

Department of Arts Administration, Education and Policy

**UNIT PLAN OVERVIEW**  
(Revised 2023)

Teacher Candidate	<b>Holly Romano</b>
School	<b>Easthaven Elementary</b>

<b>UNIT TITLE</b>	Can science inspire art?
Length of Class Period	45 minutes
Approximate Number of Students in Each class	25
Grade Level or Course Title	2nd
Beginning Date for this <i>Unit</i>	Jan 22
Ending Date for this <i>Unit</i>	Feb 16

**ENDURING UNDERSTANDINGS (FROM ODE 2022 STANDARDS)**

**Creating:** Artists use creative thinking and reasoning skills to perceive concepts and ideas to develop works.

- **2.2 CR** Combine materials to explore personal artistic ideas.
- **2.2 PE** Apply increasing skill in the appropriate use of materials and tools.
- **2.1 CO** Recognize and discuss the different ways in which art communicates ideas and serves many purposes.

**CRITICAL ISSUE / BIG IDEA**

**A). Anticipatory Set** (what do the students already know and how will you capture the students' interest in the concepts you are presenting)

**B). Rationale** (why is this unit of study relevant?) All portions of the unit should demonstrate research-based practices to support art teaching & learning.

A) According to the Ohio Department of Education, the 3<sup>rd</sup> grade curriculum includes learning about life cycles in the core subject of Science, as well as the natural environment that organisms live in that supports their ability to survive and reproduce:

“3.LS.3: Plants and animals have life cycles that are part of their adaptations for survival in their natural environment” (Ohio Department of Education, 2018)

Capturing this familiarity, knowledge, and curiosity in the art classroom will help with engagement.

Most elementary students also enjoy working with clay because they get to manipulate with their hands. Clay is a material not commonly used at Easthaven, so it will be a special treat for the students there.

- B) This lesson pulls on what is developmentally appropriate for this age group and on the ideals of STEAM curriculum. In grades 3-5 “students are interested in learning content that has relevance to their lives and want to know more about real-world issues, including global concepts, and environment, and diversity” (Sickler-Voigt, 2020). Butterflies, caterpillars, seeds, and plants are common experiences in day-to-day life, so is a child’s curiosity about their development in the natural world.

STEAM curriculum uses art as a way to enforce knowledge in other content areas. “The artistic processes of creating (presenting, performing and/or producing, responding, and connecting) are fundamental to student success across all domains. STEAM also increases learner empowerment, interest, and engagement; as well as a student’s ability to make connections and transfer knowledge” (University of Denver, 2022). Knowing that the students are learning about life cycles in their core subject of science, this unit will support students applying that knowledge to their project. Now they can move from a understanding to a higher level of thinking. This is especially important for the students at Easthaven Elementary who “needs significant support to meet state standards in academic achievement” (Ohio.gov, 2023).

**Central Focus** (creating, presenting, interpreting, responding, and/or relating art to context)

- Art can be interdisciplinary and help us learn and appreciate other subject areas.
- Art can be a way to express an artist’s interests in other subject areas.
- Artists can create art that is inspired by the world around them, especially science.

**Essential Questions** (provocative, engaging, critical)

- Can science inspire art?
- How does a seed become a plant?
- How do artists create with clay?

**Possible Integration**

This unit can be integrated with their classroom teacher’s lesson on life cycles in science.

**DESCRIPTION OF THE ESSENTIAL EDUCATIONAL CONTENT OF THIS UNIT**

<b>Lesson One</b>	
Title	Can science inspire artists?
Lesson Description	<p>As a class, students will look at ways artists have used multiple areas of science — biology, botany, entomology, and oceanography — to inspire their artwork.</p> <p>Visual culture examples:</p> <ul style="list-style-type: none"> <li>• <a href="#">Maria Merian</a></li> <li>• <a href="#">Amie Esslinger</a> - Collisions</li> <li>• <a href="#">Luke Jerram</a> – Glass Microbiology</li> <li>• <a href="#">Washed Ashore</a></li> <li>• <a href="#">Robert Steven Connett</a> - Crystalline Life Forms</li> <li>• <a href="#">Michelle Stitzlein</a> – Moth Series</li> </ul>
Approximately how long will this lesson take?	1/2 class
<b>Lesson Two</b>	
Title	Can art help us learn?
Lesson Description	<p>Knowing that art can be used to explore areas in science, as a class, we will follow a curiosity about how plants grow. We will research like artists and explore the scientific concept of life cycles, using the book “<a href="#">The Little Caterpillar</a>” and a <a href="#">timelapse videos of a caterpillar</a> developing into a butterfly.</p> <p>Students will be guided by the teacher to draw a 4-step life cycle guide of a butterfly, using a white paper folded into four sections and pencil.</p>
Approximately how long will this lesson take?	1/2 class
<b>Lesson Three</b>	
Title	The art and science of clay
Lesson Description	Day 1, students will be introduced to the art material of clay as the teacher gives an overview of what clay is, where it comes from, and how it has been used historically.

	<p>Then the students will be guided how to work with clay as the teacher gives each student a sample of the material and tools. The teacher will demonstrate how to manipulate, cut, shape, and attach clay. Students will be given quality time to explore with the material independently. Then their clay will be collected and they will wash their hands and clean tables.</p> <p>Day 2: With the knowledge of how plants grow and how to work with clay, students will use the clay material to create butterflies.</p> <p>First, like artists, students will observe how butterflies look in nature and sketch design ideas for their projects. While the students are drawing their ideas, the teacher will pass out paper bowls (labeled with student's names) to each student with their clay. The teacher will also place clay tools and texture tools on each table.</p> <p>After brief sketch time, students will have the remainder of class to work on their clay butterflies (they must be finished by the end of class). The teacher will review how to attach pieces of clay together.</p> <p>Day 3: On this final day, the students will paint their butterflies with watercolors. The teacher will review with the students how butterflies look in nature to inspire their color choices.</p> <p>After 15 minutes, students will clean up and the teacher will collect the clay projects. For the remainder of class, students will color their life cycle guides with marker and colored pencil.</p> <p>Between classes, the teacher will monitor the projects to assure they dry correctly. After the projects dry from painting, the teacher will seal them with Mod Podge.</p>
Approximately how long will this lesson take?	3 classes

**Explain how technology has been used in this unit**

- YouTube videos shown on smart board:
  - [“The Little Caterpillar”](#)

- A [timelapse videos of a caterpillar](#) developing into a butterfly.
- Drawing and clay demonstrations using Elmo and smart board
- [Google slides](#) on smart board

## LESSON PLAN 1

Teacher Candidate	Holly Romano
School	Easthaven Elementary

<b>LESSON NUMBER</b>	1
Lesson Title	Can science inspire artists?
Length of Class Period	45 min
Approximate Number of Students in Each class	25
Grade Level or Course title	2nd
Beginning Date for this Lesson	January 22
Ending Date for this Lesson	January 22

### CONTENT STATEMENT – CREATING (CR) (FROM 2022 ODE STANDARDS)

### CONTENT STATEMENT – PERFORMING (PE) (FROM 2022 ODE STANDARDS)

### CONTENT STATEMENT – RESPONDING (RE) (FROM 2022 ODE STANDARDS)

### CONTENT STATEMENT – CONNECTING (CO) (From 2022 ODE Standards)

**Creating:** Artists use creative thinking and reasoning skills to perceive concepts and ideas to develop works.

- **2.1 CO** Recognize and discuss the different ways in which art communicates ideas and serves many purposes.

### Performance-based Assessment Objectives

- Students will know that science and nature can inspire artwork.

### Performance-based Assessment Strategies

(attach assessment documents if applicable)

- Students will observe and discuss artwork created by artists who were inspired by multiple areas of science — biology, botany, entomology, and oceanography.
- Students will answer the question “Can science inspire artists?” before and after lesson to measure pre-knowledge and post-knowledge.

## Academic Language

### Vocabulary (define each)

- **Inspire:** fill (someone) with the urge or ability to do or feel something, especially to do something creative.
- **Microscopic:** so small as to be visible only with a microscope

(Definition source: Google/Oxford Languages)

### Additional Language Demands (*specific* communication task)

- Oral communication through class discussion

## Accommodations for Special Populations

- Students who have vision concerns can sit closer to the screen.
- Students with hearing concerns can sit near the front. Closed captioning will be turned on during the YouTube video in case they can read.
- Teacher will have physical copy of book for students to view.
- Key words and phrases will be visibly displayed or students learning English — some will be translated to Spanish (Easthaven has an approx. 25% Spanish-speaking population).

### Art/Visual Culture Examples (list all artists, artwork or media used)

- [Maria Merian](#)
- [Amie Esslinger](#) - Collisions
- [Luke Jerram](#) – Glass Microbiology
- [Washed Ashore](#)
- [Robert Steven Connett](#) - Crystalline Life Forms
- [Michelle Stitzlein](#) – Moth Series

## Preparations

### Materials/Resources for Teacher

- [Google slide](#) deck

### Materials for Students

None needed

### Safety Procedures

- Students will be reminded of our classroom policy to respect our classmates and their perspectives. When our peers share what they see or feel about artwork, we do not laugh or joke about it. We listen and support.
- Students are to stay in their seats during class, raising hands to answer questions
- Chairs must have all four legs on the ground — no tipping chairs

### LEARNING ACTIVITY

#### Getting the Classroom Environment Ready

- Slide deck prepped on smart tv
- Tables clean

#### Procedures for the Teaching/Learning Structure *(indicate approximate time for each step)*

##### **Classroom intro: 3 min**

Students enter and settle into classroom. Teacher makes sure all are sitting in correct seats and then gives routine introduction:

“Welcome artists! It’s wonderful to see you all today. We are going to work together today and be respectful, responsible, and safe.”

##### **Lesson Intro: 3 min**

Teacher: “Since I am an art teacher, you might guess that I love art, and you would be right! But that is not the only subject I love. I also love science! I love learning all about the world around me, including plants, animals, and how our bodies work. I love learning about tiny things you can only see in a microscope and far away things like space! Do any of you also like science? (students raise hands).

I have a big question that I am wondering about on the board... I am wondering if an artist can use their love of science as an inspiration for their art... What do you think? Can we combine science and art? (students raise hands)

Looks like we have some mixed answers, and that’s okay. Like artists and scientists, we are going to do some research to see what information is available to help us answer it. First, let’s see if other artists have used science as inspiration for their work.”



**Lesson: 6 min**

Teacher displays and facilitates class discussion about artists: Maria Merian, Amie Esslinger, Luke Jerram, Washed Ashore, Robert Steven Connett, and Michelle Stitzlein.

Teacher: "Now that we have done some research, let's go back to our original question: Can science inspire art? Raise your hand if you think the answer is yes." (students raise hands)

**Clean-up Procedures (Room, Materials & Work Storage)**

- Move on to lesson 2 (both in same day)

**Closure, Review & Anticipation (what's next?)**

Teacher: "As you can see, many artists use science as inspiration for their artwork. Next, we are going to use art to help us explore an area of science we are curious about."

**Supplemental Activity**

Students write on post-it notes what parts of science they are curious about and put on their table folders. Teacher can use this to get ideas for future lessons and share with the classroom teacher.

**Teacher reflection focused on the lesson *after* it has been taught**

- Were the students interested in the concept?
- Did they understand the connection of art and science? Was the science recognizable to them?
- Did this concept seem like new information to the students?

**Lesson 1 Teaching & Learning materials**

**Include attachments of any resources, slide shows, teacher samples, and/or assessments related to this lesson.**

# Can science inspire art?

Learning through Art

1

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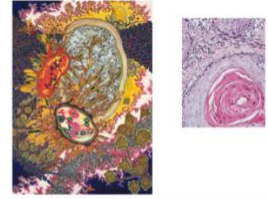
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Maria Merian



Amie Esslinger



Luke Jerram



Washed Ashore



Robert Steven Connett



Michelle Stitzlein



## LESSON PLAN 2

Teacher Candidate	Holly Romano
School	Easthaven Elementary

<b>LESSON NUMBER</b>	2
Lesson Title	Can art help us learn?
Length of Class Period	45 minutes
Approximate Number of Students in Each class	25
Grade Level or Course Title	2nd
Beginning Date for this Lesson	January 22
Ending Date for this Lesson	January 22

### CONTENT STATEMENT – CREATING (CR) (FROM 2022 ODE STANDARDS)

**Creating:** Artists use creative thinking and reasoning skills to perceive concepts and ideas to develop works.

- **2.2 CR** Combine materials to explore personal artistic ideas.

### CONTENT STATEMENT – PERFORMING (PE) (FROM 2022 ODE STANDARDS)

### CONTENT STATEMENT – RESPONDING (RE) (FROM 2022 ODE STANDARDS)

### CONTENT STATEMENT – CONNECTING (CO) (From 2022 ODE Standards)

### Performance-based Assessment Objectives

- Students will know the life cycle of a butterfly.
- Students will use art to help them understand a concept.

### Performance-based Assessment Strategies

(attach assessment documents if applicable)

- Students will create a 4-step life cycle guide pencil drawing of a butterfly.

### Academic Language Vocabulary

- **Organism:** an individual animal, plant, or single-celled life form; a living being.
- **Life cycle:** the series of changes in the life of an organism including reproduction.
- **Diagram:** a drawing or visual guide showing how something works

#### **Additional Language Demands** (*specific communication task*)

- Oral communication through class discussion
- Listening during book reading

#### **Accommodations for Special Populations**

- Students who have vision concerns can sit closer to the screen.
- Students with hearing concerns can sit near the front. Closed captioning will be turned on during the YouTube video in case they can read.
- Teacher will have physical copy of books for students to view.
- Key words and phrases will be visibly displayed or students learning English — some will be translated to Spanish (Easthaven has an approx. 25% Spanish-speaking population).

#### **Art/Visual Culture Examples**

- Book: "[The Little Caterpillar](#)"
- A [timelapse videos of a caterpillar](#) developing into a butterfly.

#### **Preparations**

##### **Materials/Resources for Teacher**

- Book "The Little Caterpillar"
- [Google slide](#) deck
- Elmo and smart tv
- White paper
- Pencil

##### **Materials for Students**

- Pencils (1 each)
- White paper (1 each)

##### **Safety Procedures**

- Students will be reminded of our classroom policy to respect our classmates and their perspectives. When our peers share what they see or feel about artwork, we do not laugh or joke about it. We listen and support.
- Students are to stay in their seats during class, raising hands to answer questions
- Chairs must have all four legs on the ground — no tipping chairs

## LEARNING ACTIVITY

### Getting the Classroom Environment Ready

- [Slide deck](#) prepped on smart tv
- Paper and pencils ready to be passed out
- Tables clean with colored folders at each

### Procedures for the Teaching/Learning Structure *(indicate approximate time for each step)*

#### **Lesson Intro: 3 min**

Teacher: “Now that we know that we can use science to inspire our art, let’s use art to help us learn something we are curious about. Look at how beautiful these butterflies are! How many of you enjoy butterflies?” (students raise hands)

I have always wondered; how do butterflies grow and develop? I asked your teacher, (teacher name). and he/she said that butterflies have something called a life cycle. I didn’t know what that means, so I looked up the definition. You will be learning about this soon in science class.”

Teacher talks through definition slides. Gives students a little “quiz” with the slide about organisms.

Teacher: “So if a life cycle is the changes an organism goes through, what is the life cycle of a butterfly?”

#### **Book: 4 min**

Show video of book read “[The Little Caterpillar](#)”

#### **Life cycle discussion: 6 min**

Teacher reviews the life cycle steps of a butterfly from the story, then shows time-lapse videos of a real butterfly developing. If time allows, there are two additional time-lapse videos of plants — a tomato plant and an apple tree — that can be shown.

Teacher: "Let's use art to help us remember the life cycle of a butterfly. We are going to draw a life cycle diagram. A diagram is a drawing that helps us understand and visualize an idea or concept.

**Life cycle drawing: 12 min**

The teacher instructs the students how to fold their white papers into four sections, then instructs them to number each section (1-4). Then, as a class, they will go through each step, drawing it together in pencil.

**Clean-up Procedures (Room, Materials & Work Storage)**

- Life cycle drawings are collected into colored table folders
- Pencils are collected

**Closure, Review & Anticipation (what's next?)**

Teacher: "Great job today artists. Today we learned about the life cycle of a butterfly and used art to help us. Next class we are going to look at all types of butterflies to create one using clay! We are going to be like artists and explore using clay, practicing with it before we make our final piece."

**Supplemental Activity**

Students can research all kinds of organisms on their Chromebooks. They can also view additional life cycle books in classroom.

**Teacher reflection focused on the lesson *after* it has been taught**

- Do the students seem to understand what a life cycle is?
- Did the students need additional support in drawing?
- Was there enough time for this lesson?

**Lesson 2 Teaching & Learning materials**

**Include attachments of any resources, slide shows, teacher samples, and/or assessments related to this lesson.**

Can art help us learn?

Learning through Art

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How do butterflies grow?

¿Cómo crecen las mariposas?

10



Life cycle ciclo vital

a series of changes in the life of an organism

11



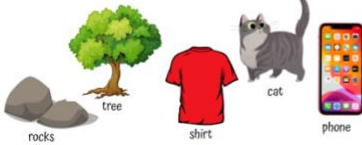
Life cycle ciclo vital

a series of changes in the life of an organism

Organism: an animal, plant, or other life form; a living thing

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Organism?



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How do butterflies grow?

¿Cómo crecen las mariposas?

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Butterfly life cycle

Ciclo de vida de la mariposa

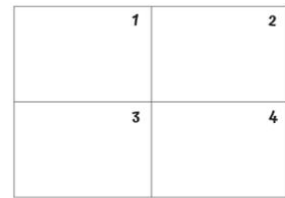


1. Egg on a leaf
2. Caterpillar
3. Chrysalis
4. Butterfly

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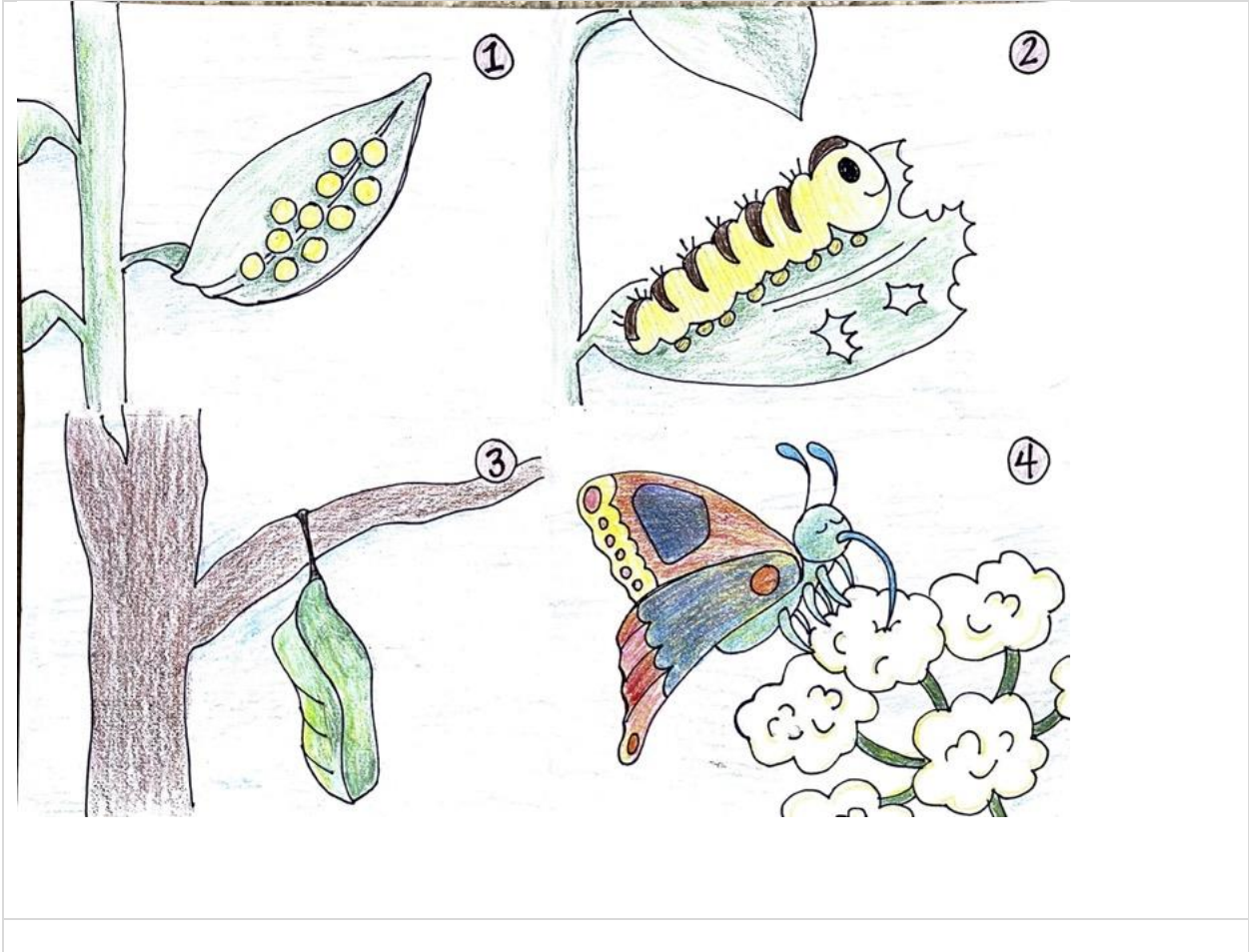
Butterfly life cycle

Ciclo de vida de la mariposa



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Teacher sample:





## LESSON PLAN 3

Teacher Candidate	Holly Romano
School	Easthaven Elementary

<b>LESSON NUMBER</b>	3
Lesson Title	The art and science of clay
Length of Class Period	45 minutes
Approximate Number of Students in Each class	25
Grade Level or Course Title	3 <sup>rd</sup>
Beginning Date for this Lesson	January 29
Ending Date for this Lesson	February 16

### CONTENT STATEMENT – CREATING (CR) (FROM 2022 ODE STANDARDS)

### CONTENT STATEMENT – PERFORMING (PE) (FROM 2022 ODE STANDARDS)

**Creating:** Artists use creative thinking and reasoning skills to perceive concepts and ideas to develop works.

- **2.2 PE** Apply increasing skill in the appropriate use of materials and tools.

### CONTENT STATEMENT – RESPONDING (RE) (FROM 2022 ODE STANDARDS)

### CONTENT STATEMENT – CONNECTING (CO) (From 2022 ODE Standards)

### Performance-based Assessment Objectives

- Students will apply their knowledge and observations of butterflies to create artwork.
- Students will learn the technique of working with clay.

### Performance-based Assessment Strategies

(attach assessment documents if applicable)

- Students will create a butterfly from air-dry clay.
- Students will observe how butterflies exist in nature and be inspired to create their artwork.

## Academic Language

### Vocabulary

- **Texture** - the visual and tactile surface characteristics that are added to a work of art: bumps, ridges, grooves and other physical details.
- **Score and slip** – a method used to attached two pieces of clay together using a tool to “roughen up” the clay and water.
- **Pottery** – objects made with clay

### Additional Language Demands (*specific communication task*)

- Listening to directions by teacher
- Reading text on slide presentation
- Oral response to questions by teacher

## Accommodations for Special Populations

- Students who have vision concerns can sit closer to the screen.
- Students with hearing concerns can sit near the front. Closed captioning will be turned on during the YouTube video in case they can read.
- Key words and phrases will be visibly displayed or students learning English — some will be translated to Spanish (Easthaven has an approx. 25% Spanish-speaking population).
- Paper guides will be available at each table for butterfly design ideas.
- Cardboard templates will be available for students who need additional support in shaping their butterflies.

## Art/Visual Culture Examples

Historical pottery examples:

- <https://www.metmuseum.org/learn/educators/lesson-plans/ancient-mesopotamia>
- [https://www.metmuseum.org/toah/hd/mayac/hd\\_mayac.htm](https://www.metmuseum.org/toah/hd/mayac/hd_mayac.htm)
- <https://kids.britannica.com/students/assembly/view/24383>
- <https://www.elaboreluxury.com/?s=moche-warrior-pottery-today-s-history-of-the-world-ll-gYLdMeHa>
- [https://en.wikipedia.org/wiki/Ancient\\_Egyptian\\_pottery](https://en.wikipedia.org/wiki/Ancient_Egyptian_pottery)

## Preparations

Materials/Resources for Teacher

- [Google slide](#) deck
- Elmo camera
- Smart board
- Air-dry clay
- Clay tools: toothbrush, bowl of water, wooden skewer, rolling pin, plastic
- Texture tools: straw, Duplo blocks, chop stick, plastic caps, burlap, rope string, evergreen clipping, cardboard, bubble wrap
- 5 lb. buckets (2) for handwashing stations (classroom sink is broken)

## Materials for Students

### Day 1 & 2

- Air-dry clay (1 lb per student)
- Clay tools: toothbrush, bowl of water, wooden skewer, rolling pin, plastic fork (two sets per table)
- Texture tools: straw, Duplo blocks, chop stick, plastic caps, burlap, rope string, evergreen clipping, cardboard, bubble wrap (one set per table)
- Visual guides for butterfly design ideas in plastic sleeve (2 per table)
- Paper bowls (one for each student)
- Masking tape
- Plastic storage bags or plastic wrapping for sample clay (one for each student)
- Brown paper bags for tables (one for each student)

### Day 3

- Dry butterfly sculptures
- Watercolors
- Brushes
- Water bowls

## Safety Procedures

- Discussion on safe ways to use a wooden skewer for cutting clay only — if you cannot use it respectfully, it will be taken away.
- Students will be reminded of our classroom policy to respect our classmates and their artwork.
- Students will be reminded of how they are to share the clay tools.

- Students are to stay in their seats during class, raising hands to answer questions
- Chairs must have all four legs on the ground — no tipping chairs

## LEARNING ACTIVITY

### Getting the Classroom Environment Ready

- Put 4-5 paper bags at each table
- Put clay materials kit on each table
- Have clay cut and ready to pass out —Day 1: ¼ lb samples and Day 2: remaining ¾ lb
- Have water bowls with toothbrushes ready to pass out
- Have plastic bags ready to pass out
- Have visual guides ready to pass out (day 2)
- Have bowls with name labels ready to pass out (day 2)
- Have watercolors ready to pass out (day 3)
- Have water bowls with brushes ready to pass out (day 3)

### Procedures for the Teaching/Learning Structure *(indicate approximate time for each step)*

#### **Classroom intro: 3 min**

Students enter and settle into classroom. Teacher makes sure all are sitting in correct seats and then gives routine introduction:

“Welcome artists! It’s wonderful to see you all today. We are going to work together today and be respectful, responsible, and safe.”

#### **Day 1**

#### **Lesson Intro: 3 min**

Teacher: “Last week we talked about how artists can use science as inspiration for their artwork. Who remembers which science concept we learned about?” (students raise hands). Teacher guides answers towards life cycles and butterflies.

“We are going to use what we learned to make our own butterflies out of clay! But first, we need to learn about clay and how it works. Like artists, we are going to experiment and practice with clay before we make our final project.”

#### **Clay overview: 4 min**

Teacher explains what clay is and where it comes from. The teacher also mentions that clay has been used for over 20,000 years by people all over the world.

### **Clay demo and work time: 25 min**

After passing out bags with small clay sample to each table, teacher tells the students to take the clay out of the bags and feel/manipulate it with their hands. While the students are doing this, the teacher passes out water bowls with toothbrushes to each table (2 per table).

Then, using the Elmo camera and smart board, teacher demonstrates how to roll, shape, and attach clay using tools provided. Teacher encourages students to learn how to use the clay, reminding them that this is practice time so it's open ended, and they will be smooshing it back into a ball at the end of class. Teacher walks around classroom, monitoring and supporting students as needed.

This continues until the end of class.

Teacher: "Clay is a fun material isn't it?! Now that you know how it works, next class we are going to combine everything we have learned and make our clay butterflies."

## **Day 2**

### **Lesson Intro: 1 min**

Teacher: "Last week we learned how to use clay — how to cut, shape, and attach it. Today we are going to make clay butterflies! But first we need to look at some photos of butterflies to get ideas for how to make our clay butterfly."

### **Sketching: 5 min**

Teacher again shows slide with photos of butterflies. Then talks to the students about "What do butterflies have?" guiding the students to answers like wings, body, and legs.

Teacher: "Take a paper and pencil at your table and draw some sketches of what you might want your butterfly to look like. Sketches are practice drawings. We will take a few minutes while you think about and draw some butterfly designs. There is a support guide on your table to help you visualize your ideas if you need it."

While students work on sketches, the teacher passes out clay bags from previous week, plus the rest of the clay each student will use to make their butterflies. Teacher can also show video of butterflies flying on smart tv.

### **Clay worktime: 25 min**

Teacher: "Okay, now that you have ideas for your butterflies, we can begin working on them. We are going to start together, then you can work independently.

First, take the small clay out of your bags that you used last class. We are going to smooch this into a circle and put it in our paper bowls."

Teacher demonstrates this on the Elmo/smart tv, then walks around the classroom to monitor students' work.

Teacher: "You will be building your butterfly onto this circle. Review how to attach two pieces of clay together. So, go ahead and make your first petal. You can roll out your clay and cut it out with the wooden skewer, or you can use your fingers to shape it. If you cut it, make sure you smooth those rough edges using your water."

Teacher demos this while talking, then walks around the classroom to support students if needed.

Teacher: "When you are ready to attach your petal, give me a thumbs up!"

When most/all students are ready, teacher review/demos how to attach clay pieces using slip and score method using the Elmo. Then, the teacher walks around the room to support students as needed.

Teacher: "Great job! Now, go ahead and make your butterflies. Make sure you slip and score every piece you add. If you don't it will fall apart when it dries."

Teacher walks around room supporting students, periodically reminding students to slip and score. Slide with information on this method will be on view on the smart tv.

Teacher gives 5 minute and 2 minute warning before end of worktime.

## **Day 3**

### **Lesson Intro: 5 min**

Teacher: "Last week you all created some fantastic clay butterflies! They have been drying out all week and are now ready for you to paint! Let's look at our butterfly pictures again to get some inspiration on how to paint them.

Teacher shows photos, asking students what colors they see. Then teacher plays video of butterflies flying.

**Painting: 20 minutes**

Teacher: “We are going to paint our butterflies with watercolors, this will help the textures you made really show up. Now, keep in mind that clay is a porous material, meaning it will absorb water, like a sponge or a towel. So we need to be careful about not using too much water when we paint them. We don’t want our butterflies to become mushy. You can dab your paintbrush on the water cup if you get too much. Be gentle! We don’t want to splash.”

Teacher demos painting a wing of the teacher sample butterfly, then has students paint. Students only have 10 minutes to paint to ensure the clay doesn’t get too wet.

After 9 minutes, teacher gives 1 minute warning. After 1 minute, teacher tells students to put their brushes in the water and make sure their clay butterflies are back in the bowls. Then teacher collects water bowls and paint. Then collects sculptures.

Teacher: “For the rest of class, we are going to color our life cycle drawings. Go ahead and open your table folders and take out your diagram drawing. These will be great to go along with your butterflies to help show others how they develop!”

Teacher passes out table bins with markers and colored pencils. Students color for the remainder of class.

Outside of class: Once the butterflies are dry, teacher will coat with glossy Mod Podge for protection.

**Clean-up Procedures (Room, Materials & Work Storage)**

- Day 1: At 10 minutes prior to class ending, teacher tells students to roll their clay back into a ball and put back into their plastic bags (labeled with their names).
- Day 2: Teacher tells students to collect their unused clay into a ball, then walks around the room collecting the butterfly projects in paper bowls (labeled with student names) to place on a shelf to dry.
- Students stack their brown bags back into a pile at their tables
- Students will wash their hands by table groups as released by teacher, then line up

**Closure, Review & Anticipation (what’s next?)**

Teacher: "You all worked very hard on your clay creations, and I am proud of you! These will dry here in the classroom, and then they will be put on display so the other teachers and students can see the wonderful work you made! Your art will help everyone learn about life cycles."

### Supplemental Activity

Students can look through books of all types of science, or research on science websites like [National Geographic](#), [Smithsonian](#), [Science Journal for Kids](#), [American Museum of Natural History](#).

### Teacher reflection focused on the lesson *after* it has been taught

- Were the students able to handle the clay on their own, or with limited help? Did they need more support?
- Was there enough time for all (or most) to finish?

### Lesson 3 Teaching & Learning materials

Include attachments of any resources, slide shows, teacher samples, and/or assessments related to this lesson.

#### Google slides:

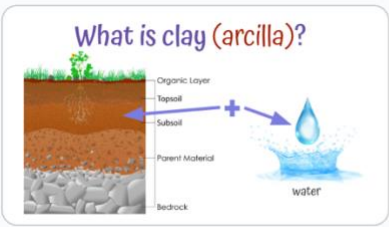


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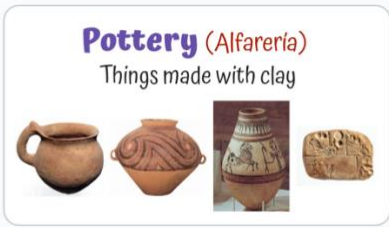


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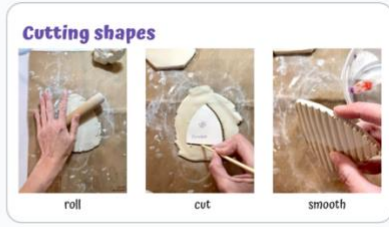
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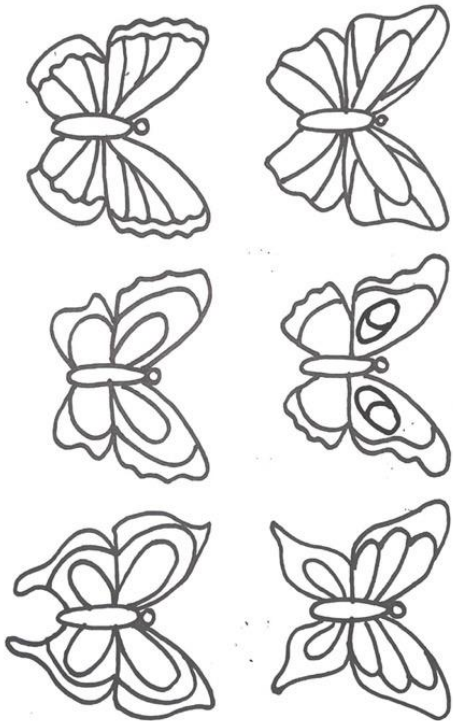
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**Teacher sample:**



**Drawing guide:**



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