

# Lesson Plan: Danielle's Monarch Butterfly Adventure

## Materials Needed

- A shoebox or sturdy piece of cardboard for a diorama base
- Construction paper (green, white, orange, black, yellow)
- Various pasta shapes (e.g., tiny shells for eggs, rotini for caterpillars, bowtie for butterflies, large shells for chrysalis)
- Markers, crayons, or colored pencils
- Glue and child-safe scissors
- A few small twigs or leaves from outside
- A large piece of paper or poster board for a garden plan
- Access to a computer or tablet for short videos (links provided)

## Lesson Plan: The Monarch Mission

### Part 1: The Spark - Uncovering Monarch Secrets (10 minutes)

**Goal:** To spark curiosity and activate prior knowledge about Monarchs.

Let's start our Monarch adventure! First, what do you already know about Monarch butterflies? What is one question you have about them? Let's write it down to see if we can answer it today.

Next, let's watch a quick, amazing video to see these butterflies in action. Watch for their bright colors and think about where they might be going.

- **Video Suggestion:** "Amazing Monarch Butterfly Migration" by PBS (search on YouTube).

After watching, let's discuss: What was the most surprising thing you saw? Today, your mission is to become a Monarch expert and a Monarch hero!

### Part 2: The Incredible Transformation - Life Cycle Diorama (30-40 minutes)

**Goal:** To creatively model and explain the four stages of the Monarch life cycle.

Every Monarch butterfly goes on an incredible journey, not just across the country, but through four different life stages. Your first creative task is to build a diorama that shows this amazing transformation. We'll use our craft supplies to make it come to life.

#### Instructions:

1. **Prepare Your Stage:** Use the shoebox or cardboard as your base. Cover the bottom with green paper to create a grassy field. Glue a few real twigs onto the paper to represent milkweed plant stems.
2. **Stage 1: The Egg:** Monarchs lay their eggs only on milkweed plants. Take a green paper leaf (shaped like a milkweed leaf) and glue one tiny pasta shell onto it. This is your Monarch egg! Glue the leaf onto one of your twigs.
3. **Stage 2: The Caterpillar (Larva):** When the egg hatches, a tiny caterpillar emerges! It eats and eats and eats milkweed to grow. Use a rotini pasta piece. Color it with black, yellow, and white stripes using markers. Glue it onto another leaf on your diorama.
4. **Stage 3: The Chrysalis (Pupa):** After it's big enough, the caterpillar forms a protective case around itself called a chrysalis. It looks like a beautiful green jewel. Paint a large pasta shell a

bright green or wrap it in green paper. Hang it from one of your twigs with a little bit of glue.

5. **Stage 4: The Butterfly (Adult):** Inside the chrysalis, the magic happens! A beautiful butterfly forms. Take a bowtie pasta and color it to look like a Monarch—bright orange wings with black lines and white dots. You can even add a little black paper body. Glue your butterfly into the diorama as if it's flying!

As you build each stage, explain what is happening. Why is milkweed so important? What is the purpose of the chrysalis?

### Part 3: Be a Monarch Hero - Design a Butterfly Buffet (25 minutes)

**Goal:** To apply knowledge of Monarch needs to solve a real-world problem by designing a supportive habitat.

Monarchs are in trouble. Their habitats are disappearing. But we can help! One of the best ways to help is by planting gardens that give them the food and shelter they need. Your next mission is to design the perfect butterfly-friendly garden.

First, let's quickly brainstorm: What two main things does a Monarch need from a garden?

*(Answer: 1. Milkweed for its caterpillars, 2. Nectar flowers for the adult butterflies to drink from).*

#### Instructions:

1. **Grab Your Blueprint:** Take your large piece of paper or poster board. This is your backyard or park space.
2. **Plant the Essentials:** First, draw a big patch of milkweed plants. These are for the caterpillars! Label it "Milkweed Cafe for Caterpillars."
3. **Add Nectar Stations:** Now, draw patches of colorful flowers that adult butterflies love. Good choices are zinnias, coneflowers, and black-eyed Susans. Use bright colors! Label this area "Nectar Fueling Station for Butterflies."
4. **Think About Extras:** What else would make a butterfly happy?
  - **A Puddle Spot:** Draw a small, shallow dish of water with some pebbles in it for butterflies to drink from. Label it "Butterfly Fountain."
  - **A Sunny Spot:** Draw a large, flat rock where butterflies can rest and warm their wings in the sun. Label it "Sunshine Rock."
5. **Give Your Garden a Name:** Come up with a creative name for your Monarch sanctuary, like "Danielle's Butterfly Paradise" or "The Monarch Motel."

### Part 4: Mission Debrief - Show What You Know (10 minutes)

**Goal:** To summarize learning and share creative work.

Great work, Agent Danielle! Your mission is complete. Now it's time to present your findings. Using your diorama and your garden plan, give me a tour.

- Show me each stage of the life cycle on your diorama and explain what's happening.
- Present your garden plan. Explain why you included each element (milkweed, nectar flowers, water, etc.) and how it helps the Monarchs.
- Let's go back to that question you wrote down at the beginning. Did we answer it?

### Learning Goals Check-in

By the end of this lesson, you have successfully:

- Modeled the four stages of the Monarch life cycle.
- Explained why milkweed is essential for Monarch survival.

- Designed a creative and functional butterfly garden habitat.
- Identified a key problem (habitat loss) and created a solution (your garden plan).

### Optional Extension Ideas

- **Become a Citizen Scientist:** With a grown-up's help, research "Journey North" to see how you can track and report Monarch sightings in your area.
- **Write a Story:** Write a short story from the perspective of a Monarch butterfly traveling through your garden.
- **Plant a Seed:** If possible, get a real milkweed or nectar flower seed and plant it in a pot or outside.