

# Adaptations in Predators & Prey

## *Predators vs. Prey*

Name \_\_\_\_\_

Date \_\_\_\_\_

Block \_\_\_\_\_

predators: \_\_\_\_\_

prey: \_\_\_\_\_

- **Adaptations in Predators**

The following are some adaptations that have developed in predator species to improve their ability to catch prey:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

- **Adaptations in Prey**

The following are some adaptations that have developed in prey species in order to improve their ability to avoid predation:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

### **Warning Colouration**

- some \_\_\_\_\_ (i.e. tastes bad or is poisonous) species advertise this fact with \_\_\_\_\_
- predators learn quickly to avoid these prey

example: blue ring octopus



**Batesian Mimicry**

- \_\_\_\_\_ species mimics \_\_\_\_\_ one
- example: flower flies (palatable) mimic honeybees (unpalatable)



**How does Batesian mimicry work?**

- predator eats honeybee and gets stung
- after getting stung several times, predators learn not to eat the honeybees
- since the flower flies resemble the honeybees, predators avoid the flower flies as well

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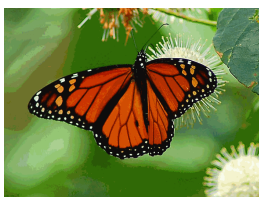


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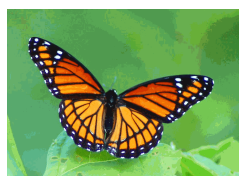
- if the predator was not stung almost every time it ate its prey, the predator would not learn to avoid the prey
- if the predator was eating more flower flies than honeybees, the predator would not learn to avoid the honeybees

**Mullerian Mimicry**

- \_\_\_\_\_ species that live in the same community mimic/resemble each other
- example: \_\_\_\_\_ butterflies and \_\_\_\_\_ butterflies mimic each other (both are unpalatable)



MONARCH BUTTERFLY



VICEROY BUTTERFLY

## How does Mullerian mimicry work?

- predator eats both the monarch butterflies and the viceroy butterflies and gets sick
- after getting sick several times, predators learn not to eat both species of butterfly
- since the monarch and viceroy butterflies resemble each other, predators learn to avoid both species faster than they would have if there was only one

## Camouflage

A species has colouration that will \_\_\_\_\_.

Some can actually change their colouring at will to blend in. \_\_\_\_\_



## Coevolution

- a change in one species acts as \_\_\_\_\_ on another species
- example: If only the fastest foxes in the fox population are able to catch rabbits, then only those foxes will survive long enough to reproduce. After several generations, the fox population has become faster. Now, the slower rabbits are nearly all consumed (because they are really easy for the faster foxes to catch), and only the fastest rabbits survive long enough to reproduce. After several generations, the rabbit population has become even faster, as a result, only the fastest of the fast foxes will survive long enough to reproduce, etc.