

# For Creative Minds

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## Match the Insect “Cousins”

Using what you learned reading the book, match the insect “cousins” to each other. Insects shown are not to size.

ant



butterfly



red palm weevil



cricket



damselfly



dragonfly



grasshopper



ladybug



moth



walking leaf



walkingstick



wasp



Answers: ant/wasp, red palm weevil/ladybug, butterfly/moth, cricket/grasshopper, damselfly/dragonfly, walking leaf/walkingstick

# Insect Scavenger Hunt

They may be small and fast, but insects leave traces everywhere! Try to find as many different insect traces in your area as you can! Try looking at different times of day, or different seasons throughout the year!

This page may be photocopied or printed from [www.ArbordalePublishing.com](http://www.ArbordalePublishing.com) to track insect discoveries. Feel free to have kids track the dates, time of day, or even by season.

Find an anthill.



Find a leaf or flower that has been eaten.



Find some flowers with a bee or butterfly eating.



Listen for a cricket or grasshopper.



Find insects under a rock or log.



Find tiny holes in tree bark.



Find insects by digging in the dirt.



Find a mosquito bite.



Find a cicada shell or hear one calling in the trees.



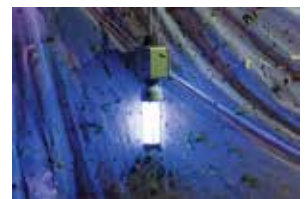
Find a ladybug.



Find a bee or wasp nest (but don't touch).



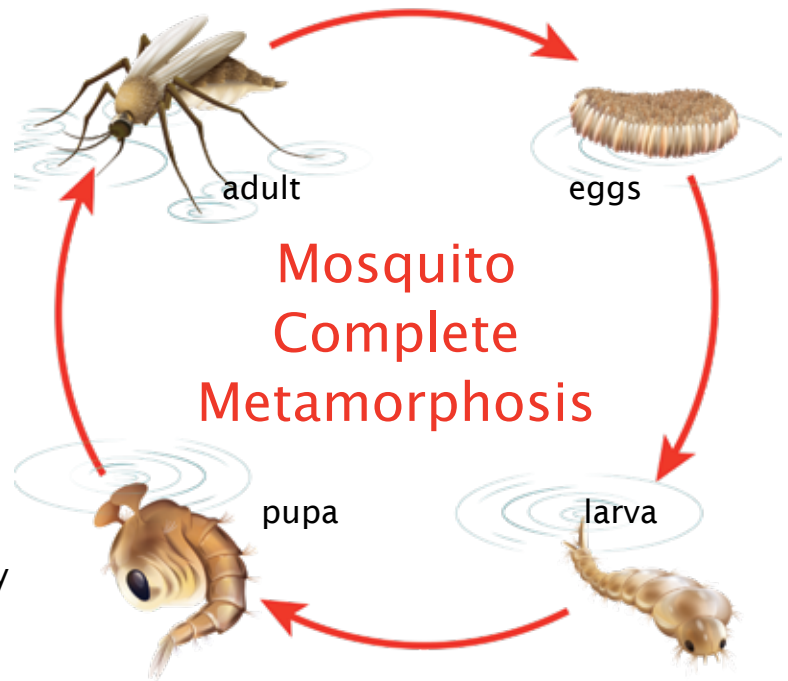
Shine a light outside at night to see what insects approach.



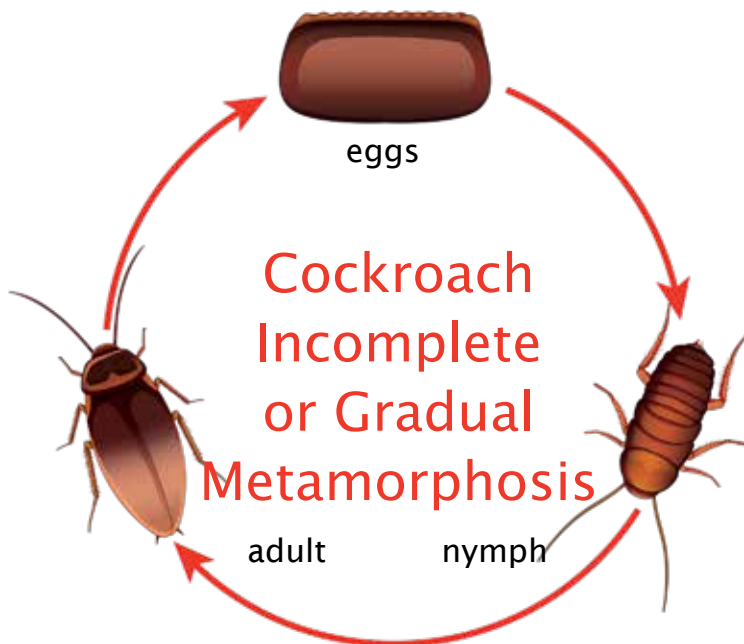
# Insect Life Cycles

Depending on the type of insect, it either goes through a complete change, called metamorphosis or an incomplete or gradual metamorphosis.

- An Insect that goes through a complete metamorphosis begins its life when it hatches from an egg into a larva that doesn't look anything like the adult insect it will become.
- The larva eats and grows. In some cases, the larva adds body segments and goes through body changes (instars). As it goes through the instar levels, it molts its outer skin (exoskeleton) with a new one growing underneath. Whether a larva goes through instars or how many levels depends on the type of insect.
- At the end of the larval stage, the larva turns itself into a pupa.
- While inside the pupa, the insect's body is changing so that when it emerges from the pupa, it is a full-grown adult insect.



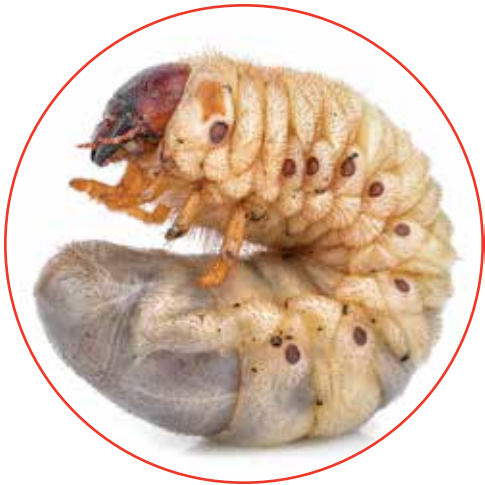
- An Insect that goes through an incomplete or gradual metamorphosis hatches from an egg into a nymph that looks like tiny versions of the adult insects but without wings.
- As the nymph grows, it molts its exoskeleton and grows a new, bigger one. A nymph will molt several times.
- By the time it has finished molting and growing, the insect has grown its wings and is an adult.



## Complete or Incomplete Metamorphosis?

Based on what you learned on the previous page, see if you can determine whether the insect undergoes a complete or incomplete/gradual metamorphosis during its life cycle. Larva is singular, larvae is plural.

atlas caterpillar (larva) molting



beetle grub (larva)



cicada nymph molt



cricket nymph molt



dragonfly nymph



spongy moth caterpillars  
(larvae)



swallowtail caterpillar (larva)

Did you know that a butterfly pupa is called a chrysalis  
and a moth pupa is called a cocoon?

Answers: Complete: Atlas caterpillar/butterfly, beetle, swallowtail butterfly, spongy moth  
Incomplete/Gradual: cicada, cricket, dragonfly