

# **Butterfly Royalty**



## **The Life Cycle of the Monarch**

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## **I Project Overview**

The life cycle of the Monarch Butterfly is an amazing adventure. It is full of many exciting physical changes that will enliven and fascinate a young child's mind. As our first grade students explore and become amateur lepidopterists, they will be exposed to a variety of resources and hands on activities. The students will observe first hand, the actual growth, starting with a caterpillar, watching them spin a chrysalis and emerge as a beautiful Monarch Butterfly.

The children will learn vocabulary words associated with butterflies, how to label its parts, the life cycle from beginning to end, and the events occurring in each cycle. A trip to the Bronx Zoo will enable the children to visit an authentic Butterfly Garden. Over the course of the year, the students will incorporate all they have learned into other academic areas, such as Math, Social Studies, Language Arts, and Technology. In the area of Technology, students will explore the world of Butterflies using the many websites on the Internet. Using their acquired skills, the children will be able to access Microsoft Word, and under a picture, will type in several sentences, describing important facts they have learned. As a culminating activity, the Newark Museum will visit P.S.#4 and present "Creepy Crawlers", a hands on workshop delving into the amazing world of insects.

## II Content Objectives

Students will be able to:

- Identify and name the four life cycles of a butterfly
- Draw and label a diagram of a Monarch butterfly
- Observe and record the sequence stages using live larvae
- Discuss the diet needed for growth
- View the stages using a man made habitat [ Butterfly Pavillion]
- Learn facts using finger plays and songs
- Recreate the stages in a mobile art activity
- Discuss at length the Butterfly's flight to Mexico

## III Technology objectives

Students will be able to :

- Identify the keys on a computer keyboard
- Type two or three sentences using correct punctuation
- Log on to district computers using their user ids and passwords
- Open specific programs [Internet Explorer/ Microsoft Word] by double-clicking the mouse
- Create and edit a Microsoft word Document

## **IV New Jersey Core Content Curriculum Standards**

### **Language Arts and Literacy-**

3.1 3.2 3.3 3.4 3.5

### **Science**

5.4 5.5

### **Technology Education**

8.1 8.2

## **V Lesson Plans**

The following five lesson plans were used as core portions of our unit. Three of the lesson plans deal with content and hands-on activities; the remaining two lessons are computer/technology related.

### **Lesson One: Introduction to the Monarch Butterfly**

#### **Objective**

Students will be introduced to the Life Stages of the Monarch Butterfly

#### **Materials**

4- piece poster set depicting stages in sequence  
Picture book- "Life Cycle of a Monarch Butterfly"  
Internet- United Streaming "Migration of the Monarch"

#### **Procedure**

Teacher will read book to class discussing the life cycle of the butterfly.  
Teacher will use poster set to have class put stages in the correct sequence.  
Children will view United Streaming video on the monarch butterfly.

#### **Assessment**

Craft Activity- Children will divide a paper plate into 4 sections. Each section will have one of the stages drawn on it. Students will use various shaped pasta to depict the butterfly in each stage.

## **Lesson Two: Parts Of a Butterfly**

### **Objective**

Students will be introduced to the anatomy of the butterfly. Children will learn the body parts and label them.

### **Materials**

Read aloud story Monarch Butterfly by Gail Gibbons  
Butterfly poster that depicts the labeled body parts  
Blank worksheets for labeling  
Overhead projector

### **Procedure**

We will read the story about the Monarch Butterfly. We will look at the different parts of the butterfly's body and ask questions about its anatomy. We will look at the butterfly poster to match the parts we know and to fill in the parts we do not know. On the overhead the children will come up to label the different parts of the butterfly.

Children will then do their own paper and label the parts they have learned.

### **Assessment**

Many of the children can readily identify and demonstrate labeling the anatomy of the butterfly. Children will put the completed paper in their folders.

## Lesson Three: Butterfly Wing Symmetry

### Objective

As part of the Math curriculum, the students will demonstrate symmetry using a large photo copy of a monarch butterfly.

### Materials

1- large outlined picture of a butterfly  
crayons/ markers

### Procedure

The teacher will model how to achieve symmetry by folding the butterfly picture equally into two separate parts. The children will be instructed to decorate each half exactly the same.

### Assessment-

Each child will be given a copy of a blank monarch butterfly. As a conclusion to this activity, the students will create their own beautiful butterfly using symmetry.

## **Lesson Four: The Keyboard and Mouse**

### Objective

The children will be able to locate specific keys on the keyboard and move the mouse to a designated spot on the keyboard.

### Materials

Oak tag- key board replica  
paper mouse

### Procedure

The teacher will familiarize the students with the classroom computer , including the keyboard and mouse. A discussion will follow on the function, usage and importance of the keyboard as well as the mouse. The teacher will also point out other important buttons such as the space bar, shift and caps lock.

### Assessment

To assess the student's understanding of the keyboard and mouse, each student will be given an oak tag replica of a keyboard. As the teacher calls out a letter or number, the students will use their paper mouse to press said buttons on their make believe keyboard.

## Lesson Five: Search Engines

### Objective

Students will be able to use the mouse and maneuver it to gain Internet access and open the Explorer window. They will open a search engine and look for information about the butterfly

### Materials

Classroom computers

### Procedure

Students will demonstrate their ability to log on the computer using their password. Students will help make a chart about the step by step sequence needed to log on and find the site they need. Guide the students that are having difficulty and lead them to success.

### Assessment

Students will independently log on, and open the Internet Explorer. They will show that they can type in [www.yahooligans](http://www.yahooligans.com) and look for “ Monarch Butterflies” and show the results page. The teacher will check and assess each student.

## Content Lesson Rubric

### Butterfly Stages of Development

😊😊😊	😊😊	😊
You know how a butterfly is born.	You are still working on your stages of development.	You are not sure of how a butterfly is born.
You can write a sentence about each stage.	You can write a sentence about each of the stages.	Your sentences on a butterfly are not complete.
You can draw a picture of each stage.	You can draw a picture of most of the stages.	Your pictures are starting to develop.

## Content Lesson Rubric

### Art Activity

😊😊😊	😊😊	😊
You followed all the directions in your art activity.	You followed most of the directions in your art activity.	You did not follow all the directions in your art activity.
Your art activity is creative and detailed.	Your activity is nicely done.	Your activity is in the working stages.
Your art activity depicts the life of a butterfly in the correct stages.	Your art activity depicts most of the stages in sequence.	You did not include all the stages in your art activity

## Bibliography

### Children's Books

- Monarch Butterfly Gail Gibbons, 1991
- An Extraordinary Life: The Story of the Monarch Butterfly Laurence Pringle, 1997
- Monarch Butterflies Emilie Lepthien, 1989
- Life Cycle of a Monarch Butterfly Jason Cooper, 2003

### Websites

- Monica the Monarch- [www2. Cybernex.net](http://www2.Cybernex.net)
- Monarch Watch- [www.monarchwatch.org](http://www.monarchwatch.org)
- Enchanted Learning- [www.enchantedlearning.com](http://www.enchantedlearning.com)
- Yahooligans Insects- [www.fws.gov](http://www.fws.gov)

Project Evaluation  
By  
Mary Ann Lentini

As a first grade teacher, I am always looking for creative and innovative ways to teach my children. This year, as a first year Eisenhower participant, I was able to integrate technology education into our Science curriculum with much success. The topic my partner, Chris Buckman, and I chose was Monarch Butterflies. Through Language Arts, Science, Math and Technology, our students learned about the life stages, body parts, and eating habits of these beautiful insects, while at the same time raising them in our classroom in their own butterfly pavilion.

Along with my students, I have come away with a better understanding of technology and realize that its integration into the school curriculum is essential in this fast paced technology world.

Project Evaluation  
By  
Christine Buckman

This is my first attempt at doing the Eisenhower grant . I felt a little insecure about working on the computer, but I was given a lot of support and help from both Anita and Jennifer. In the first grade, I always do a unit on butterflies. This year for the Eisenhower Grant I chose the "Monarch Butterfly". This enabled me to explore both the world of the Monarch and the huge World Wide Web. By using technology and all the different applications and sites I have become more familiar with the different things a computer can do. Doing the Ike Grant has also been an asset to my teachings as now I can use technology more confidently in the classroom.