



Insect Defenses

8th Grade Science
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Insects are an important part of any food web; however, many of them have **adaptations** or **defense mechanisms** that help them avoid being eaten! They also help them survive challenges in their habitats!

Warning Colors

Insects use **warning colors** to alert predators that they may be poisonous, distasteful, or dangerous. Common warning colors are **yellow, red, and black**.



Bumble Bee



Yellow Jacket



Monarch



Palm Beetle



Milkweed Bug

Spikes & Stingers

Insects use **spikes and stingers** to **defend** against predation by helping them **fight off** attackers or to **kill** prey.



Cicada Killer



Hickory Horned Devil



Rainbow Scarab Beetle (Dung Beetle)

Chemical Defenses: Odors & Poisons

Insects use chemicals as defenses, such as **odors and poisons**, to defend themselves. Predators avoid these insects because they **smell bad, taste bad, or give off chemicals**.



Ladybird Beetles
Secrete their yellow blood which causes stains and smells bad



Saddleback Caterpillar (To Moth)
Have body hairs & spikes with an irritant that causes pain & itching



Bombardier Beetles
Shoot formic acid at predators



Paper Wasp
Many bees and wasps have venom that is released when they sting a predator; may also be used to help them catch prey

Mimicry

Insects use **mimicry** to help them **look like (or mimic)** a harmful insect in the hopes that predators will avoid them.



Monarch
Distasteful to predators



Viceroy
Looks like monarch in hopes that birds will avoid it as well

Let's see some more mimics!

Click the picture at right to go to the website → 

Camouflage

Insects that use **camouflage (or crypsis)** are colored in such a way that they are able to blend into their habitats.



Katydid

Let's see if you can find some insects!



Click the picture above to go to the website

