



UNIT FOR WEEK 2

LIFE CYCLE



LIFE STAGES

The four life stages are egg, larva, pupa and adult. The queen produces all of the eggs. Before she starts egg production, she mates only once with up to 15 different male, drone bees from several other hives, which makes her fertile for life. The variety of mates for the queen assures a healthy diversity of the bee population in the colony.

Back in the hive, she lays up to 2000 eggs per day! The eggs are deposited one per cell in the brood comb. After 4 days, the larva (a small, white, grub-like form) hatches. The worker nurse bees feed the larva royal jelly (a milky, rich bee secretion) for 3 days. They then feed the larva beebread, a combination of pollen, nectar, and enzymes for the remaining 3 days. The cell is then capped, and the pupa (developing bee) forms and grows within the cell. It takes a total of 23 days from the time the egg was deposited for the honey bee to become fully developed and ready to exit the cell.

Fertilized eggs become female, worker bees, and unfertilized eggs become male, drone bees. When the queen dies or becomes unproductive, the other bees will “make” a new queen by selecting a young larva and feeding it a diet of royal jelly for its entire larva stage. For queen bees, it takes 16 days from egg to emergence.

LIFE STAGES TABLE

	Queen	Worker	Drone
Gender	Female	Female	Male
Fertilized Egg	Yes	Yes	No
Egg	3 Days	3 Days	3 Days
Larva	5.5 Days	6 Days	6.5 Days
Pupa (Capped Cell)	7 Days	12 Days	14.5 Days