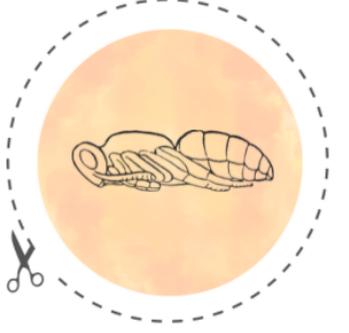
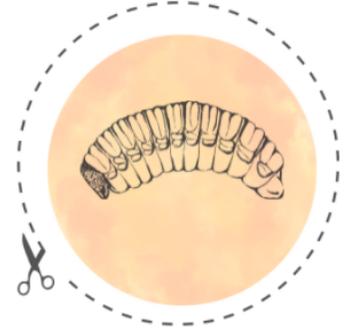
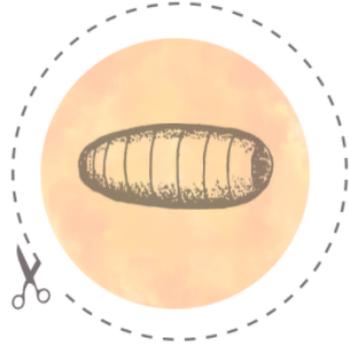
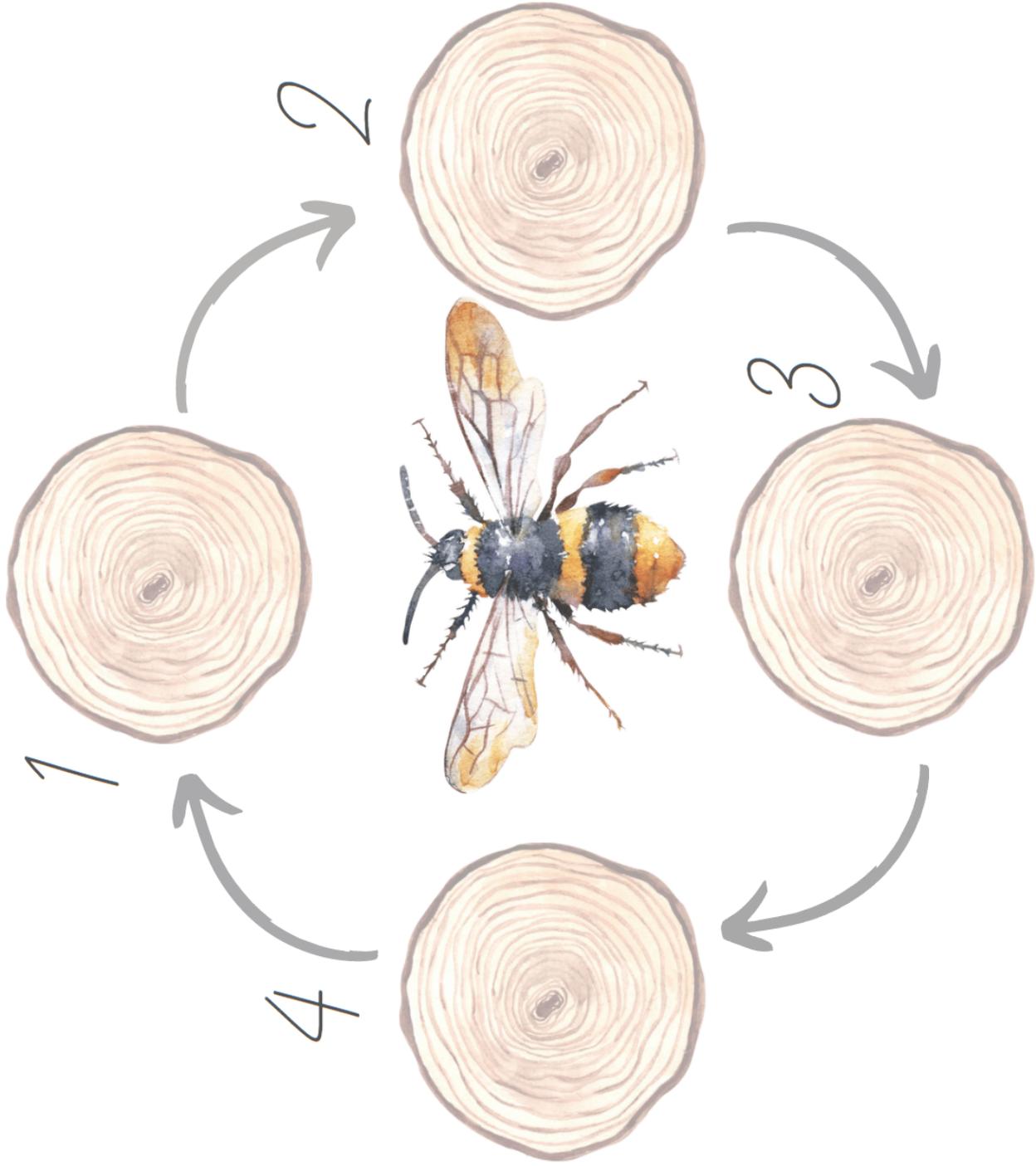
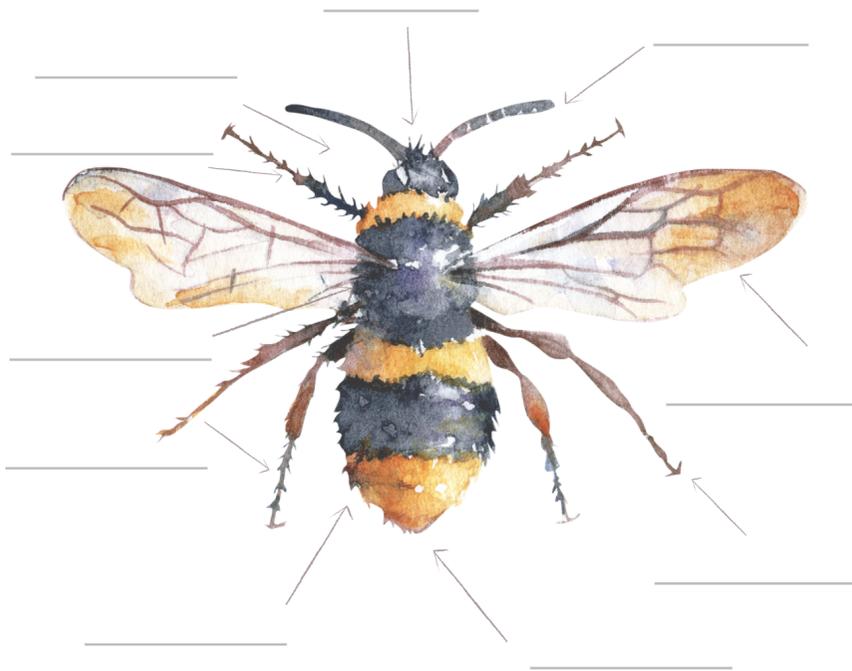


BEE LIFE CYCLE

Cut and paste the stages of the life cycle of a Bee



ANATOMY OF A *Bee*



Abdonomen Wing Hind Leg ForeLeg Antenna
Stinger Middle Leg Head Thorax Eye



For bees, the flower is the
fountain of *Live*

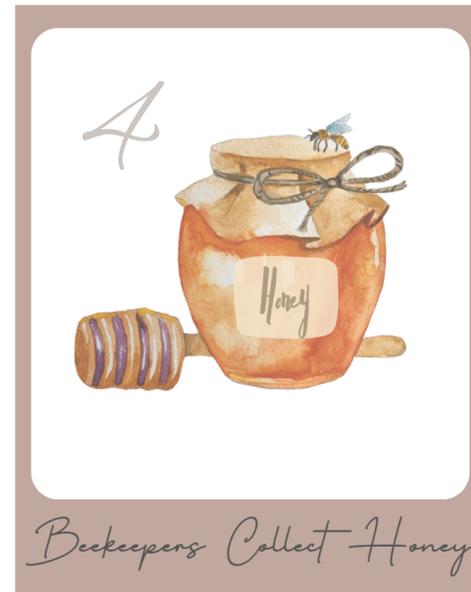


For flowers, the bee
is the messenger
of *Love*



Why Is Honeycomb Hexagonal?

Why the hexagon, of all shapes? Bees are extremely intelligent, and they happen to be excellent mathematicians. Honeybees have figured out that packing a hexagonal pattern together over and over again creates the most efficient use of space. This shape allows the bees to fit into the structure, as well as a great place to store the honey they make. Let's call this their very own honey jar. Honeycomb is important as it is a efficient way to store not only their honey ,but also their nectar, pollen, water, and their baby larvae.



How bees make honey stages

Cut out each square and arrange in order 1- 4

3 TYPES OF BEE CLASSES



Queen Bees

Queen bees have one of the most important roles in the colony. They're the founders and main egg producers, ensuring the survival of the hive, they mostly sit in the middle of the hive. The workers surround the queen to keep her protected and tend to her every need. The queen will have a much longer abdomen than any of the others, and her wings will appear smaller because of it. In most cases the queen will be easy to identify based on just how much longer than the other bees she is. A queen bee can lay up to 2000 eggs in a day that are attended to by drones, as well as herself. An egg that is fully fertilized can become a new queen, while the eggs that are not fully fertilized become new drones and workers.



Drone Bees

Drone bees are male bees, responsible for mating with queen bees. They are usually larger than the worker bees and do not have stingers. They do not forage, produce honey, or do any other tasks. They will sit around in the nest, being fed by the worker bees until it is time to mate. Drones are the result of unfertilized eggs, where female bees come from fertilized eggs. Drones have big eyes. Drone bees are slightly larger than their sisters.

Worker Bees

A bee colony would be nothing without its worker bees. They tend to the nest, construct new cells, take care of the queen and babies, and forage flowers for food and a lot more. Worker bees are all female. Worker Bees have a smaller body than the queen and drones and have a stinger. The worker bee's legs, especially the hind legs, are larger as they have pollen baskets.



LIFE CYCLE OF Bees

FACTS



1 Eggs

Every bee begins life as an egg. Almost all species of bees lay their eggs in protected locations. Social bees care for their eggs, whereas solitary bees do not. Honeybee queens lay their eggs in cells inside the beehive. Bumblebee queens brood their eggs in their underground nests. The bumblebee lays her eggs on balls of pollen, taking care to keep them warm.

2 Larva

The larval stage is the first part of a bee's life. At this point, bees look more like maggots than the winged insects they will become. Larvae do very little besides eating and molting. Honeybee larvae destined to become workers grow quickly. In only nine days, they are ready to reach the next stage of life. Queen honeybee larvae grow even faster, pupating after approximately six days. Leafcutter bees, a solitary species, spend roughly two weeks as larvae.

3 Pupa

Once a bee larva is sufficiently grown, it will form a pupa. The larva spins a cocoon around itself, preparing to transform. During the pupal stage, the bees don't feed. Solitary bee larvae pupate on their own without assistance. Social bee larvae will receive support from their caretakers. For example, worker honeybees cap the pupating larvae cell with beeswax.

4 Bee

Once the pupa is matured, the new adult bee chews its way out of the closed-cell. This stage takes around 10 to 23 days, depending on the type of bee it will become. The adult stage is the final stage of metamorphosis for the bee. It is now fully grown. A new queen bee is born to replace a dying queen or she will leave the colony to start her own.

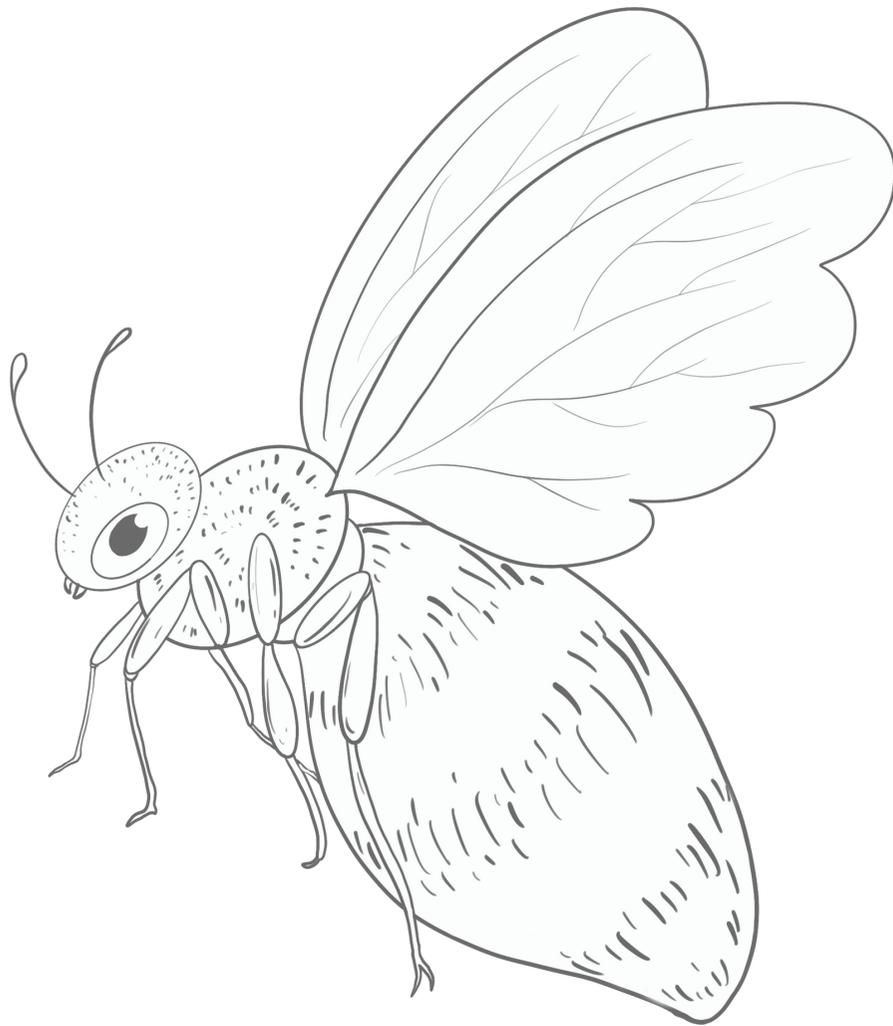



Cut out each
picture





Honey Bee



Can you colour me in ?



DID YOU KNOW?



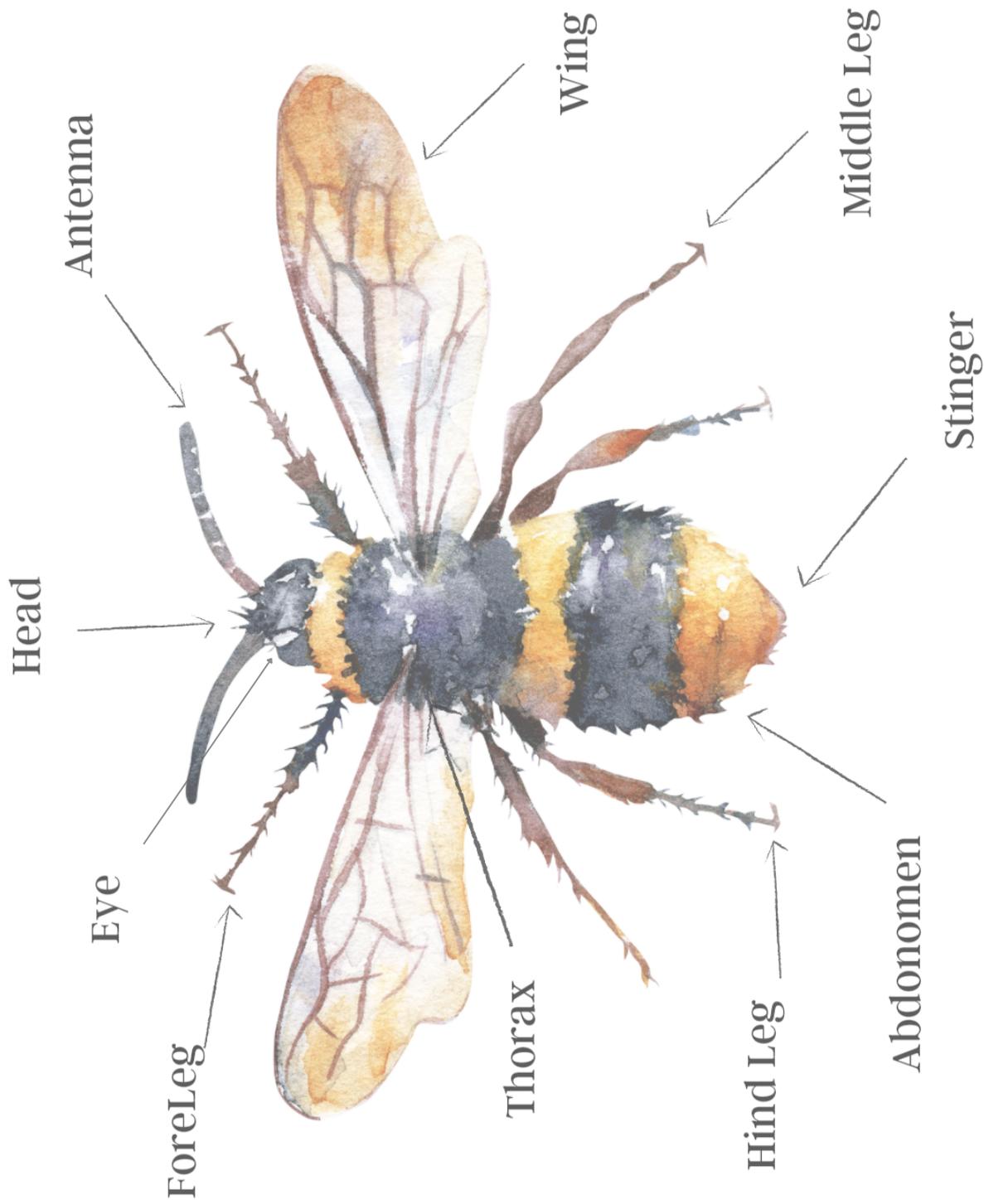
- Bees have 5 eyes
- Bees are insects, so they have 6 legs
- Male bees in the hive are called drones
- Bees fly about 20 mph
- Female bees in the hive (except the queen) are called worker bees
- Number of eggs laid by queen a day can be close to 2000
- Losing its stinger will cause a bee to die
- Bees have been here about 30 million years!
- Bees carry pollen on their hind legs in a pollen basket or corbicula
- An average beehive can hold around 50,000 bees
- Foragers (worker bees) must collect nectar from about 2 million flowers to make 1 pound of honey
- The average forager makes about 1/12 th of a teaspoon of honey in her lifetime
- Bees have 2 pairs of wings
- The principal form of communication among honey bees is through chemicals called pheromones
- One of the odd facts about honey bees is they don't sleep, Instead of shutting down when it's time to sleep, bees stay conscious. However, they remain still throughout the night to conserve energy for foraging after the sun comes out.
- Honey Bees are responsible for a third of the food we eat by helping pollinate the crops



Can you draw a busy bee collecting
Nectar from a pretty flower?



ANATOMY OF A BEE



How bees Make

Honey



4

.Skilled beekeepers take some of the finished honey from the hive, taking care to not harm or damage the colony ,while leaving some honey for the bees

1

Once a bee finds a flower, they use their long tongue like a straw to suck nectar out of the plant. That nectar is then stored in a second stomach, also known as a "honey stomach."



After they have filled up their second stomach, the bees will return to their hive and start to pass the nectar through their mouths to other bees. These bees will chew on the nectar for about 30 minutes. Then they pass it along to another bee! As the nectar is passed from bee to bee, it is turned into honey.



Once the nectar becomes honey, the honeybees will store it in honeycomb cells, which act as little jars made of wax. The bees then flap their wings over the honey to make it thicker and more like syrup instead of sweet juice. Once the honey is ready, the bees will seal the cell using a wax lid to store it for later.

3

