

READING SCIENCE!

Name: _____

Date: _____

How to Create a Butterfly Garden

Lexile: 1020L

- 1 Butterflies are amazing creatures – they go through the process of metamorphosis, changing from a wiggly caterpillar into a beautiful winged insect. If you would like to observe this process at work, you can. Just plant a butterfly garden!



- 2 A butterfly garden is a garden where the plants have been specially chosen to attract the butterflies that live in the area.
- 3 **Step 1: Learn**
To start a butterfly garden, you must begin by learning about the types of butterflies in your area and the plants they like. To discover which butterflies live in your area, you can ask a biologist at a state park or conservation area, check out a library book about butterflies, or look for information on the internet.
- 4 Once you know the kind of butterflies you are going to attract, you need to figure out which plants your chosen butterflies like the most. Butterflies often drink nectar from many kinds of flowers, but many caterpillars have a favorite plant. The best way to attract a lot of butterflies is to have the caterpillars' favorite kind of plant as well as several kinds of flowers with bright blooms for the adult butterflies to feed on. You should find out what type of plant the caterpillars like most. You can get this information from the same source you used to find out about the butterflies in your area.
- 5 **Step 2: Plan your garden**
Next, think about where to put your butterfly garden and where you will put each plant inside the garden. Do the plants you chose need lots of sun or do they like some sun and some shade? Will you need to put the plants in a place where the soil is very wet? How tall will the plants get? Taller plants should be behind the shorter plants so that you can see the flowers and the butterflies. How much space can you use for the garden? Think about how much space each plant will need. It doesn't have to be a big garden. Even a small area, like a window box, can draw butterflies. To keep your garden healthy, though, you must give each plant enough room to grow. You might want to draw a map showing where each plant will fit.



6 Step 3: Plant

Get ready to plant your garden by marking off the area where the garden will be. About a week before you plant anything, break up the soil. You can get flower seeds or seedlings at a home and garden store, nursery, or greenhouse. When you plant the seedlings in your garden, be sure to give them plenty of space. Remember, they're small now, but they will get much bigger.

7 Step 4: Care for your garden

There are a few more things to remember about your new butterfly garden. First, don't ever use an insect killer on your plants because it will kill the caterpillars and butterflies, too. Second, remember that the caterpillars need lots of food! If you see a lot of leaves that have been eaten, it is a sign that the caterpillars are happy with the garden you made for them. If you have lots of caterpillars in your garden, you may need to add a few more plants.

8 Step 5: Observe!

Now that you have done all this work, sit back and enjoy your new butterfly garden. You'll be able to watch the caterpillars as they grow and make their *chrysalides*, or cocoons. It should be easy to know when a butterfly is about to come out of its chrysalis. One day before the butterfly comes out, the chrysalis becomes clear and you can see the butterfly inside. Butterflies don't pay much attention to people, so you should be able to sit fairly close to them. Now, you can watch the process of metamorphosis in action!



- 1 The author organized this passage by...
- A Comparing and contrasting butterfly gardens with other types of gardens
 - B Telling a story about creating a butterfly garden
 - C Sequencing the things you need to do to create a butterfly garden
 - D Classifying butterflies and caterpillars

5.11C

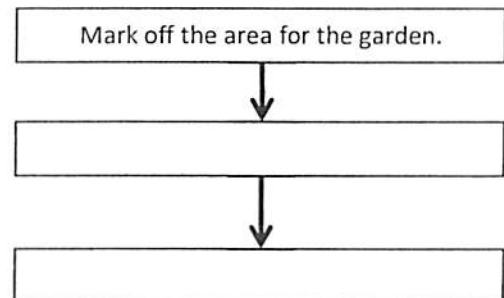
- 2 Why is it important to know the caterpillars' favorite food?
- A Butterflies won't come to a place where there are no caterpillars.
 - B To see metamorphosis happen, you will need to have caterpillars in your garden.
 - C You will not want caterpillars to eat your garden, so you should make sure you don't plant their favorite foods.
 - D Caterpillars and butterflies like the same foods.

Fig. 19D

- 3 The author used the word *chrysalides* in the last paragraph. This word means...
- A Caterpillars
 - B Butterflies
 - C Plants
 - D Cocoons

5.2B

- 4 What belongs in the empty boxes below?



- A Break up the soil
- B Plan where the plants will fit
- C Find out what kind of seedlings caterpillars like
- D Talk to a biologist

5.13A

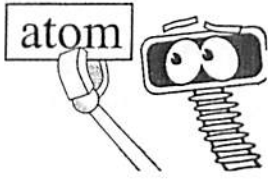


- 5 According to the passage, what is the best way to attract lots of butterflies?
- A Keep the caterpillars' favorite kind of plant and several kinds of flowers with bright blooms for the adult butterflies in your garden.
 - B Plant as many different kinds of flowers as you can think of.
 - C Find out what type of plant the caterpillars like best and fill your whole garden with only that one plant.
 - D Choose the plants that you like best and eventually butterflies will find them.

5.11A



the _____ is



CLOZE-ING IN ON SCIENCE!

5.10C: Metamorphosis
Organisms and Environments

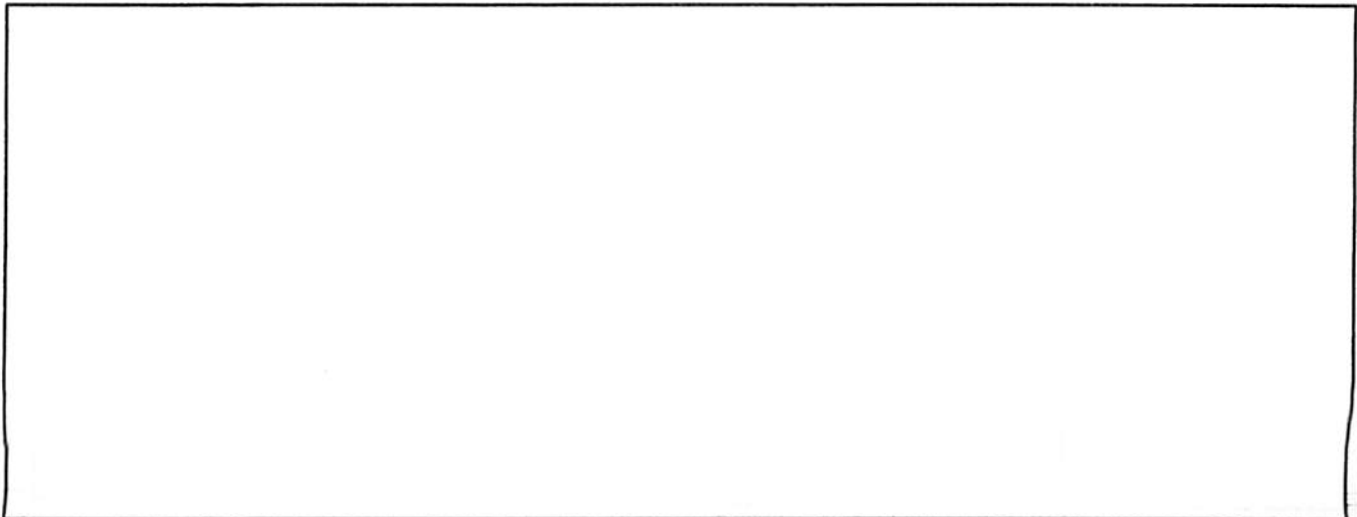
Name: _____ Date: _____

Key Concept 1: Complete metamorphosis in insects involves four distinct differences in life stages, including egg, larva, pupa, and adult.

Passage

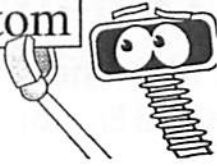
Some of the most familiar insects undergo complete metamorphosis. Once the _____ is laid in this type of metamorphosis, an insect will develop in the egg and then _____, or emerge, as a larva. During the larval stage the insect often looks worm-like, such as caterpillars of butterflies, grubs of beetles, or maggots of flies! Each of these insects also undergoes a change where they cover themselves with a special case and undergo their transformation into adults. Here, they each _____ in different ways but each _____, or comes out, as an adult!

Illustration



the _____ is

atom



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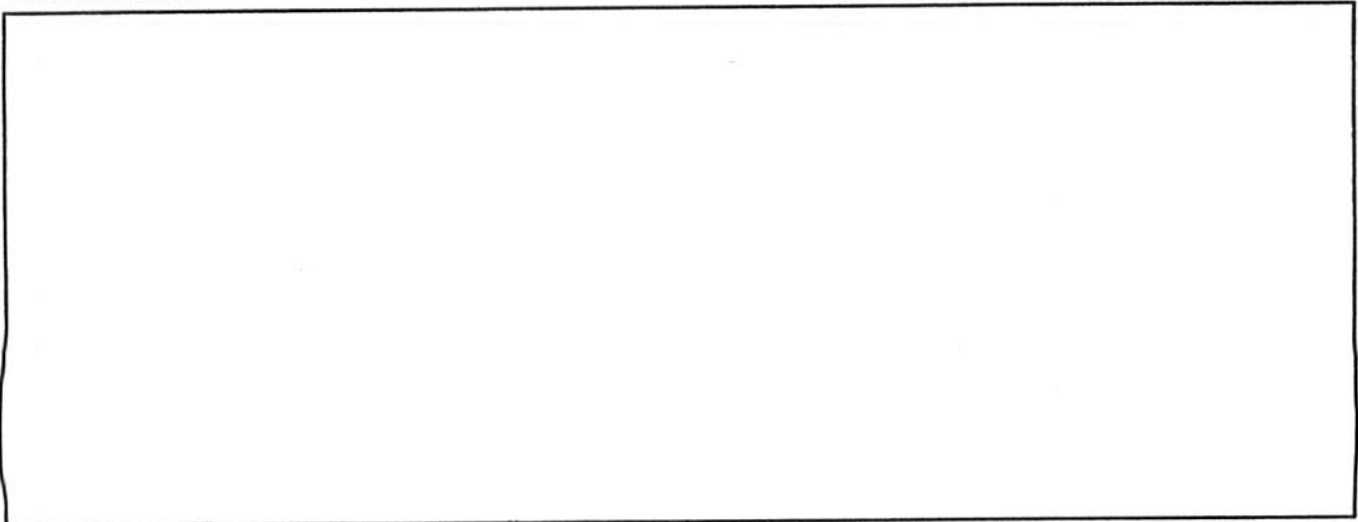
5.10C: Metamorphosis
Organisms and Environments

Key Concept 2: Incomplete metamorphosis in insects involves three life stages including egg, nymph, and adult.

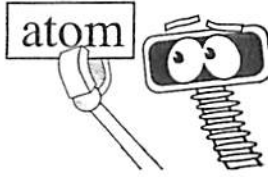
Passage

Incomplete metamorphosis is slightly different than what we observe in complete metamorphosis. Once again, the _____ is laid, and the insect develops until _____, or coming out, as a _____. At this stage, they look very _____ to the adult, but might be smaller and without wings. As they grow, they only change their outer coverings such as grasshoppers or cockroaches do. The _____ stages can be many, as the insects are gradually increasing in _____ and many eventually will grow a set of _____ as in adult grasshoppers or cockroaches.

Illustration



the _____ is



CLOZE-ING IN ON SCIENCE!

5.10C: Metamorphosis
Organisms and Environments

Key Concept 3: Butterflies and beetles undergo complete metamorphosis (four stages), while grasshoppers and walking sticks undergo incomplete metamorphosis (three stages).

Passage

Some insects undergo _____ stages of development including dragonflies. Other insects undergo only _____ different stages such as silverfish or walking sticks. Remember, the nymph stage is only seen in _____ metamorphosis, and although there may be 7-8 molts, this is the same nymph stage. The pupa stage is only seen in _____ metamorphosis, and is a time where the insect changes a whole lot. Think about ladybugs, moths, or bees – their larval and pupal stages are very very _____ than, or distinct from, their adult stage.

Illustration

