

# [The chrysalis effect](https://assignbuster.com/the-chrysalis-effect/)

The campus location I was supposed to observe was the flowerbeds. I went there to observe the butterflies. It was four o’clock in the afternoon. Unfortunately, I failed to find unusual thing there. So, I went to the near stream. There are a number of trees around. I tried to find another subject of my observation. I was looking for migrating birds. Ironically, I found a pupa hanging on a lower branch of a tree. I decided to come back there after two days. I want to find out how long the young butterfly stays inside to develop its wings. But on the day that I was about to visit it, it rained for three days.

So I decided to come back there when the weather is ok. Still, it was a pupa. Because of that, I wondered if it really takes a lot of days for the butterfly to come out of its cocoon. So, I took the pupa and brought it home to observe. I put it in a container and stored it in my room. The day after tomorrow, I saw how it emerged from its chrysalis. Then, it made me think, why did it easily come out of its cocoon when I brought it home? The organism that I observed is a Hackberry Butterfly. Its scientific name is Asterocampa celtis celtis. Here are some of its sample pictures.

Some of the possible questions that can be asked from my observations are the following. What is the normal length of the stay of larva inside its cocoon? What are the factors that affect it? Do the location and temperature have something to do with it? I came up with this hypothesis. The location of the cocoon or the chrysalis has something to do with the development of the larva. To test my hypothesis, I looked for experiments that will test my hypothesis. This is what I have got. The materials that will be used are as follows: • 6 larvae. Place each in its own container.

Butterfly larvae can be gathered; however it is advisable and most likely more convenient if it will be ordered from a biological supply company. • Source of light or heat Either of the two following variables in the test can be used regarding the chrysalis stage of the butterfly: Dark vs. Light or Heat vs. Cold. Place the container in the settings described below once the larvae come into the stage of chrysalis. Put numbers to the lid of the container (1-6).

Things to Do on Dark vs. Light:

• Put 2 of the chrysalides under constant light. It should not be too near or too close to the light so that they will not be extremely heated.

• On the other hand, place 2 others in a continually dark location or surroundings, such as inside a box or cabinet.

• Place the ‘ CONTROL’ pair on a table; it can be in your room or at the kitchen. Then, expose it to the ordinary or usual light of day and night.

Things to Do on Cold vs. Heat:

• Store 2 of the chrysalides in the refrigerator, it should be about 40 degrees.

• Let 2 others remain in a heated or warm area, for examples, a box for hatching eggs, under a heat table lamp, or some other continuously warm zone.

• The ‘ CONTROL’ pair must be kept at room temperature. (Dung, 1998)

Observe chrysalides everyday until the adult butterfly comes out. Then, record the information on a daily basis. One of the expected results is that adult butterfly will emerge sooner on a warm temperature or on a well-lighted place. Most butterfly species splurge the winter as pupa and then come out as butterflies in summer or spring. However, the length of their chrysalis stage still depends on the species. This study is important for naturalists and observer. If one wants to witness the emerging of an adult butterfly, he/she have to know the proper timing and location where one he/she can observe effectively.