

- Flying insects typically have two pairs of wings made of chitin.
- Flight has allowed insects to disperse long distances and to colonize a wide variety of habitats.

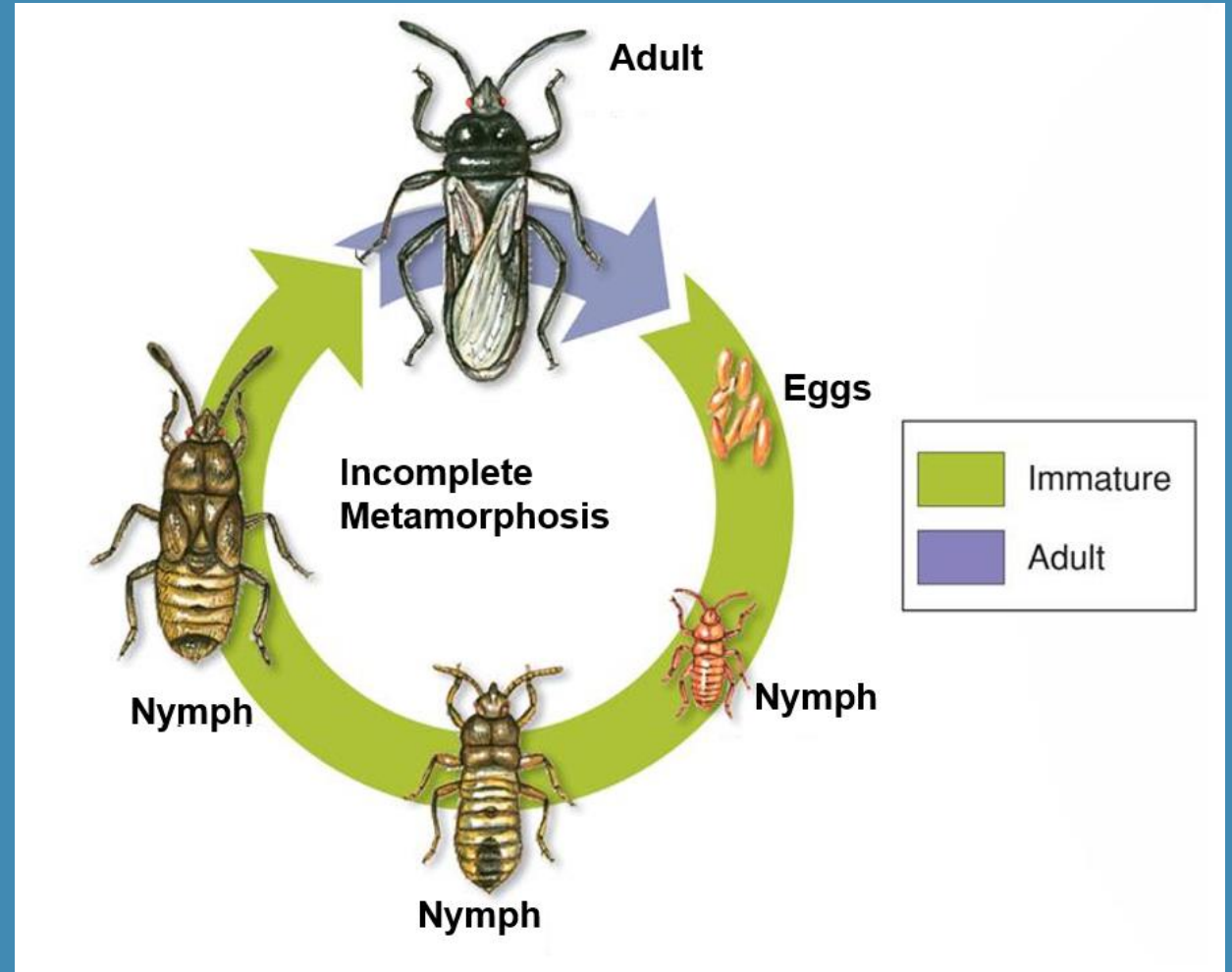


# METAMORPHOSIS

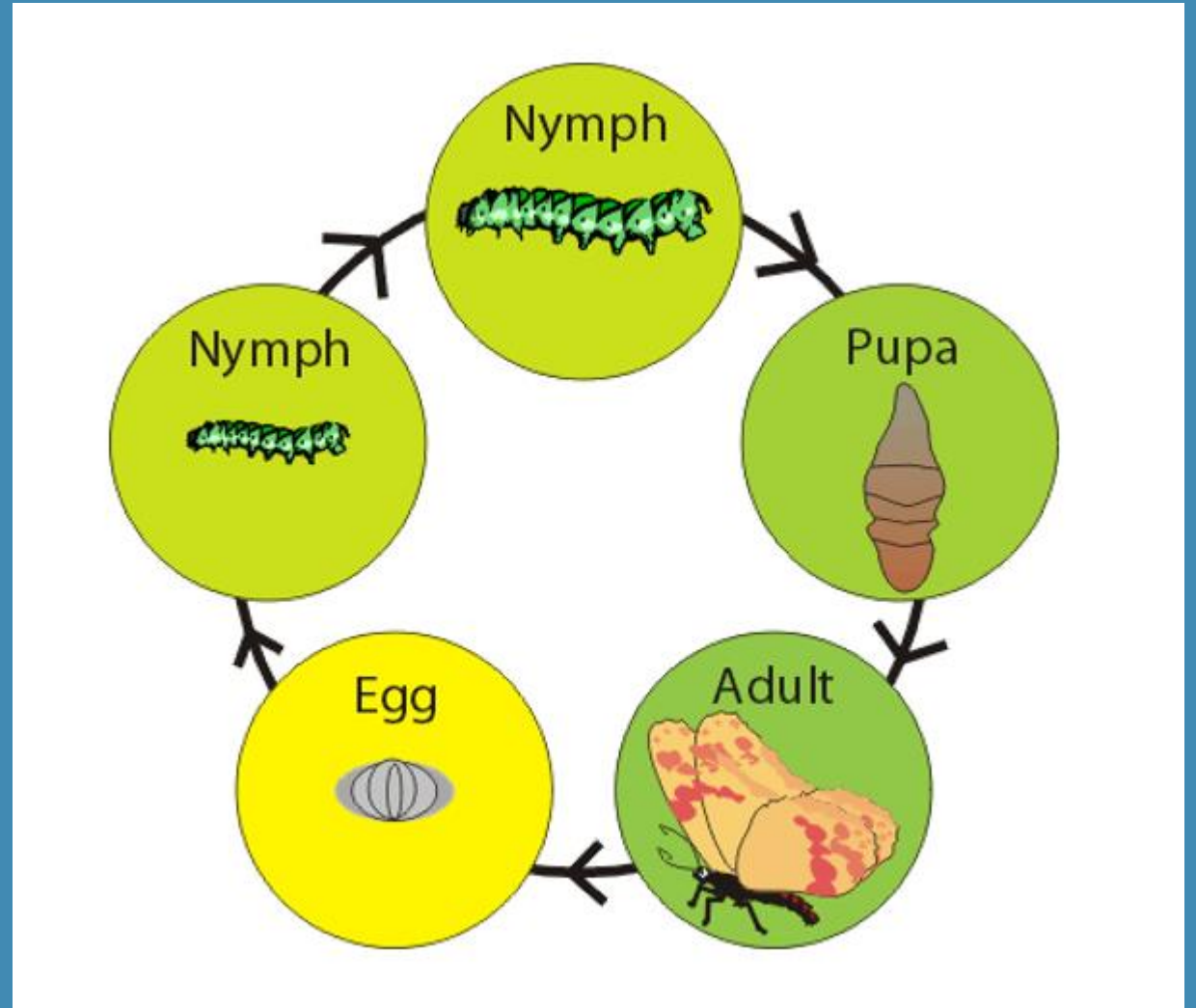
- The growth and development of insects usually involves metamorphosis, which is a process of changing shape and form.
- Insects undergo either incomplete metamorphosis or complete metamorphosis.



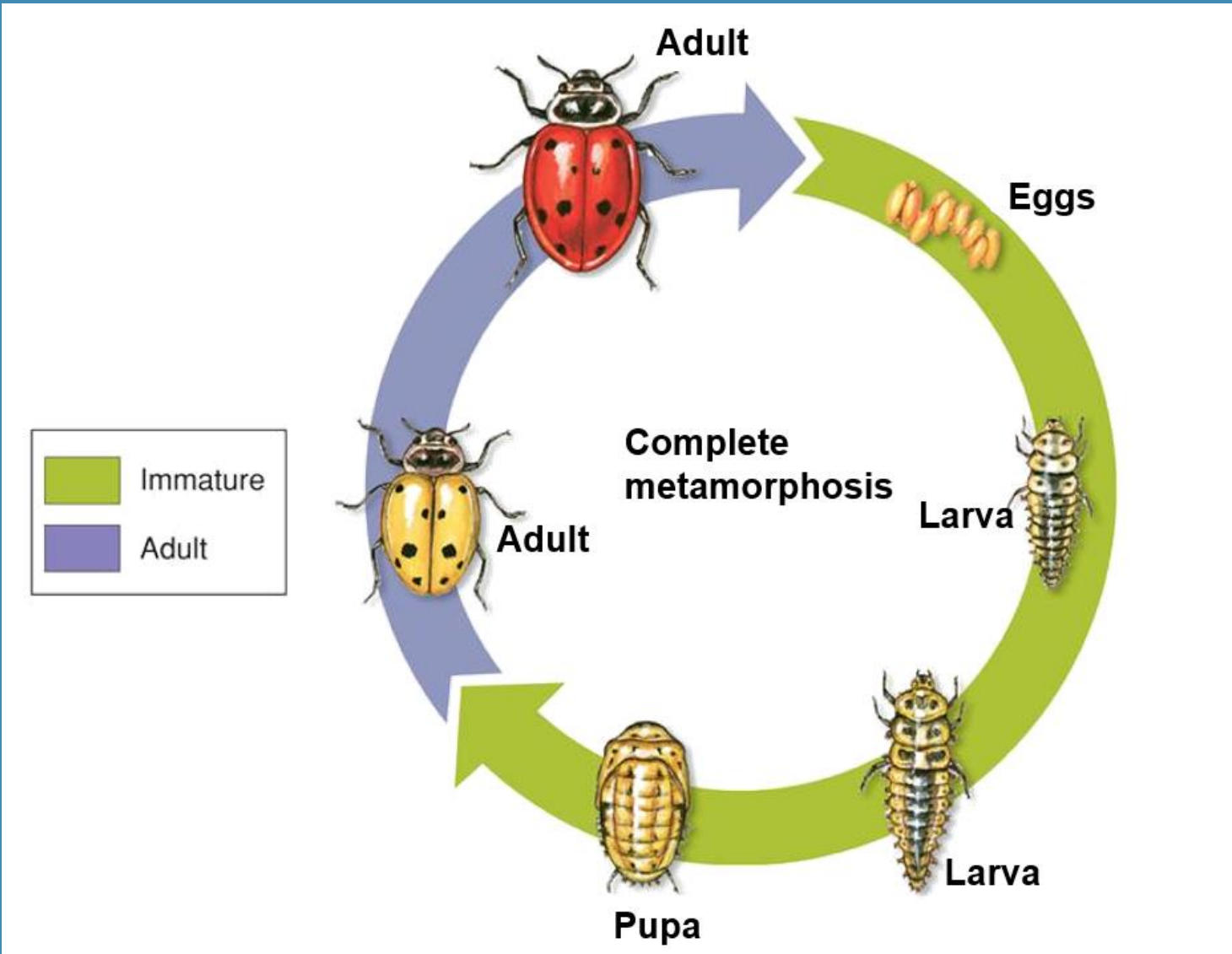
- Immature insects that undergo incomplete metamorphosis look very much like the adults.
- These immature forms are called nymphs.



- In complete metamorphosis, animals hatch into larvae that look and act nothing like their parents.
- They feed and grow rapidly and molt a few times.
- They undergo a final molt and change into a pupa—the stage in which an insect changes from larva to adult.

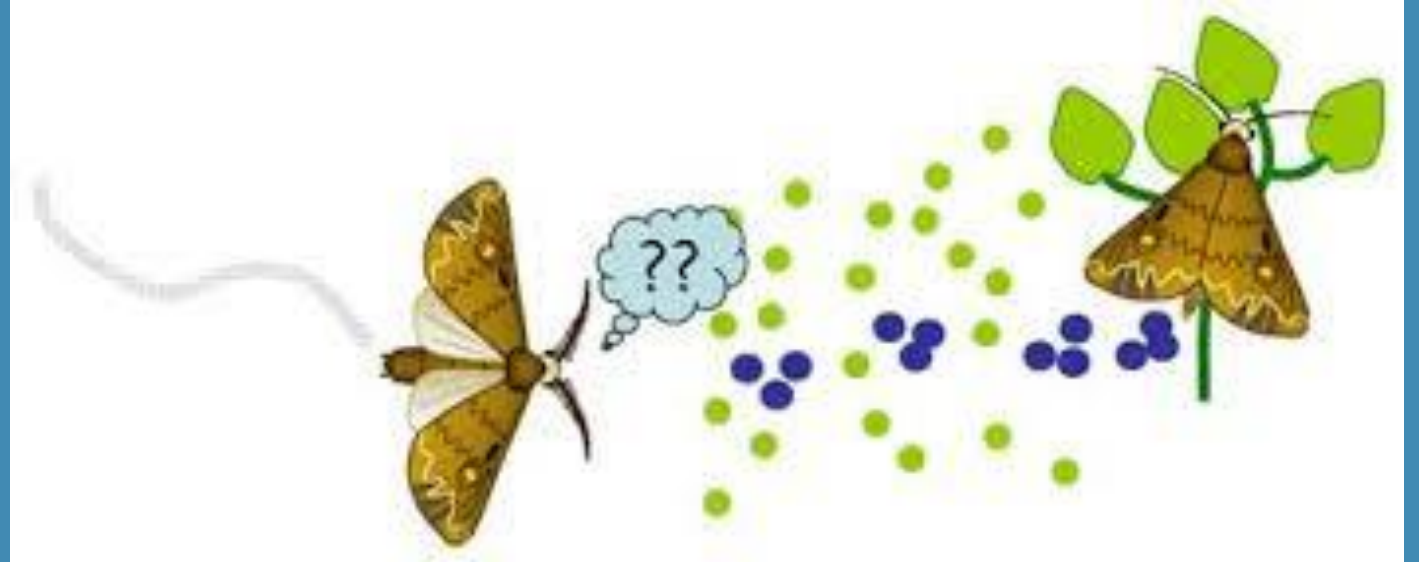






# COMMUNICATION

- Insects communicate using sound, visual, chemical, and other types of signals.
- Much of their communication involves finding a mate.



# INSECT SOCIETIES

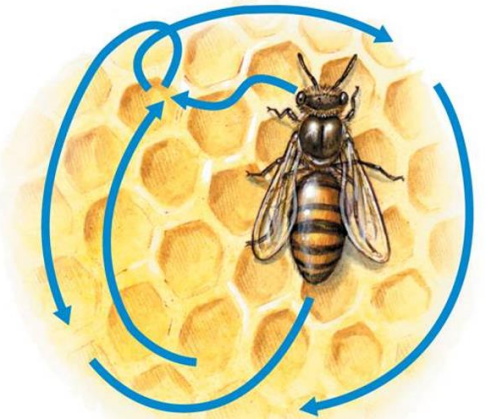
- Ants, bees, termites, and some of their relatives form complex associations called societies.
- A society is a group of closely related animals of the same species that work together for the benefit of the whole group



# COMMUNICATION IN SOCIETIES

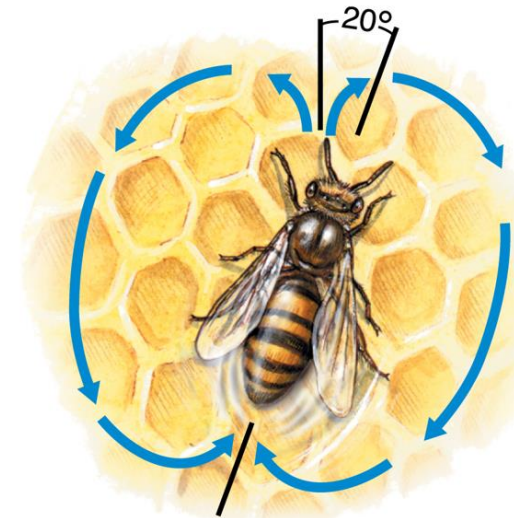
- Each species of social insect use visual, touch, sound, and chemical signals to communicate information among members of the colony.
- Honeybees communicate information about food through a series of complex movements.

The round dance indicates that food is fairly close to the hive.



**Round Dance**

The waggle dance indicates that food is farther away from the hive. It also indicates the direction of the food.



**Waggle Dance**