

Chrysalis Challenge

Learn about the life stages of a butterfly. Create your own chrysalis support structure inspired by those found in nature.

STANDARDS

SCIENCE:

6.LS2

6.ETS1

7.LS1

8.LS4

VISUAL ART:

6-8 VACr2.A

MATERIALS

- Toilet paper tube
- Scissors
- Tape
- Paper (3 sheets)
- Assorted materials

Support: Cans, cereal boxes, or empty water bottle, etc.

Clips: paperclips, binder clips, or clothespins, etc.

“Silks”: Yarn, string, or aluminum foil, etc.

“Sticks”: Straws, pipe cleaners, or pencils, etc.

PROCEDURE

1. The objective of the challenge is to design a support structure that will hold a toilet paper tube chrysalis off the ground.
2. Draw a support design on a sheet of paper.
3. Use your materials to construct the structure.
4. Experiment with designing and building other chrysalis support structures, including suspended, silk loop, and silk hammock.

DISCUSSION

Background information: Butterflies and moths have evolved in a variety of colors, textures, and patterns to ensure survival.

GRADE LEVEL

6-8



HORTICULTURE



EXPERIMENT

They have varying chrysalises dependant on habitat and species. Some butterflies have adapted their diets to ward off predators. The life cycle of a butterfly includes 4 stages: egg, larva, pupa, and adult. Caterpillars attach, secure, and protect a chrysalis before entering hte chrysalis phase. During this phase the cells break down and new butterfly organs, wings, legs, and antannae are formed. During the final stage of life butterflies may not eat; this phase of life is reserved for mating.

WHY IT WORKS

What adaptations do you notice butterflies have for survival during the different phases?

What techniques does the caterpillar use to protect the chrysalis?

Project Example:



Inspired by:



Mary Alice Quinn
Butterfly Garden

Virtual Learning Experiment Sheet

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