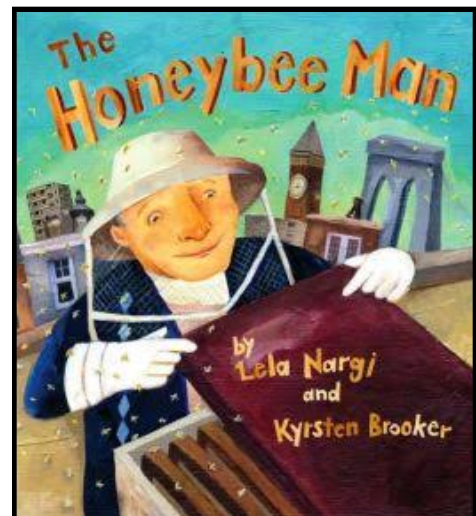
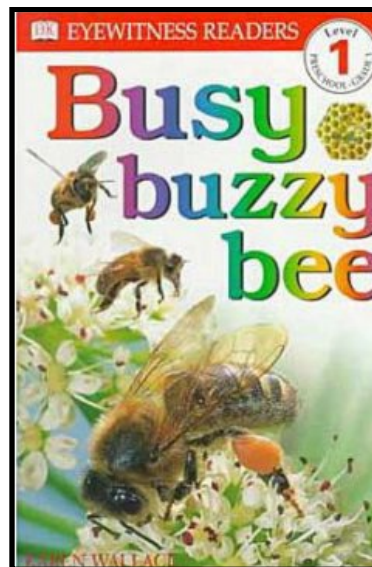
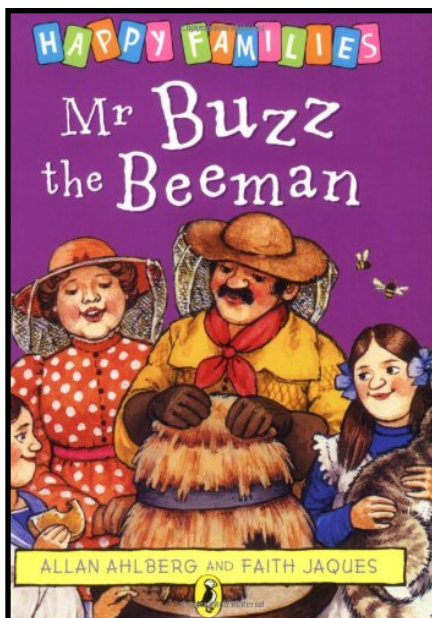
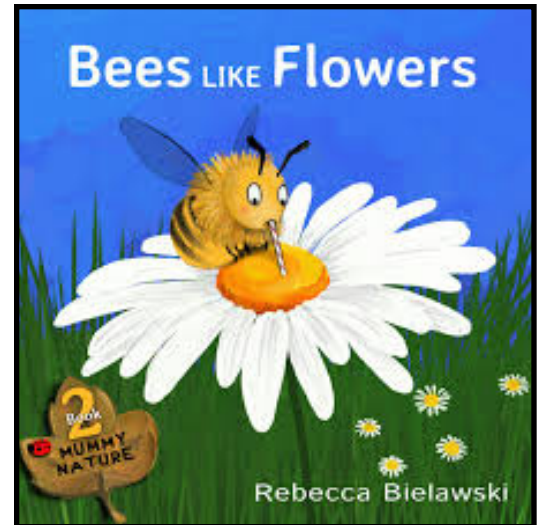
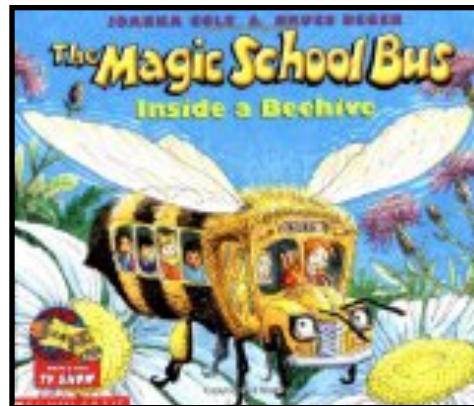
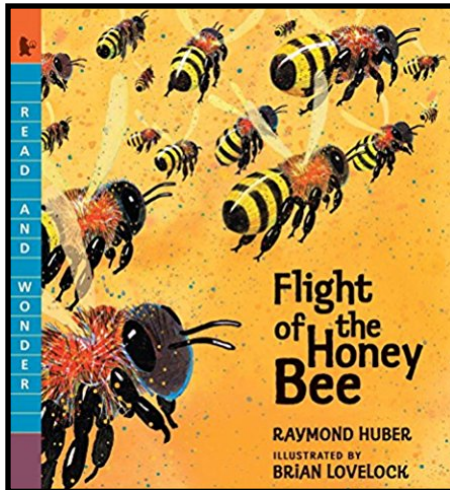


Parts of a Honey Bee

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.

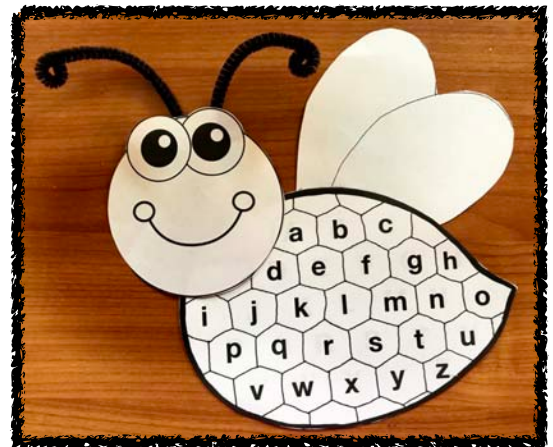
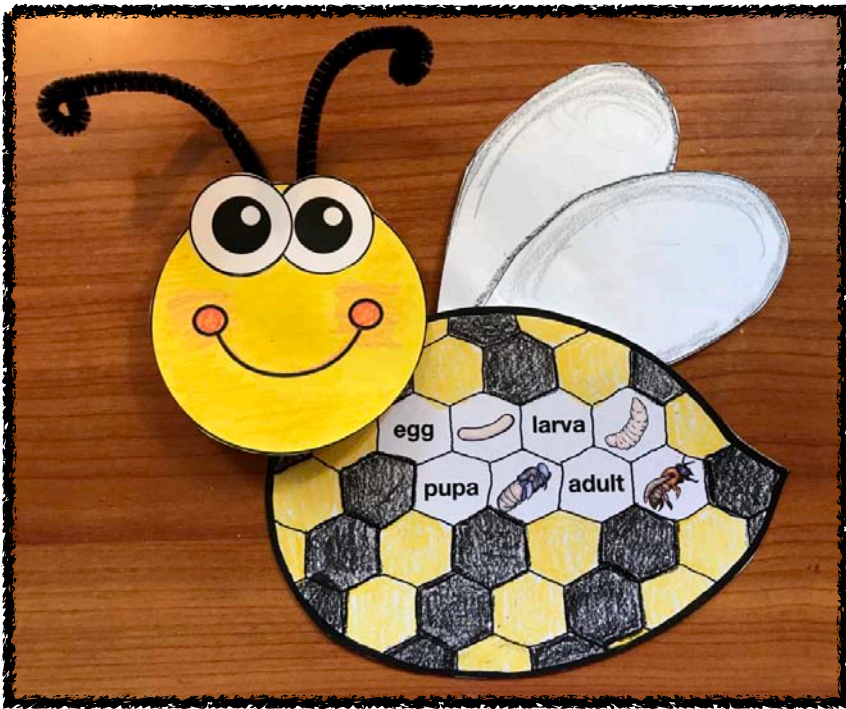
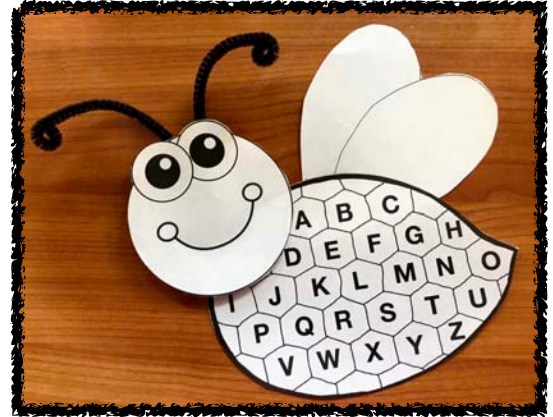
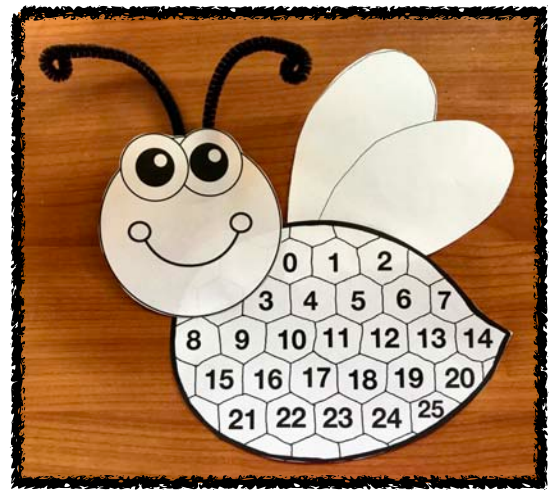
This is a super-fun way for students to improve their fine motor skills, at the same time strengthening their finger & hand muscles.



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!

1st

2nd

3rd

4th

Life Cycle

2nd

Honey Bee!

4th

egg

larva

pupa

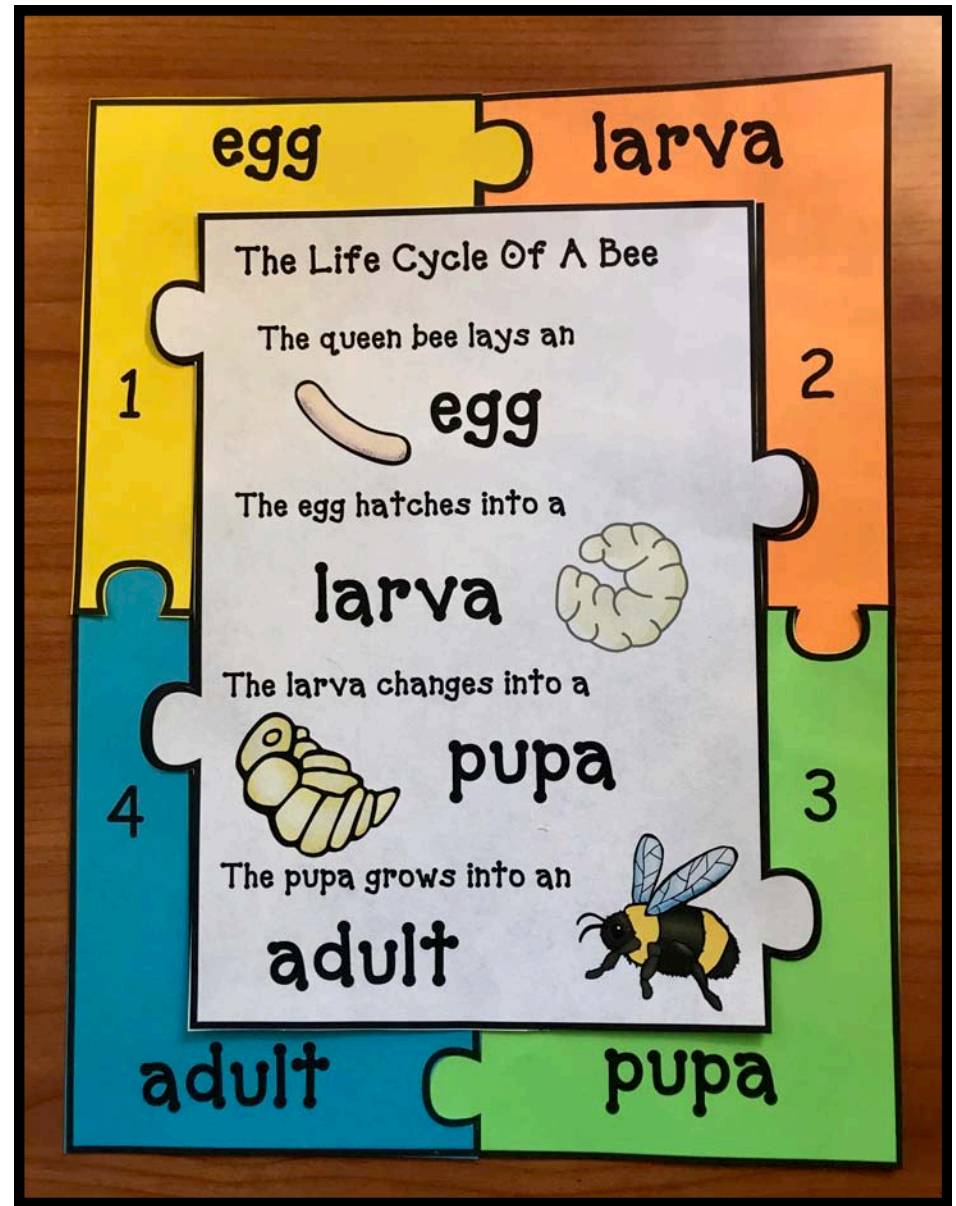
egg

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.

Name:

Mia



Ee is for egg!



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.

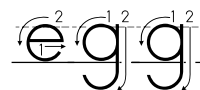
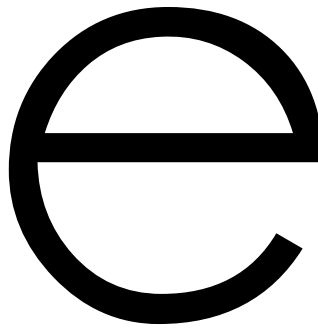
Using an Elmer's glue bottle, students outline the letter then sprinkle instant "Minute Rice" on top of the glue, carefully pressing the pieces down with the palm of their hand, then shaking the excess off in a box. A dot of glue inside the honeycomb cell along with a single piece of rice, completes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

Set aside to dry.

Name:



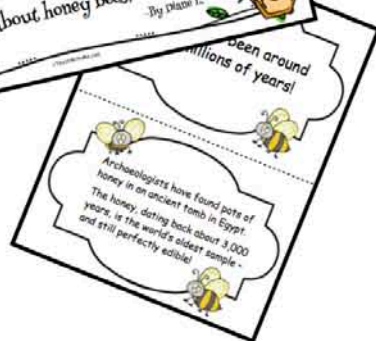
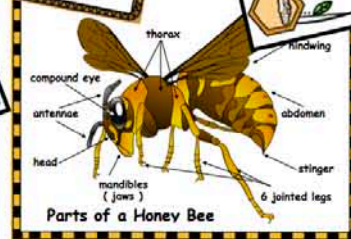
Ee is for egg!





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 do 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 adult bees come from the egg, they are called adults. The adult stage is the longest stage of the life cycle.

For example, a queen will usually live 1 to 2 years, while a worker bee will live 4 to 6 weeks. The male bees (drones) will live 2 to 3 months. The life cycle of a bee is very interesting and the life cycle of a bee is very important.

The adult stage of a bee is the longest stage of the life cycle. The adult stage of a bee is the longest stage of the life cycle. The adult stage of a bee is the longest stage of the life cycle.



Three Bee Facts

The Life Cycle

1. The life cycle of a bee is very interesting.

2. The life cycle of a bee is very important.

3. The life cycle of a bee is very long.


Stage of the Life Cycle

1. The egg stage is the first stage of the life cycle.

2. The larva stage is the second stage of the life cycle.

3. The pupa stage is the third stage of the life cycle.

4. The adult stage is the fourth stage of the life cycle.

Honey Bees

can have are

Queen Bees

can have are

Worker Bees

can have are

Drone Bees

can have are





Queen Bees

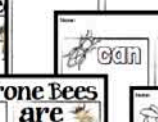

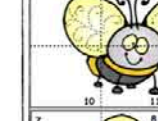
can have are

Worker Bees

can have are

Drone Bees

can have are

Three Bee Facts

Why Are Bees Important?

1. Bees are very important.

2. Bees are very important.

3. Bees are very important.






Egg Stage of the Life Cycle

The Life Cycle

The Life Cycle

The Life Cycle

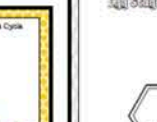
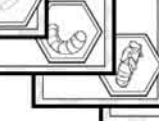





Stage of the Life Cycle

The Life Cycle

The Life Cycle

The Life Cycle

Queen Bees




can have are

Worker Bees

can have are

Drone Bees

can have are

Queen Bees


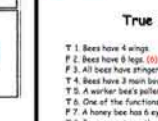
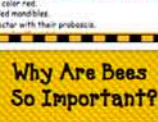
can have are

Worker Bees

can have are

Drone Bees

can have are

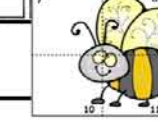
Three Bee Facts

Why Are Bees Important?


1. Bees are very important.

2. Bees are very important.


3. Bees are very important.



Smart As Can "Bee" Vocabulary Booklet



Smart As Can "Bee" Vocabulary Booklet



Queen Bees




can have are

Worker Bees

can have are

Drone Bees

can have are

Queen Bees



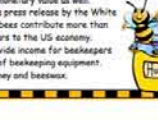
can have are

Worker Bees

can have are

Drone Bees

can have are

Why Are Bees So Important?




Over 80% of our food is dependent on pollination. Bees pollinate fruit trees. Bees also pollinate many crops that are used to feed our livestock that we are dependent on for meat. Bees pollinate flowers so that they can reproduce. Cotton is also pollinated by bees, which is turned into textiles and clothing. Bees are a very important part of the food chain. Seeds, fruits and berries eaten by birds and small animals are all from plants that are pollinated by bees, making them an invaluable contributor to ecosystems around the world. Bees provide monetary value as well. According to a press release by the White House (2014) bees contribute more than 24 billion dollars to the US economy. Bees also provide income for beekeepers and suppliers of beekeeping equipment. Bees make honey and beeswax.



		
What we KNOW.	What we WANT to know.	What we LEARNED!

An Interesting Fact About Honey Bees:



		
What I KNOW.	What I WANT to know.	What I LEARNED!


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:



An Interesting Fact About Honey Bees:

The buzzing sound that bees make comes from the rapid beating of their wings!



"What'll It Beep?"

I'd rather be a _____ bee than a _____ bee because ...




bees need flowers



Name: _____

Trace the words in the order that they are written. Write the words in the order that they are written.

egg
larva
pupa
adult
pollen
bee
hive
honey
stinger
antenna
insect
nectar
queen
wax



Name: _____

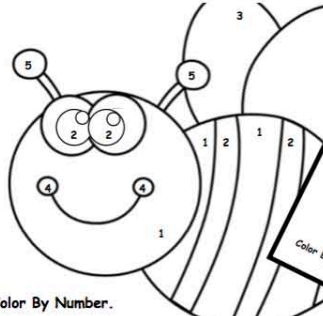
Trace the words in the order that they are written. Write the words in the order that they are written.

thorax
abdomen
buzz
cell
drone
dance
worker
flowers
wings
legs
jelly
colony
hexagon
cap



Name: _____

Color By Number.



Color By Number.



1 yellow
2 blue
3 black
4 red
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:

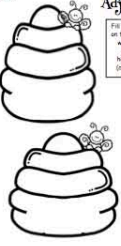


Name: _____

Adjectives and Actions

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

Fill in the boxes on the right with actions that apply to a honey bee.

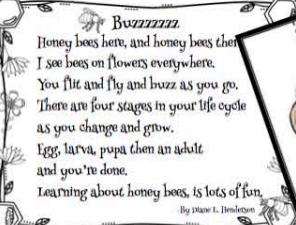


My favorite thing about honey bees ...

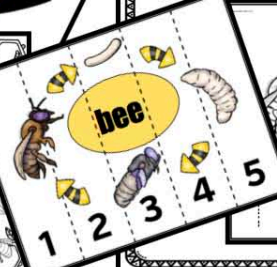
Bzzzzzz.

Honey bees have, and honey bees have. 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.

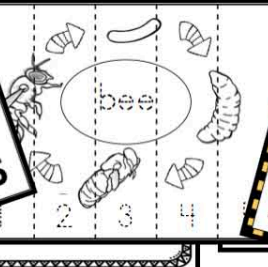
By Diane L. Henderson



bee



bee



"What'll It Beep?"

I'd rather be a _____ bee than a _____ bee because ...



Answer Key

Honey Bee Word Find

t	l	a	o	h	o	n	e	y	d	r	o	n	e	j
r	j	e	l	l	y	f	w	i	n	g	s	x	t	o
u	i	n	s	e	c	t	h	o	r	a	x	k	c	q
h	x	d	a	n	c	e	q	u	e	e	n	w	a	x
h	i	s	h	f	l	o	w	e	r	s	v	j	b	k
g	p	s	j	e	n	t	o	m	o	l	o	g	y	r
y	l	m	p	u	p	o	l	i	n	a	t	i	o	n
y	h	r	n	e	c	t	a	r	c	e	l	l	k	m
w	p	c	y	w	o	r	k	e	r	l	a	r	v	a
p	u	p	a	b	d	o	m	e	n	s	s	u	y	b
d	a	n	t	e	n	n	a	h	o	j	o	b	b	p
b	f	b	n	p	o	l	l	e	n	f	x	g	j	l
l	k	e	g	g	l	e	g	s	t	i	n	g	e	r
g	n	h	o	n	e	y	c	o	m	b	b	u	z	z
h	g	e	a	i	c	o	l	o	n	y	h	i	v	e

Word Bank

abdomen
antenna
buzz
cell
colony
dance
drone
egg
entomology
flowers
hive
honey
honeycomb
insect
jelly
job
larva
legs
nectar
pollination
pollen
pupa
queen
stinger
thorax
wax
wings
worker

Extra Words I Found

a
on
one
win
to
or
ax
in
his
is
flow
ow
log
pup
up
tar
work
an
ant
ten
dome
men
tin
poll
comb
colon

7

8

7

8

9

10

9

None:

Directions:

Choose 6 crayon colors, which will match the numbers on the dice.
 Start at the bottom of your graph.
 If you roll a one, color the first box in column one the color of your choice.
 All rolls of one will also be colored in that same color.
 Roll the dice 20 times.
 To help keep track, make a tally mark each time you roll.

Beel

I'm expecting you!

Was saying yesterday

To somebody you know

That you were due—

The frogs got home last week—

Are settled, and at work—

Birds, mostly back—

The clover warm and thick—

Comparing and Contrasting 2

Comparing and Contrasting 2 Insects

Comparing and Contrasting 2 Insects

Comparing and Contrasting 2 Insects

Comparing and Contrasting 2 Insects

Comparing and Contrasting 2 Insects

Comparing and Contrasting 2 Insects

Comparing and Contrasting 2 Insects

Answer Key

Honey Bee Word Find

a	w	j	e	l	l	y	t	n	t	h	o	r	a	x
n	a	n	r	f	l	o	w	e	r	s	v	r	x	z
t	x	p	o	l	i	n	a	t	i	o	n	x	h	
e	n	t	o	m	o	l	o	g	y	p	u	p	a	t
n	z	g	n	q	u	f	h	l	s	h	o	n	e	y
n	p	q	u	e	e	n	c	w	t	a	f	r	r	
a	n	e	c	t	a	r	b	h	i	y	c	d	z	c
e	u	w	a	z	u	f	i	n	s	e	c	t	v	
q	t	i	b	j	q	s	z	v	g	t	l	b	l	y
g	q	n	d	o	x	y	z	e	e	x	l	x	h	w
i	d	g	o	b	r	x	m	w	r	p	e	g	g	o
v	r	s	m	e	p	o	l	l	e	n	g	a	a	r
h	o	n	e	y	c	o	m	b	r	t	s	f	r	k
e	n	t	o	m	o	l	o	g	y	p	u	p	a	e
u	e													r

Word Bank

abdomen
antenna
buzz
cell
colony
dance
drone
egg
entomology
flower
hive
honey
honeycomb
insect
jelly
job
larva
legs
nectar
pollination
pollen
pupa
queen
stinger
thorax
wax
wings
worker

Extra Words I Found

or
at
a
an

1

2

3

4

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Comparing and Contrasting 2 Insects

Comparing and Contrasting 2 Insects

Comparing and Contrasting 2 Insects

Comparing and Contrasting 2 Insects

Comparing and Contrasting 2 Insects

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Life Cycle Of A Honey Bee

Life Cycle Of A Honey Bee

There are 3 kinds of bees in every hive.

drone

queen

worker

There are 3 kinds of bees in every hive.

drone

queen

worker

Sample

If We
Were Bees!

A Class Book By:

If I were a honey bee...

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...



bee...



ee...



ney 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 honey stomachs 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 thorax secrete waxes necessary for building the honeycomb.

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

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



The Drone Bee

The colloquial "body of 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 or special glands that secrete 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 loafing 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 top of his head.

This enables him to see the queen during the mating flight. The drones also have longer 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. If one is killed.

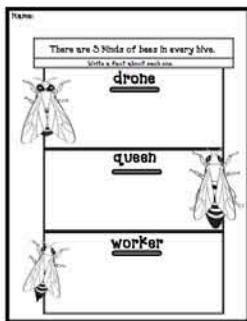
To make sure no queens are in a capped cell, she gives a special sound. The so-called "queen bee" sound. The so-called "queen bee" sound.

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.

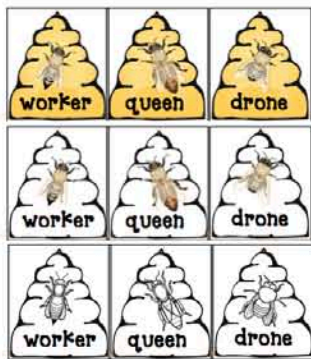
After countless hours of research, I condensed my findings and made 15 detailed "info-anchor chart posters".



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.



"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.

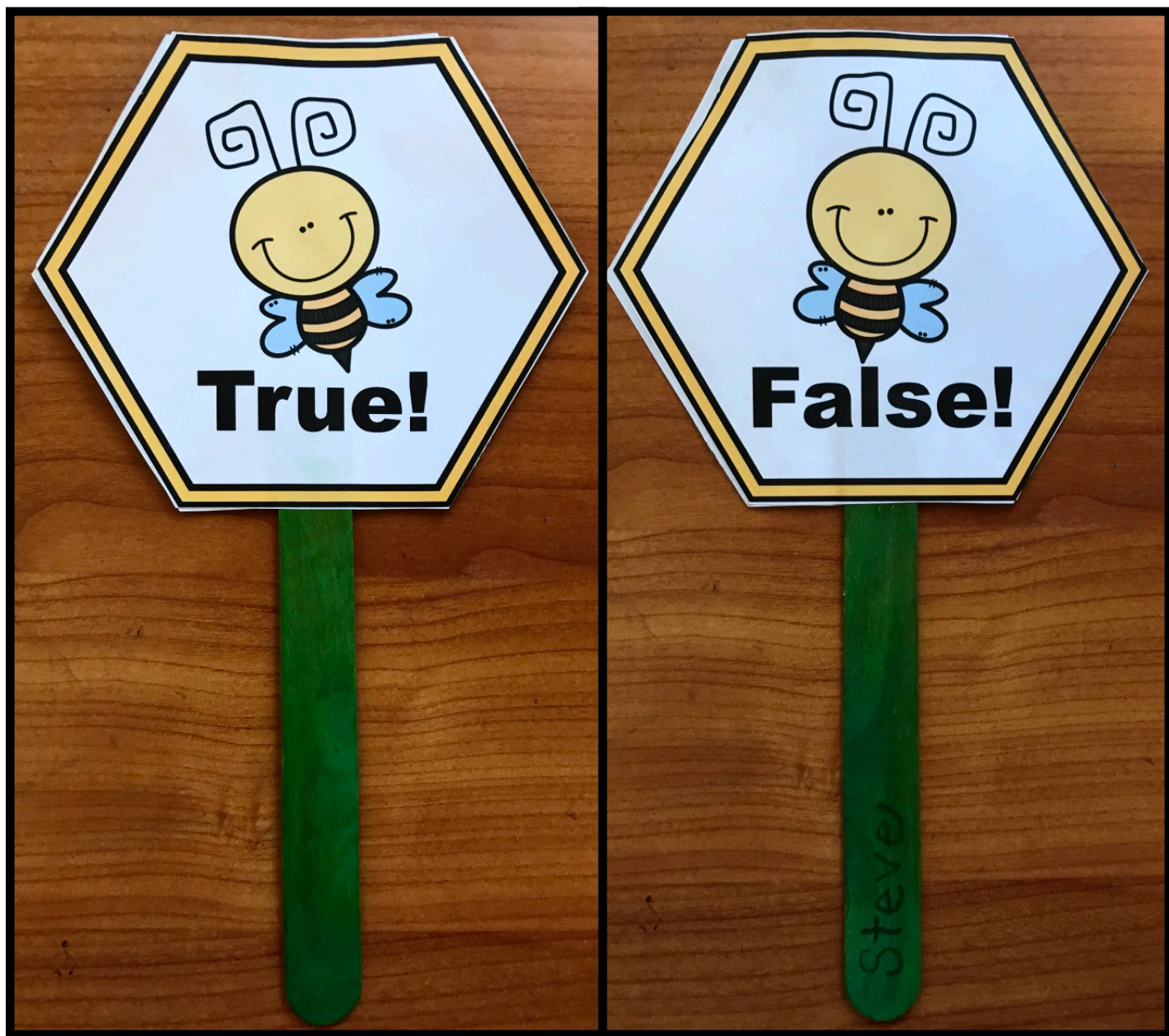


Which bee is which? Label them.

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.



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.