

## Commensalism

In some symbiotic relationships, one partner benefits, but the other is neither harmed nor helped. For example, hermit crabs use discarded snail shells to protect themselves. This type of symbiotic relationship is called commensalism.

Another example of commensalism is when one organism attaches itself to another for transportation. Burdock seeds need to be dispersed over a wide area. Their seeds have adapted to this need by evolving velcro-like hooked spines. These spines stick to the fur of a passing animal and are carried to a new place.

Still another type of commensal relationship involves mimicry. Mimicry is when one organism closely resembles another organism. For example, the Viceroy butterfly has evolved to look very much like a Monarch butterfly. Why? The larvae of the Monarch eat and store a substance that makes them bad-tasting. Predators learn to avoid eating them. Because the Viceroy looks so much like a Monarch, predators avoid them, too.



*The Monarch, in the picture at the left, is slightly larger than the Viceroy, shown at the right.*

### FOCUS QUESTIONS

1. Explain the difference between mutualism and commensalism.

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2. Why is the relationship between the Monarch and the Viceroy butterflies a commensal relationship?

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### ACTIVE READER

**1 Identify** *Underline the sentence that defines commensalism.*

**2 Recall** *Who benefits from a commensal relationship?*

\_\_\_\_\_ *only one organism*

\_\_\_\_\_ *both organisms*

\_\_\_\_\_ *neither organism*