**Storytime- Butterfly Life Cycle**

Overview of Workshop

This workshop consists of two parts: a reading of the "The Very Hungry Caterpillar" by Eric Carle followed by the Butterfly Life Cycle hands-on activity. Using some very ordinary items at home, we're going to learn and discuss about the different steps in the life cycle of a butterfly from egg, to caterpillar, to crysalis / cocoon, to butterfly.

**We recommend thoroughly going through all documents including resources for the most successful outreach.**

Grade Level: Preschool - Kindergarten

STEM topics: Biology

**WORKSHOP OBJECTIVES:**

* To learn about the life cycle of a butterfly.
* To learn about the biology of metamorphosis.
* To learn about and understand the concept of change.

**PHYSICAL REQUIREMENTS:**

* You will need a space that will allow you to comfortably lead the virtual quiz, a stable internet connection, a desktop computer with 1-2 desktop screens, based on your preference, a webcam and a headset with microphone.
* Site coordinators and volunteers participating in online programming must ensure the following if video is recorded or shown: wearing a Let’s Talk Science t-shirt, having a neutral background and trying to avoid open backgrounds where other people may suddenly be visible.
* This activity works best with a partner who can monitor the chat for questions.

**LESSON OVERVIEW**

\*\* Based on your specific outreach audience and event duration, you may choose to include more renewable energy related activities available in the Online Activities Database on the Let’s Talk Science portal. Make a plan that best fits your group.

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| --- | --- | --- | --- |
|  | **Approx. Time** | **Overall Time** | **Description** |
| Intro  | 10 minutes | 0-10 minutes | Welcome, donors recognition, land acknowledgement, who’s in the room, Zoom overview, rules |
| Storytime introduction | 5 minutes | 10-15 minutes | Topic, book presentation, brief activity description |
| Book reading | 15 minutes | 15-30 minutes | Reading of "The Very Hungry Caterpillar" by Eric Carle |
| Butterfly life cycle | 25 minutes | 30-55 minutes | Students will discuss the life stages of a butterfly and get to create a butterfly or caterpillar craft |
| End | 5 minutes | 55-60 minutes | Thank you to everyone involved and who attended, other projects/resources at Let’s Talk Science, donors recognition, survey reminder, questions from participants |

**POWERPOINT REVIEW**

The PowerPoint will complement the kit and will help with the timing and flow of the event. Be sure to go through the PowerPoint thoroughly prior to your event. All scripts, speaking notes, and follow along hand signals are located within the notes of the PowerPoint. To create a script make sure you refer to the manual for instructions on how to do so, you can also refer to the manual for how to share your PowerPoint screen.

Pre-Event Preparation

Before attending the Let’s Talk Science online event, you will want to make sure you have the following items to follow along.

**MATERIALS**

|  |  |
| --- | --- |
| **Part** | **Materials**  |
| Hands-on activity | Paper plate |
| Scrap of green construction paper |
| Small, white pompoms- 3 per student |
| Tissue paper (2 inch x 3 inch piece of green for the chrysalis, and any other colors you want for your butterfly cut to 2 inch x 2.5 inch) |
| Pipe cleaners (2-inch piece in black for the butterfly, and any other colors you want for your caterpillar cut to 6 inches) |
| Pencil |
| Black marker or crayon |

**STEP BY STEP PROCEDURE**

1. Reading of "The Very Hungry Caterpillar" by Eric Carle.
2. Doing the Activity
* Optional: Use tempera paint to paint your paper plate. Let it dry. (You can skip this step, we just thought you might like some color to your craft!)
* Divide the paper plate in 4 and draw 2 lines across the center of the plate.
* Egg Section
* Cut out a small leaf from your green construction paper.
* Draw lines on your leaf with your black marker or crayon.
* Glue some small, white pompoms onto your leaf to represent the eggs.
* Glue the leaf and eggs onto the leaf section of your plate.
* Caterpillar Section
* Choose two different colored pipe cleaners to use for your caterpillar. Cut the pipe cleaners so they are each 6 inches long.
* Twist the two pipe cleaners together.
* Wrap the twisted pipe cleaners around a pencil.
* Slide it off.
* Glue your caterpillar onto the caterpillar section of your plate.
* Chrysalis Section
* Glue a small twig onto the chrysalis section of your plate.
* To make the chrysalis, cut a piece of tissue paper so it’s 2 inches x 3 inches.
* Twist the top and bottom of the rectangle to form a chrysalis shape.
* Glue it next to the twig on your paper plate.
* Butterfly Section
* Choose two colors of tissue paper to use for your butterfly wings. Cut them to 2 inches x 2.5 inches.
* Stack the pieces of tissue paper together and round the corners with your scissors.
* Cut a black pipe cleaner so it’s 2.5 inches long. Scrunch up the center of both pieces of tissue paper and twist your black pipe cleaner around it.
* Glue your cute, little butterfly onto the butterfly section of your paper plate.

**OTHER IMPORTANT DETAILS**

* Participants’ microphones and webcams are turned off by default. Nobody will be able to hear or see you.
* For privacy reasons, the participants’ last name will be edited so just the initial is showing.
* If you have any questions during the activity, you can use the Q&A section to communicate with the volunteer and they will answer it there.