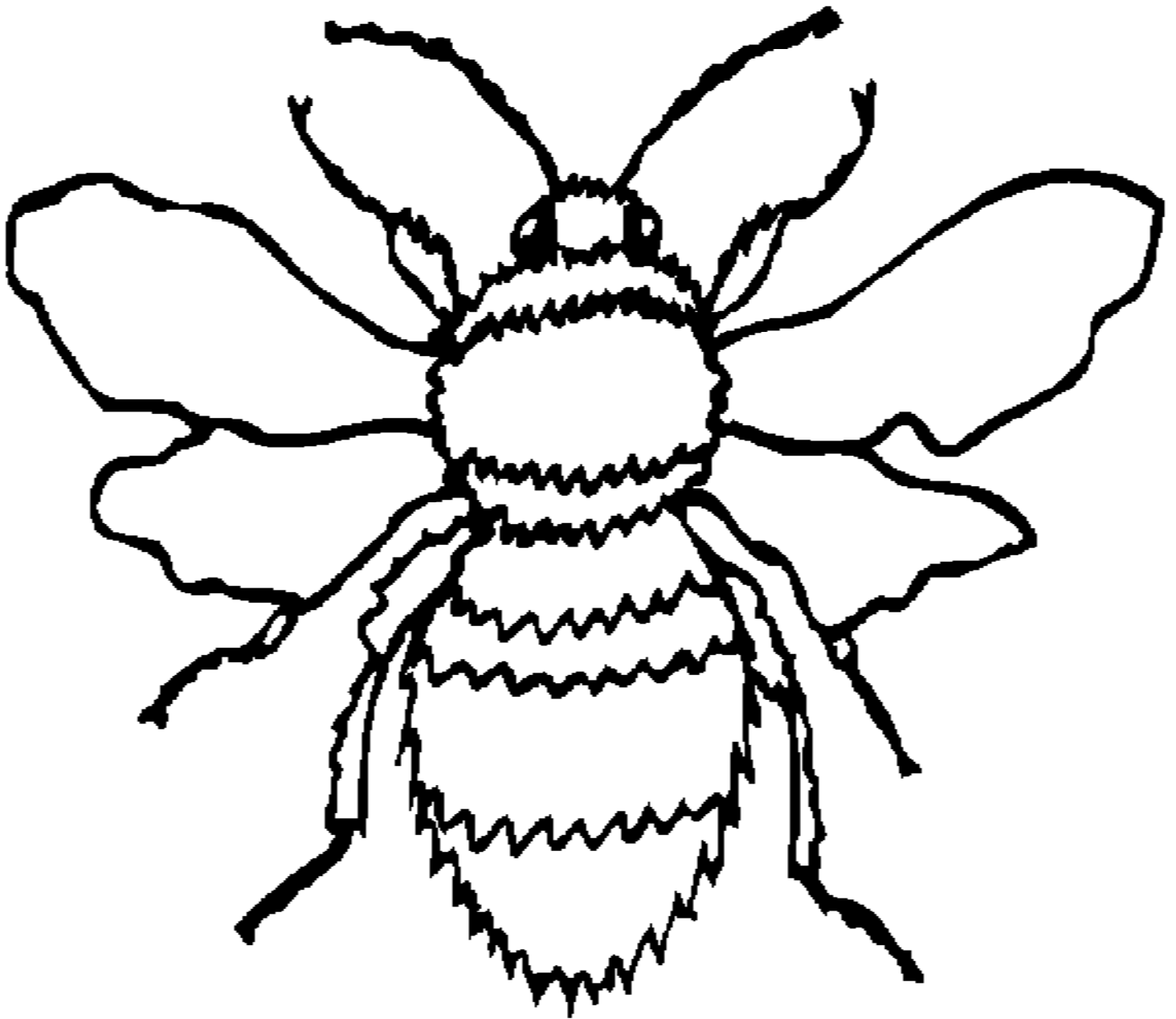


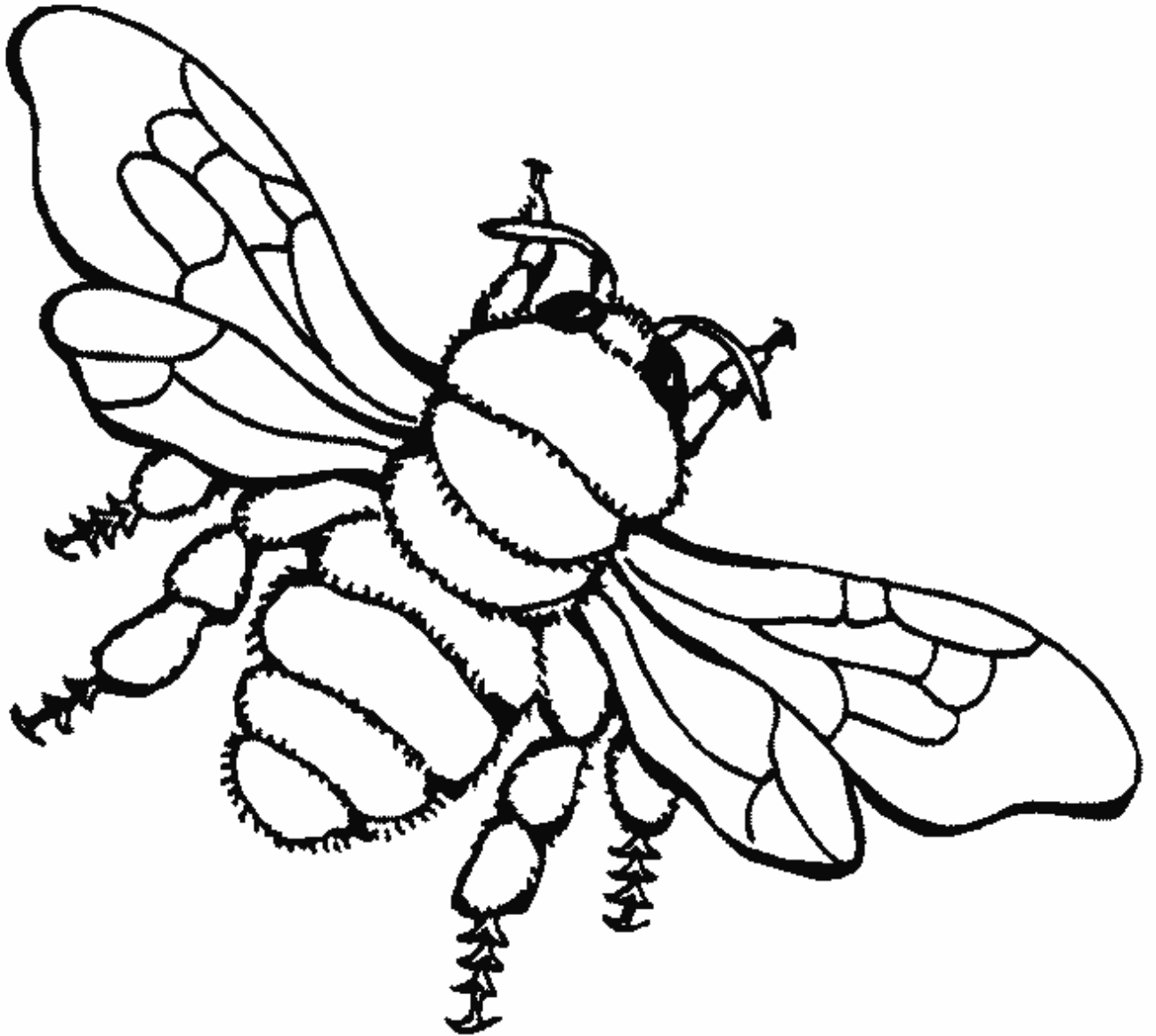


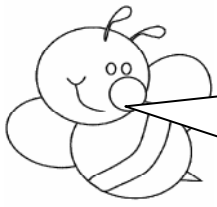
My Bee Work





Label The Parts





Bee Acrostics

H

O

N

E

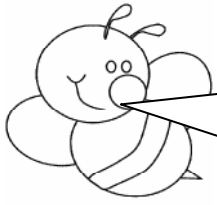
Y

B

M

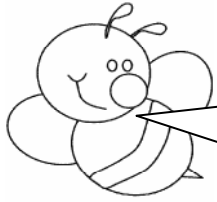
M

S



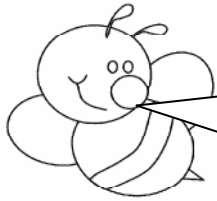
Bee Facts

List as many Bee Facts you know



Bee Word Find

Complete the bee wordfind



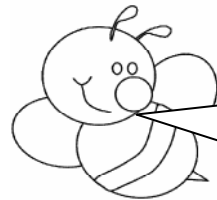
Bee story

Make up your own mini bee story



My Bee words

Make as many words you can with "bee" in them.



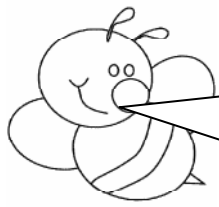
Bee Mobile

Make your own cut out bee



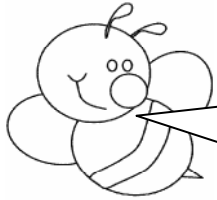
Bee cartoon

Make up your own mini bee cartoon



Bee Junior Book

Make up your own bee book for juniors



Bee Model

Make up your own bee model



Bee Crossword

Make up your own bee crossword



My Bee Presentation

Consider doing a public presentation on bees



Bees Extinct

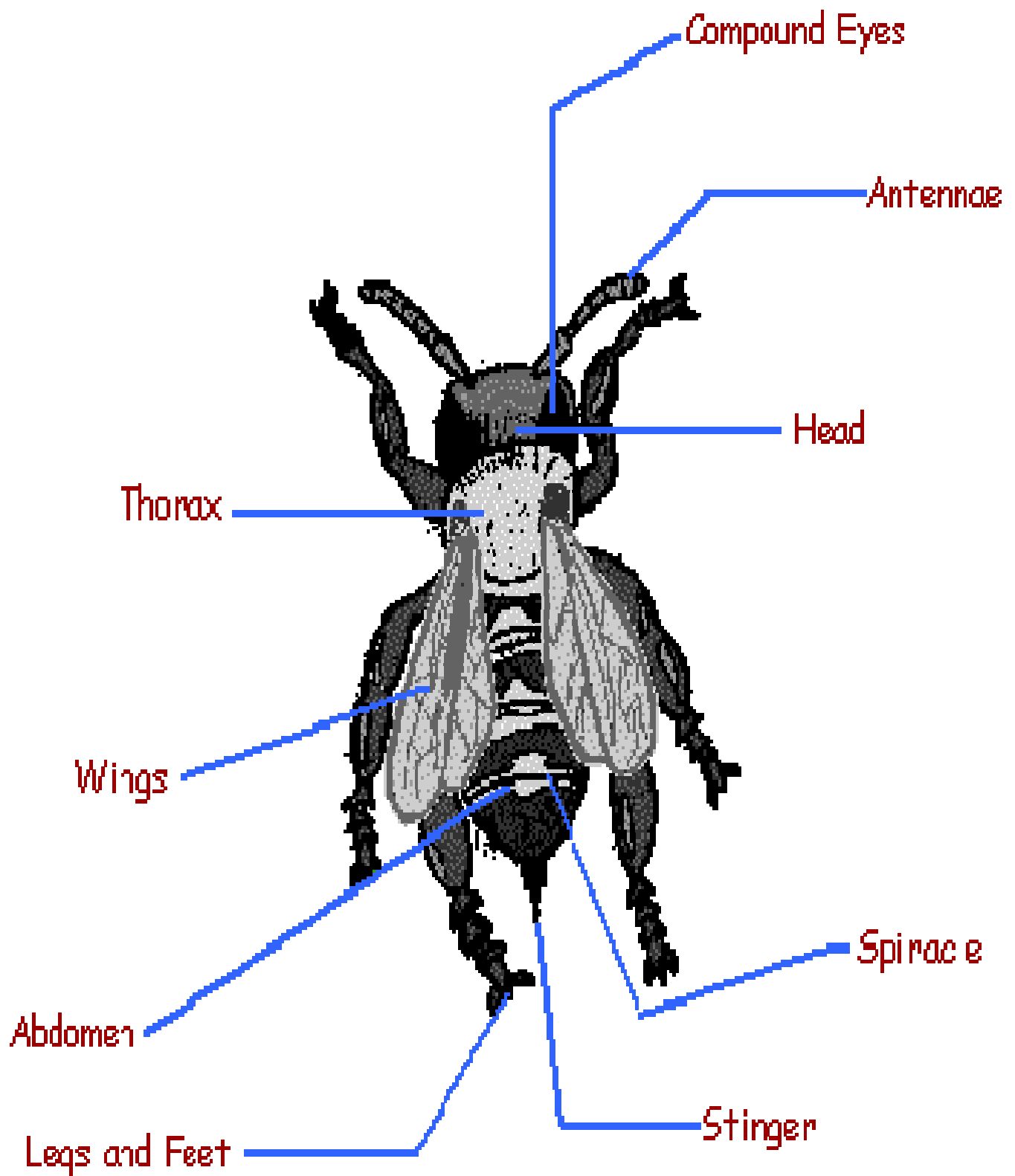
List all the things that would happen if bees became extinct



My Choice

Do your own bee activity

Bee Information



The Honey Bee

Bee Information

Honey Bees

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

By: Isaac Watts, "Against Idleness and Mischief"

Buzz! What a busy honey bee! Honey bees make and do things that are helpful to humans. They are very interesting insects. Honey bees provide us with honey, royal jelly, beeswax, and propolis. They are very cooperative insects and have good colony structure. They are the prime pollinators of the planet. Honey bees are social insects. A typical hive is divided primarily into worker bees and drones, ruled by the queen. Now let's go find out the wonderful things that bees do that help us!

HONEY

Honey bees have to go through a long process to make honey. The house bee and the field bee are involved in the process. First the field bee goes out and collects nectar, which it stores in an internal honey sac. They bring it back to the hive and transfer it to the house bee tongue to tongue. Then the house bee spreads a drop of nectar on the roof of a cell in a comb. During the next couple of days other house bees fan their wings over the nectar so that the moisture evaporates (nectar is 80% water and honey is 19% water). Finally, more house bees cover every cell filled with modified nectar with a thin layer of wax.



Honey is a product that honey bees make. Humans use the honey for many different purposes. Honey can be a substitute for sugar in many foods. You can make ice cream with honey but you would have to lower the temperature in the freezer because honey lowers the freezing point. Honey has a greater sweetening ability that sugar doesn't have. One cup of honey weighs twelve ounces while one cup of sugar weighs seven ounces.

Honey was also used in various ways in history. Long ago priests used honey and cakes sweetened by honey in many religious ceremonies. In Roman times, Romans used honey as widely as sugar is now. Honey was used for cooking, preserving meats, vegetables, fruits, sauces and dressing. In Biblical sources it is said that honey was the first and last food that Jesus Christ ate on Earth. Muhammad is recorded in the Koran saying that honey is a remedy for all illnesses.

ROYAL JELLY, "YOU ARE WHAT YOU EAT!"



Royal jelly is a secretion from workers' glands. It is fed to the queen bee throughout her larval and adult life. It is also fed to larvae for the first two and a half days. It is a creamy milky-white color, strongly acidic, has a prudent odor and bitter taste. The queen eats only royal jelly, the worker bees eat some royal jelly and the drones eat the least amount. Royal jelly is high in protein and is rich in vitamins B, C and D.

Royal jelly is used in many things such as in dietary supplements, additives in lotions, cosmetics and creams. It is in demand as a human health food because it is known to improve human health.




BEESWAX

Beeswax is a very helpful product. Beeswax is a secretion from four glands on the underside of a worker bees' abdomen. Some major uses of beeswax are cosmetics and candle making. Some minor uses are lotions, cold creams, ointments, salves, lipsticks, rouges, pill coatings, waterproofing, coatings for electrical apparatus, floor and furniture polishes, leather polishes, arts and crafts items, adhesives, crayons, inks, basketball molding, grafting wax, ski wax and ironing wax.



Most of the world's beeswax comes from Africa. Roman wax tablets were found in Egypt. Persians and Syrians both covered important bodies with wax before burial. Beeswax death masks were made by Mme Tussaud for King Louis XVI and Marie Antoinette after their execution.

 There are two ways to make beeswax candles. There is the dipping method where the wicks were repeatedly dipped into a pool of melted beeswax. There is also the pouring method where the wick is suspended and a dipper full of melted wax would be poured over it and would run off into a big container below.

PROPOLIS



For honey bees, propolis is used for a kind of glue. Honey bees gather propolis from trees and other vegetation. They use it to seal cracks and crevices in the hive to make it less drafty when it is cold. Propolis is sticky when it is warm and it is difficult to deal with when it is hard. Propolis was used for medical purposes by doctors in Via Sacra. Roman doctors favored it more than wax. Propolis is also an effective dressing for wounds and was used during the Boer War (Oct. 11, 1899-May 31, 1902).

Propolis is also used for a variety of things. It was used in veterinary practice in Russia. It is used as ointments for healing animal cuts and wounds. Doctors have experimented with an alcohol tincture for hearing defects. If propolis is mixed with mineral spirits, it can be used as a natural varnish. Famous violinists used propolis in their violin varnish.



POLLINATION

Since many of our pollinators are now scarce, we are dependent on the honey bee to pollinate our crops. Pollination starts when a field bee crawls around a plant blossom. The honey bee is dusted with pollen. Then the field bee flies over to another blossom with the pollen in its hair. When the bee lands, the pollen falls onto this blossom's stigma. Now a fruit, vegetable or other crop can grow.

Farmers actually rented colonies of bees to pollinate their crops. Even though other insects pollinate crops too, honey bees are one of the few that are synchronized and managed with the development of crops. If honey bees didn't pollinate, crops wouldn't be able to grow. Without the pollination from the honey bees there would be one third less crops in the world than there is now.



Bee Wordfind

A	c	d	c	c	a	m	s	t	i	n	g	o	y	i
B	b	r	t	j	w	a	a	p	p	o	l	l	e	n
C	v	o	h	h	g	n	i	i	k	g	a	i	j	s
D	l	n	n	o	z	t	h	i	v	e	h	e	s	e
E	n	e	o	n	t	e	q	o	f	a	x	w	t	c
F	a	e	r	e	j	n	m	q	u	e	e	n	i	t
G	i	b	c	y	v	n	t	h	o	r	a	x	n	v
H	i	d	d	t	k	a	l	f	d	j	p	j	g	s
I	e	l	u	o	a	e	w	i	n	g	s	l	e	w
J	m	k	l	y	m	r	o	w	u	h	z	j	r	a
K	r	n	e	m	v	e	i	q	b	e	e	s	m	r
L	a	t	h	q	b	f	n	m	u	j	x	s	r	m
	1	2	3	4	5	6	7	8	9	10	11	12	13	14

bees

honey

hive

sting

swarm

wings

queen

nectar

abdomen

antennae

thorax

drone

stinger

pollen

insect

Bee Wordfind (Answers)

A	c	d	c	c	a	m	s	t	i	n	g	o	y	i
B	b	r	t	j	w	a	a	p	p	o	l	l	e	n
C	v	o	h	h	g	n	i	i	k	g	a	i	j	s
D	l	n	n	o	z	t	h	i	v	e	h	e	s	e
E	n	e	o	n	t	e	q	o	f	a	x	w	t	c
F	a	e	r	e	j	n	m	q	u	e	e	n	i	t
G	i	b	c	y	v	n	t	h	o	r	a	x	n	v
H	i	d	d	t	k	a	l	f	d	j	p	j	g	s
I	e	l	u	o	a	e	w	i	n	g	s	l	e	w
J	m	k	l	y	m	r	o	w	u	h	z	j	r	a
K	r	n	e	m	v	e	i	q	b	e	e	s	m	r
L	a	t	h	q	b	f	n	m	u	j	x	s	r	m
	1	2	3	4	5	6	7	8	9	10	11	12	13	14

bees	swarm	abdomen	stinger
honey	wings	antennae	pollen
hive	queen	thorax	insect
sting	nectar	drone	