

## Pollinator Garden Basics: Scavenger Hunt

Answer each question using your own words and complete sentences.

1. Describe the basic life cycle of insects - both bees and butterflies – which is called complete metamorphosis.

*Complete metamorphosis has 4 stages. They are egg, larva, pupa, and adult.*

- Do all species of butterfly live for the same amount of time? Support your answer with evidence.

*No, size is a factor with the larger butterflies living longer. The average life span of a butterfly is about one month. However the tiny butterflies may only live one week. The Monarch may live as long as nine months.*

<http://www.thebutterflysite.com/how-long-butterflies-live.shtml>

- Do all butterflies start in the spring as a caterpillar? Support your answer with evidence.

*No, some butterflies, such as the Eastern Black Swallowtail, might overwinter in their chrysalis and emerge from their chrysalis in the spring or summer. Different species of butterflies may overwinter in different stages of the butterfly life cycle.*

- Do all species of bees live for the same amount of time?

*“... Adult bees can live about a month (mason, mining bee), a year (bumble bee), or three years (large carpenter, western honey bee) depending on the species and sex.”*

<http://w3.biosci.utexas.edu/jha/about-native-bees>

- Where do bees go in the winter?

*Bees may go underground, into leaf litter, or burrowed into hollow stems.*

2. What is the difference between a chrysalis and a cocoon?

*Moths weave a protective cocoon around themselves. The butterfly's pupa has a chrysalis. The chrysalis is the hardened exterior of the pupa that emerges when the caterpillar sheds its skin for the last time.*

3. What do caterpillars eat? (a tricky question☺)

*The caterpillar of different butterflies eats different plants. For example, the Monarch butterfly caterpillar will only eat milkweed. The Eastern Black Swallowtail caterpillar will eat fennel, parsley, and rue.*

4. What do bees eat?

*“Worker bees gather both pollen and nectar from flowers to feed to the larvae and other members of the colony. Nectar is the sweet fluid produced by flowers to attract bees and other insects, birds and mammals. Worker bees drink the nectar and store it in a pouch-like structure called the crop.”*

From

<https://cals.arizona.edu/pubs/insects/ahb/inf4.html#:~:text=Worker%20bees%20gather%20both%20pollen,like%20structure%20called%20the%20crop.>

*“Bees feed exclusively on sugary nectar and protein-rich pollen from flowering plants, unlike the carnivorous wasps from which they evolved.”* From <https://www.nwf.org/Educational-Resources/Wildlife-Guide/Invertebrates/Bees>

5. What is a host plant?

*Host plants play host to the butterflies' eggs and then caterpillars. The butterflies' larval form, caterpillars, will only eat a specific type or types of plants.*

6. What is a nectar plant?

*Nectar plants provide the food, called nectar, for butterflies and bees.*

