



Insect Adaptations

What is an adaptation?

Some adaptations help insects:

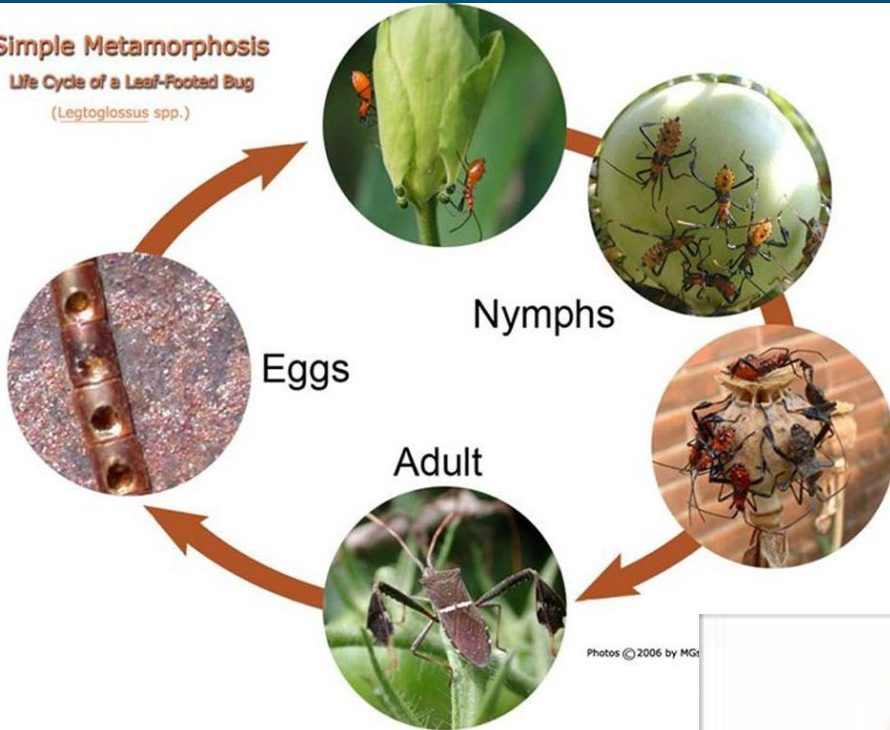
- Hide
- Protect themselves
- Eat different foods
- Move (ex. run, jump, fly)

Growth Adaptations: Different Life Cycles

Simple Metamorphosis

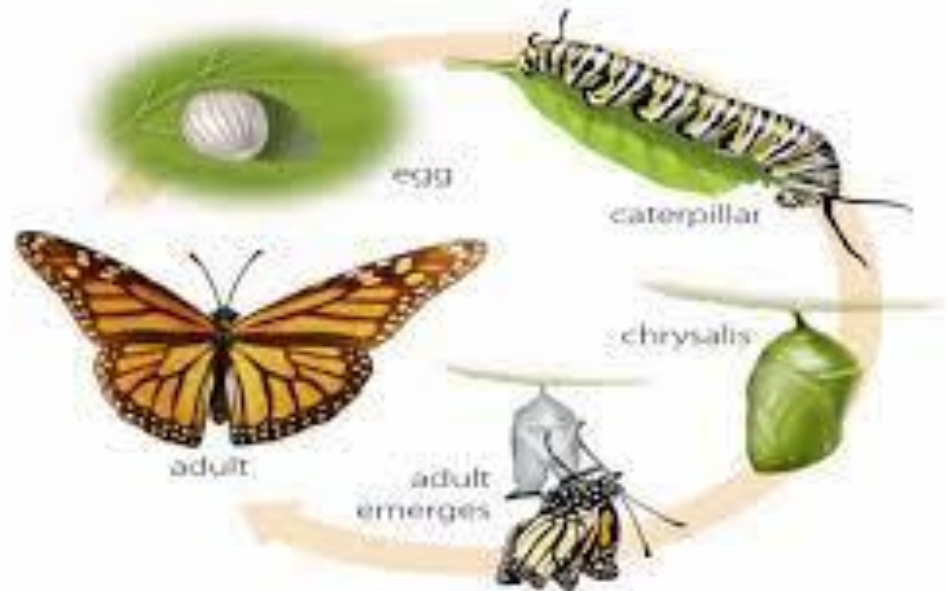
Life Cycle of a Leaf-Footed Bug

(*Leptoglossus* spp.)



Incomplete or simple

Complete



Protective Adaptations

- Wide range of ways to hid from potential predators or prey
- Camouflage – hiding in plain view; can involve color, shape, behavior to blend into environment (crypsis)
- Mimicry – hiding by looking like something else inedible



Protective adaptations: camouflage

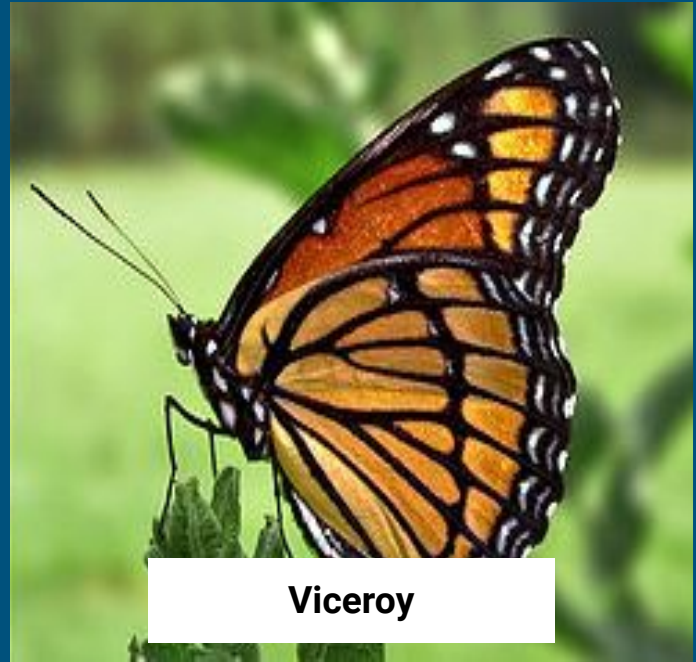


Protective adaptations: mimicry





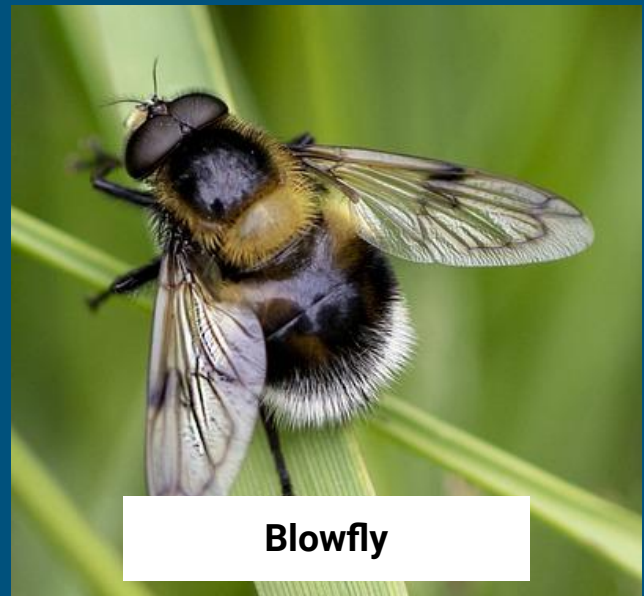
Monarch



Viceroy



Bumble Bee



Blowfly

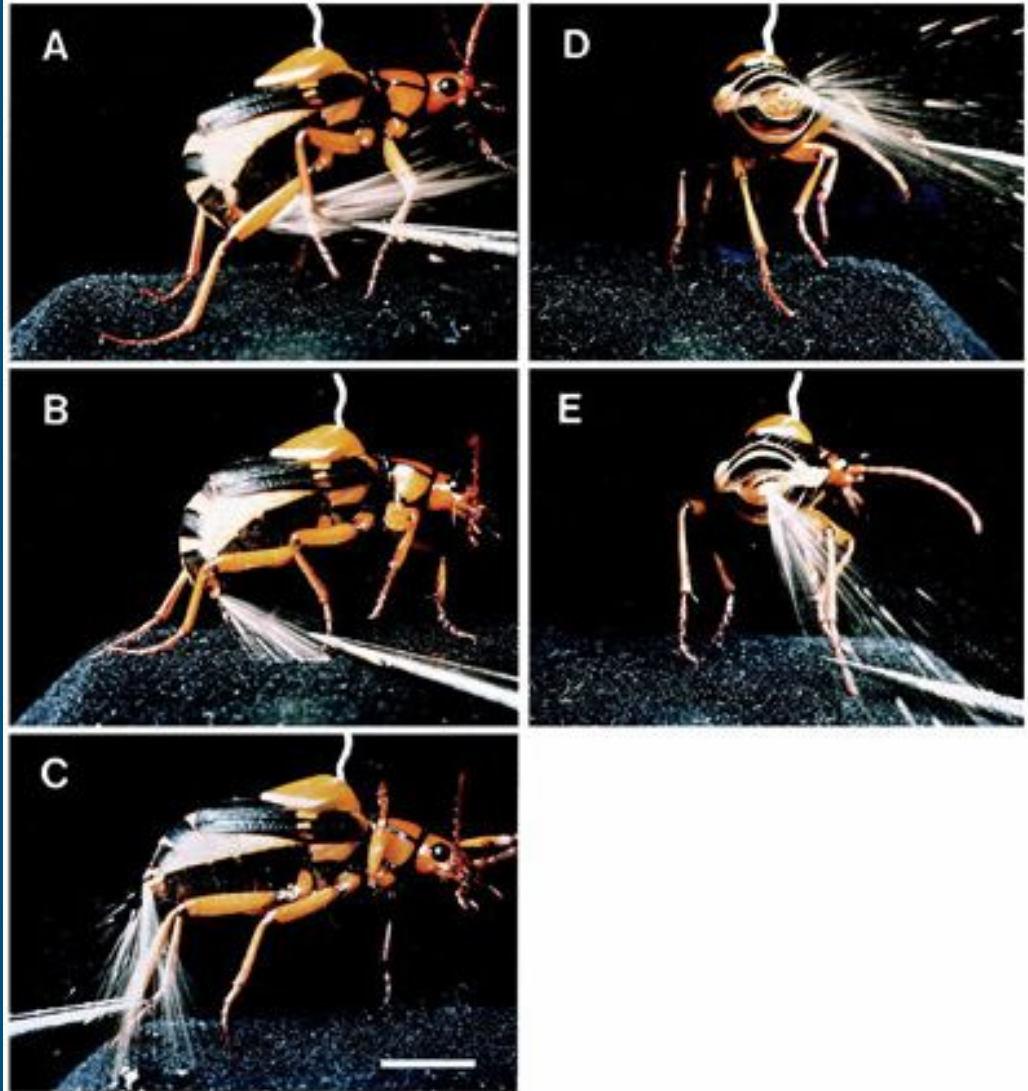
Chemical protection

- Don't taste good because of the food they eat (Monarch caterpillar)
- Spray bad smelling or tasting chemicals (swallowtail caterpillar and bombardier beetle)



Chemical protection cont.

Bombardier beetle



Lifestyle adaptations

Ecological niches of insects:

- Plant eaters
- Pollinators
- Predators
- Bioindicators

Herbivores

- Feed on plants
 - leaves or juices



Pollinators



Predators



Bioindicators



Aquatic insect communities are often used as bioindicators of our environment

Adaptations Activity

- Leg parts
- Mouthparts
- Wings
- Morphology & Coloration

In groups, work out which types of body parts these insects have and what it's function?