



Class Insecta: Three major body regions in honey bees

**Head:** Houses large share of sensory organs - eyes, antennae,

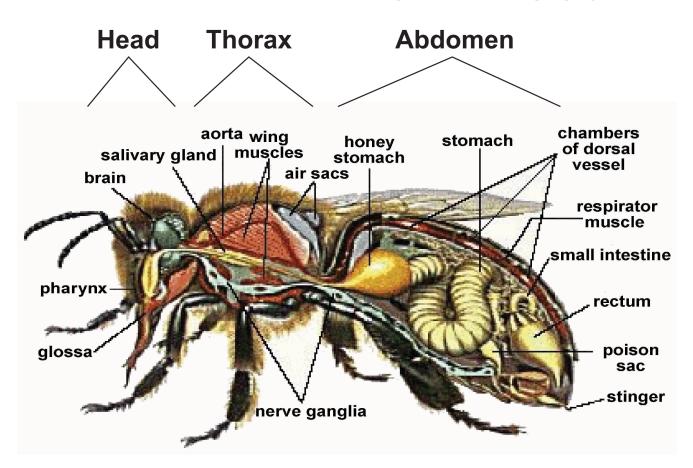
mouth parts

**Thorax:** Consist mainly of locomotory appendages - legs, wings

and muscles for powering them

**Abdomen:** Chiefly consists of body organs - for digestion, waste

removal, reproduction organs, and stinging system



The honey bee is part of a group of insects that engage in complete *metamorphosis*, with 4 developmental stages:



Egg Egg is sausage-shaped
1/16 inch long (queen rearing stage)
Hatches after 3 days
Should stand on end at bottom of cell



Larva Starts as a bright white grub
Larva adopts a C-shaped posture
Elongates to prepupa - heads up
Workers cap over cell

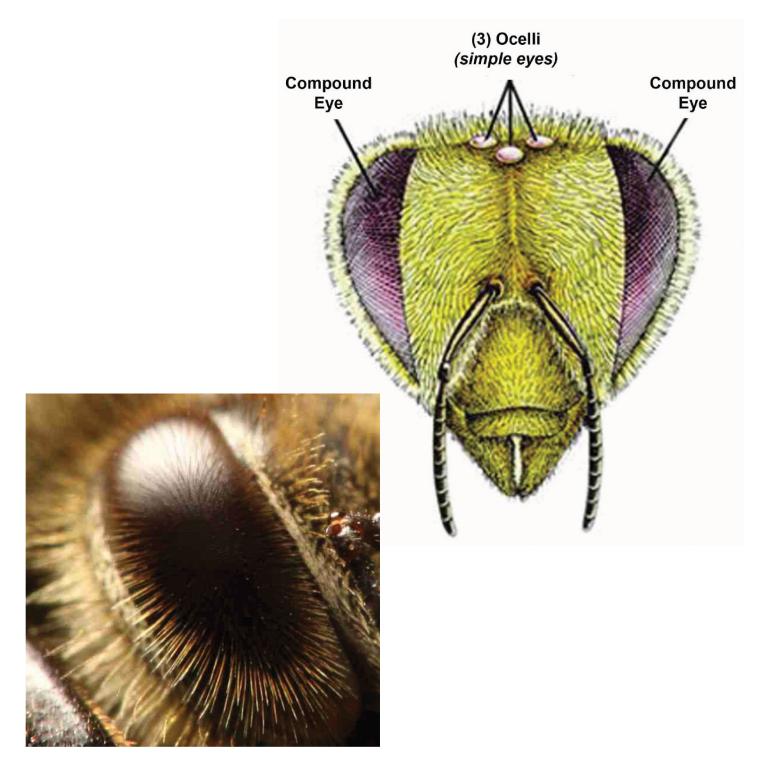


Pupa Changes to likeness of adult bee
Body regions become apparent
From no pigmentation to darkening
Hair and wings develop



**Adult** 

Chew out through cell capping Immediately starts cleaning out cell Begins housekeeping & feeding brood 10-15 days average before flying or wax production



## **What They See**

## Compound Eye Composite



**Iridescent Nectar Guides** 





Bees Do Not See Red Looks Black



