Caterpillar to Butterfly Adventures in Science, Music, and Dance

An unforgettable learning experience in the natural sciences!

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For children ages 4 - 8

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National Content Standards for Learning, grades K-3

Science Standard 4: Life Science

- Students demonstrate understanding by explaining observations and by representing concepts in multiple ways (words, drawings, etc.) Students produce evidence that demonstrates understanding of
 - life cycles of organisms

Music Standard 6: Listening to, analyzing, and describing music

Students respond through purposeful movement to specific musical events while listening to music

Music Standard 8: Understanding relationships between music, the other arts, and disciplines outside the arts

Dance Standard 1: Demonstrating movement elements and skills in performing dance

- Students accurately demonstrate axial movements
- Students create body shapes at low, middle, and high levels
- Students demonstrate the ability to define and maintain personal space
- Students demonstrate kinesthetic awareness, concentration, and focus in performing movement skills

Dance Standard 2: Understanding choreographic principles, processes, and structures

- Students create a sequence and identify each part of the sequence
- Students improvise and perform dances based on their own ideas and concepts from other sources

Dance Standard 7: Making connections between dance and other disciplines

- Students create a dance project that reveals understanding of concepts from another discipline

Lesson Plan for Teachers

Watch the video yourself before showing it to students.

Day 1: Chapters 1-2, 35 minutes Day 2: Chapters 1-2, 35 minutes Day 3: Chapters 2-3, 35 minutes Day 4: Chapters 3-4, 35 minutes

Reflection Questions

- What were you feeling when you moved through the butterfly life cycle?
- 2) What did you learn about the butterfly life cycle that you didn't know before? What are you still curious about?
- 3) What's your favorite movement? Why? Your favorite music? Why?
- 4) How do music and movement help you learn?

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Moving Through Math and Moving Through Science products invite children to explore music, movement, and the use of the imagination. Math and science move off the paper and into children's hearts and bodies when learning is physically experienced through music and movement.



Introduction • 5 minutes

Parents and teachers learn about Arts Integration and how to use this DVD.

For chapters 1-3, you need a large empty space for students to move in. If you plan to work in your classroom, you'll need to move the furniture!

Chapter 1

Rules for Music and Movement • 10 minutes

Students learn three key rules for listening and moving.

Chapter 2

Learning Science, Music and Movement • 25 minutes

The life cycle of the Monarch butterfly is organized into eight steps:

Egg Hatch	Hang Pupate		
Eat Molt	Chrysalis Butterfly	24	

Students experience each step by viewing nature footage, listening to music, and moving creatively as a way of embodying their learning.



Chapter 3

Listening, Watching and Moving • 10 minutes

Students dance the complete life cycle of the butterfly. Verbal cues, music, and video deepen students' comprehension of the sequence of events.

Chapter 4

Drawing Story Maps • 15 minutes

Students draw and retell the sequence of events in the life cycle of the Monarch butterfly.

Special Bonus: Butterfly Performance

The complete musical score is provided for students to perform the butterfly life cycle for a school or parent audience.







Learning moves out of the head and into the body when children dance the life cycle of the Monarch butterfly. Students munch imaginary milkweed leaves and break out of a chrysalis while moving to original music. Stunning nature video combines with the music and the movement, bringing the natural world to life!

Caterpillar to Butterfly introduces a new way to teach science standards—through integrating music and movement with the natural sciences. Arts integrated instruction reaches all students, deepening their comprehension, because it embraces their Multiple Intelligences.

"Caterpillar to Butterfly is a delightful blend of music, movement, art, and nature footage combining to tell the science of metamorphosis, skillfully presenting the magic of nature. The original, creative way Caterpillar to Butterfly demonstrates a lesson in wildlife biology is sure to captivate young children. Teachers, children, and parents alike will be impressed." Catherine Hughes, Science Editor, National Geographic Kids magazine

"Marcia Daft combines the elegance of a master teacher's layered presentation with an artist's sensibility. She explores the mystery of biological process through the young child's most essential languages of music and movement. This DVD demonstrates with true wit how children learn best." Thea Cox, MEd, Head Start

Marcia Daft is the founder and Artistic Director of Moving Through Math and Moving Through Science. Her unique teaching methods have been nationally recognized by arts organizations and used in classrooms across the United States for 20 years. Visit www.marciadaft.com.





Filming and Direction by Ellie Walton and Gopi Shastra Story and music by Marcia Daft Graphic Design by Amy Hendrick

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