

Defense Mechanisms – Insect Survival

Glue the worksheet on page 13 (FAF Left).

Fill in Part A (front) as you watch the video on EDPuzzle.

Assignment: Defense Mechanisms: How to Avoid Predators

You also need to complete the video quiz.

Remember to use the rewatch button if you are unsure of a quiz questions. Your quiz score will be counted as a grade!

Defense Mechanisms

Name: _____

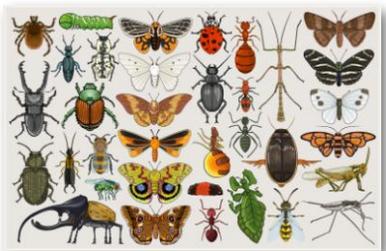
Part A: Watch the video on EDPuzzle to help you complete this worksheet. You also need to complete the video quiz as you watch the video. Use the re-watch button (arrow) if you are not sure of an answer!

1. Defense mechanisms are _____ or _____ that can help animals avoid being prey for a predator.
2. _____ and _____ are two ways an animal can avoid being eaten.
3. Insects use a type of camouflage, called _____, to look like objects in their habitats, such as thorns, twigs, and leaves.
4. Some insects use _____ colors to startle or scare away their predators, such as the wings on the jungle nymph.
5. Small butterflies use their _____ to startle predators or they can make predators think they are a much larger animal.
6. Animals use bright colors, or _____, to tell predators they are dangerous, poisonous, or dangerous.
7. Common warning colors are _____.
8. _____ mimicry occurs when less dangerous insects look alike, but predatory occurs when a harmless insect looks like a poisonous or dangerous one.

Part A: Watch the video on EDPuzzle to help you complete this worksheet. You also need to complete the video quiz as you watch the video.

1. Defense mechanisms are **BEHAVIORS** or body **FEATURES** that can help animals avoid being prey for a predator.
2. **CAMOUFLAGE**, **STARTLE**, **DISRUPT**, and **WARN** are four ways an animal can avoid being eaten.

Eat OR be eaten?



3. Insects use a type of camouflage, called **MIMESIS**, to look like objects in their habitats, such as thorns, twigs, and leaves.

Flower Mantid

Umbonia crassicornis
A thorn mimic treehopper




<https://www.thornmimicresearch.com/umbonia-crassicornis/>
<https://www.pinterest.com/pin/201205/umbonia-crassicornis-362>



Eastern Comma



Span Worm (Caterpillar)



Wood Nymph Moth



Giant Swallowtail

<https://www.pinterest.com/pin/201205/umbonia-crassicornis-362>
<https://www.pinterest.com/pin/201205/umbonia-crassicornis-362>

4. Some insects use **BRIGHT** colors to startle or scare away their predators, such as the wings on the jungle nymph.

Add to notes:
FLASH COLORATION



Mourning Cloak (*Nymphalis antiopa*)



Red Admiral (*Vanessa atalanta*)



Common Buckeye (*Junonia coenia*)



Question Mark (*Polytonia interrogationis*)

Some insects, such as the Mourning Cloak, hibernate during the winter as pupa or adults. Other insects hibernate as eggs or larva.

<http://www.hsu.edu/Academics/ARNature/Trivia/9th-Butterflies-Color.html>

5. Owl butterflies use their **EYESPOTS** to startle predators or they can make predators think they are a much larger animal.



Owl vs. Owl Butterfly



Spicebush Swallowtail caterpillar

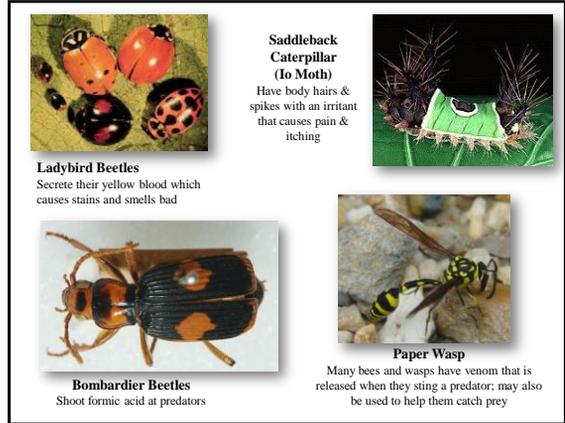


Buckeye Butterfly

Buckeyes, monarchs, and dainty sulfurs are three butterflies that migrate or head to warmer parts of the globe to avoid the cold temperatures and lack of food.

6. Animals use bright colors, or **WARNING COLORATION**, to tell predators they are distasteful, poisonous, or dangerous.

7. Common warning colors are **RED**, **BLACK**, & **YELLOW**.



8. **MIMICRY** occurs when animals mimic other animals in color pattern, shape, or behavior.

9. **MULLERIAN** mimicry occurs when two dangerous insects look alike, but **BATESIAN** mimicry occurs when a harmless insect looks like a poisonous or dangerous one.

