

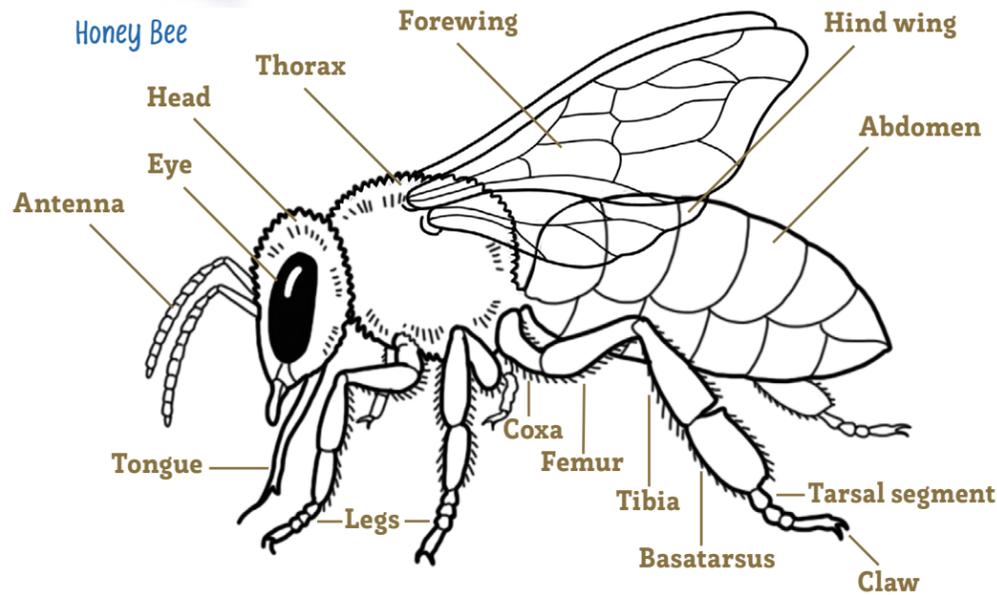
Parts of a Bee

Did you know? All insects, like bees, are animals!

Each type of bee is called a *species*. Teams of scientists who study bees (*mellitologists*) use the parts of a bee to identify them. To help understand how alike or different they are, scientists put similar species together into a group called a *genus*. In this book, you'll learn about a few of the most common *genera* (plural of genus) in Oregon.

Bees are like super-heroes with body parts adapted to help them find flowers and collect pollen and nectar!

All bees have 3 body segments (head, thorax, abdomen), 6 legs, and 4 wings.



A Closer Look

Bee eye photo

Wings - A bee's wings help them fly up, down, forward, backwards and sideways and hover. They beat so fast they make a buzzing sound and create a positive electrical charge. The charge remains on their body and helps them pull pollen from flowers. Plus, an "echo" of the electricity is left behind on the flowers they visit to signal to other bees that the flower was just visited.

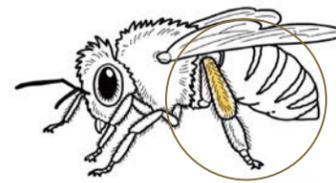
Tongue - A bee's tongue (or *proboscis*) is a thin and hairy tube. It can reach into flowers to suck nectar out like a straw, lick up water and helps bees communicate. Honey bees' also use their tongue to lick up honey and pass food to other bees.

Antennae - A bee's two antennae are connected to the brain and swivel in all directions. The tiny hairs on them respond to touch and smell.

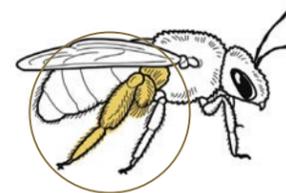
Legs - Bees use their legs for a lot more than walking. **Just the honey bee:** Their front legs have hairy brushes they use to push pollen toward their back legs and to clean their head and antennae. They use their middle legs to move flower parts and to push pollen on their upper body to their back legs. Then they use their back legs to pack pollen in their pollen baskets (see top of next page). When their baskets are full, they return to the nest. They use their middle legs to pass the pollen from their baskets to another worker in the hive.

Eyes - Bees have five eyes! Their two big eyes (called *compound eyes*) have thousands of tiny lenses each. These eyes help bees find flowers by sensing differences in light, color and movement. Bees' three small eyes (called *ocelli*) detect brightness and intensity of light, not images, and are arranged in a triangle between the compound eyes.

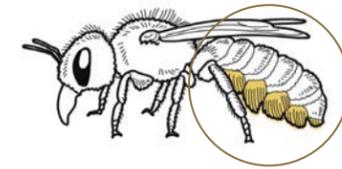
Three Different Types of Pollen-Carrying Structures:



1 **Corbicula** (pollen basket)
Honey bee



2 **Scopa** (hairs on back leg)
Mining bee



3 **Scopa** (hairs beneath the abdomen)
Leafcutter bee



Bumble bee with pollen in a corbicula

Bees Make Healthy Food Acrostic Poem

What is it? An **acrostic** is a poem in which the first letter of each line spells out a word. Often, that word is the title of the poem. Here's an example:

Cherry

- C**ool-weather blossoms
- H**elped to grow by mason bees
- E**at cherries fresh or in fruit salad or parfait!
- R**uby red
- R**ipe in midsummer
- Y**ou can't eat just one!



Your Turn!

Try writing an acrostic poem about your favorite fruit or vegetable that bees help make! First write your title, in large letters, one letter at a time in the blocks on the side of the page. Use as many blocks as you need. Now write something you like about your fruit or vegetable or the bee that helps make it that begins with the letter at the start of each line.

Find someone to read your poem to!

