

Student Glossary

Abdomen—the rear body region of a honey bee composed of nine segments and containing many organs including those for digestion, reproduction, and respiration.

Adult—a fully formed, mature honey bee.

Antenna(e)—the moveable, sensitive feelers on an insect's head which detect odor and movement.

Bee dances—a way honey bees communicate to find nectar sources.

Bee metamorphosis—the four stages of transformation in the life of a honey bee.

Beebread—a mixture of nectar and pollen.

Beeswax—substance secreted from glands located on the underside of the worker bee's abdomen.

Brood—the offspring produced by the colony (eggs and larvae).

Brood cells—cells that house developing bees.

Cell—a hexagonal wax chamber built of beeswax for brood rearing and storage of honey and pollen.

Cocoon—the silk chamber a larva spins around itself just prior to the pupal stage of development.

Colony—a group of honey bees living together.

Comb—a structure made up of hexagonal wax cells.

Compound eye—an eye made up of thousands of tiny lenses that allow a honey bee to see ultraviolet light, which is invisible to the human eye, as well as visible light (except red).

Dehydration—the removal of water from a substance.

Diameter—the length of a straight-line segment through the center of a sphere.

Drone—a male honey bee that is produced from an unfertilized egg.

Drone cell—a brood cell that is larger than the normal worker brood cells and in which the queen deposits drone eggs.

Egg—laid by a queen bee, this is the first stage in the life of a honey bee.

Exoskeleton—the hard outer covering which forms a bee's body.

Guard bees—the bees that guard the hive entrance.

Head—the forward body region of the honey bee's three sections that contains the compound eyes, simple eyes, antennae, mandibles, and proboscis.

Hexagon—a polygon having six sides and six angles.

Hive—a home to a colony of bees.

Hive scent—all the worker bees of a colony produce a scent that is characteristic of their colony and is recognized by all the members.

Honey sac—the stomach-like organ that is connected by a funnel shaped valve to the digestive tract. The nectar stored here will be unloaded into empty hive cells or passed on to house bees for food.

Honeycomb—six-sided wax cells in a beehive.

Larva—hatched from the egg the queen bee lays, the larva will pupate and eventually turn into an adult insect.

Legs—a honey bee has three pairs of segmented legs used not only for walking but also to dust off antennae, brush pollen out of the thousands of branched hairs that cover the body, and to store pollen.

Mandible—located on either side of the honey bee's head, these jaw-like structures are used to chew honey and pollen, and to knead wax.

Mate—to join together as male and female to produce young.

Midgut or ventriculus—the stomach section in the abdomen which digests food.

Nectar—a sweet liquid secreted by flowers of various plants.

Ocellus—simple eye with a thick lens that can sense changes in the brightness of daylight.

Pollen—the fine, powder-like material produced by flowering plants.

Pollen basket—an area on the hind legs of honey bees used to transport pollen.

Polygon—a closed figure bound by three or more sides.

Proboscis or tongue—a straw-like structure used for sucking nectar or honey.

Propolis—a resin-like material collected from trees by bees. Used to construct and seal parts in the beehive and protect the hive from the elements.

Pupa—the third stage in a bee's life, during which the larva's body changes to an adult.

Queen—a female bee that lays eggs.

Royal jelly—a milky, yellow syrup that is very high in protein, that young worker bees secrete from glands inside their heads and feed to larvae.

Scent gland—found at the tip of the abdomen of worker bees and produces a scent characteristic of that particular colony.

Stinger—found in a chamber at the end of the abdomen (in female honey bees only) and is used to defend against intruders.

Thorax—the middle section of the honey bee's three sections that contains the flight muscles, the wings, and six legs.

Wax—the substance excreted from the glands located on the underside of a worker bee's abdomen.

Wax gland(s)—four pairs of glands that are specialized parts of the body wall. During the wax-forming period in the life of a worker, they become greatly thickened and take on a glandular structure.

Wing(s)—the honey bee's back has two sets of flat, thin, body structures that allow it to fly. The forewings are larger than the hind wings.

Worker—the female bee that performs all the jobs, both inside and outside the hive, necessary for the survival of the colony.

