

# **Ceramics II**

## **Grade 9-12**

EWING PUBLIC SCHOOLS  
1331 Lower Ferry Road  
Ewing, NJ 08618

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Superintendent

In accordance with The Ewing Public Schools' Policy 2230, Course Guides, this curriculum has been reviewed and found to be in compliance with all policies and all affirmative action criteria.

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## **Course Description and Rationale**

Ceramics II is designed for students who have successfully completed the Ceramics I level course. Students are taught how to advance their knowledge of hand building techniques, cultural, historical, and current applications of the medium, use of molds, and develop skills for working on the potter's wheel. Special emphasis is placed on advancing knowledge of surface treatments learned in Ceramics I with the addition of mishima, slip decoration, and additional glazing effects. In this class students learn how to communicate effectively, using the elements of art and principles of design: line, space, form, value, shape, color, texture and pattern.

Students learn to define, analyze and solve visual problems in three dimensions. They access and interpret information from a variety of sources as they create and explore with hand-building techniques, glazing techniques and maintenance of the ceramics studio. Students draw inspiration from the world around them, the works of other artists and from their own imaginations. Students also learn how to critically analyze a work of art, in order to achieve creative results.

## **21st Century Life and Careers**

In today's global economy, students need to be lifelong learners who have the knowledge and skills to adapt to an evolving workplace and world. To address these demands, Standard 9, 21st Century Life and Careers, which includes the 12 Career Ready Practices, establishes clear guidelines for what students need to know and be able to do in order to be successful in their future careers and to achieve financial independence.

### **The 12 Career Ready Practices**

These practices outline the skills that all individuals need to have to truly be adaptable, reflective, and proactive in life and careers. These researched practices are essential to career readiness.

#### **9.1 Personal Financial Literacy**

This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially secure, and successful careers.

#### **9.2 Career Awareness, Exploration, and Preparation**

This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.

#### **9.3 Career and Technical Education**

### **Technology Integration**

#### **8.1 Educational Technology**

All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and create and communicate knowledge.

#### **8.2 Technology Education, Engineering, Design and Computational Thinking - Programming**

All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.

## **ELA Integration**

The Research Simulation Task requires students to analyze an informational topic through several articles or multimedia stimuli. Students read and respond to a series of questions and synthesize information from multiple sources in order to write an analytic essay.

Companion Standards History, Social Studies, Science and Technical Subjects 6-8

Companion Standards History, Social Studies, Science and Technical Subjects 9-10

Companion Standards History, Social Studies, Science and Technical Subjects 11-12

## **SCOPE AND SEQUENCE**

### I Introduction to Ceramics II

- A. Review practices of Ceramics I
  - i. hand building
  - ii. throwing
- B. Health and safety rules for a studio
- C. Principles and elements of design

### II. Development Process

- A. How an artist develops ideas
  - i. research
  - ii. sketches
  - iii. revision
- B. Explore the creative processes
  - i. personal experience and ideas transform ideas to 3-D design appropriate for ceramics

### III. Surface Decoration

- A. Textures
  - i. texture in relation to form
  - ii. texture in relation to color
  - iii. texture in relation to size
- B. Glaze
  - i. glaze in relation to form
  - ii. glaze in relation to color opacity
  - iii. glaze in relation to clay

### IV. Creation Techniques

- A. Hand building
  - i. construction ideas
  - ii. practicality
  - iii. utility
- B. Potter's wheel
- C. Molds and mold making
  - i. plaster

- ii. one-piece drape and press molds
- iii. two-piece molds

V. Research

- A. Ceramics through the ages
- B. Contemporary and past ceramists
- C. Careers

**MINIMUM PROFICIENCY REQUIREMENTS**

Students will:

1. Average a passing grade on all assigned work including tests, class work, homework and projects
2. Demonstrate knowledge of health and safety rules
3. Demonstrate appropriate cleanup, maintenance and housekeeping procedures in the ceramics studio:
  - A. properly store unfinished work
  - B. properly clean work area
  - C. reclaim clay
  - D. assist in cleaning and organizing the ceramics studio at course's end
4. Demonstrate the safe studio procedures in handling and use of the equipment and supplies
5. Demonstrate knowledge of the developmental process for creating a clay form by including evidence of research, sketches, revisions and final project
6. Demonstrate the appropriate use of time in the completion of assignments
7. Demonstrate knowledge of the design elements and principles:
  - A. recognize, comprehend and employ the elements and principals of design in the creation
  - B. discriminate among the visual characteristics of the design elements (line, shape, form, color, value, texture and space) when describing ceramic pieces
  - C. describe how design principles contribute to the expressive qualities of a work of art
8. Explore the creative process:
  - A. how artist develops ideas
  - B. the relationship between personal experience and ideas
  - C. how artist transforms ideas to create art
9. Demonstrate ability to produce a specific number of clay project successfully incorporating ceramic techniques as evaluated by the teacher
  - A. hand building techniques

## **Ceramics II: Unit 1: Introduction to Ceramics II (Days: 2.5 weeks)**

### **Why is this Unit Important?**

This first unit in Ceramics II will be a time for students to review origins of ceramics, basic hand building techniques, rules, and routines of the studio. This will allow for review of the basic ceramic "rules" (wall thickness, venting, wedging, etc.) which will lead to successfully completed projects throughout the course. Students will review grading and teacher expectations so they may be knowledgeable of how they are being evaluated. Studio safety practices will be enforced to set the tone for a safe learning environment throughout the course. Rules and routines of the class will be established so students can use class time effectively. Students will end this unit with a successful hand building project to demonstrate their knowledge of basic ceramic rules, safety, and routines in the course.

### **Enduring Understandings:**

- Understand that culture affects self-expression whether we realize it or not.
- Understand that every artist has style; every period has style.
- Understand that technology affects the arts.
- Understand ceramics are some of the only materials which continue to exist to reflect past people. Hence, we may call them a strong-fragile part of human life.
- Understand that since ancient times, the technology and applications of ceramics have steadily increased.
- Understand that clay has been indispensable in architecture, in industry and in agriculture from prehistoric times.
- Understand that every Ceramic studio must have established rules and routines in order to function safely and effectively

### **Essential Questions:**

- Does art define culture? Or, does culture define art?
- How does art created in the past affect art today?
- How important is 'new' in art?
- Why did humankind create ceramics?
- What do I need to do before I can create with clay?

**Acquired Knowledge:**

- Basic knowledge of ceramic decoration
- Apply the elements and principles of art to the three-dimensional design of ceramic structures
- Acquire knowledge of the uniqueness of clay
- Become familiar with basic glaze formulations
- Acquire a basic knowledge of bisque and glaze firing processes
- Acquire vocabulary specific to ceramic techniques and firing processes
- Rules and Routines of the Ceramic Studio

**Acquired Skills:**

- Basic skill in hand-building methods, including pinch, coil and slab methods
- To follow sequential directions as they apply to the ceramic process
- To develop responsibility in the care and safe use of ceramic tools, materials and equipment
- Develop eye-hand coordination in three-dimensional ceramic work

**Major Assessments:**

Formative Assessments-

- Do Now, Exit Slips, Daily Participation Points

Summative Assessments-

- Quizzes, Tests, Self-Assessment, Rubrics, Critiques

Benchmark Assessment-

- Project Grade aligned with Rubric

Alternative Assessment-

- Modified Quizzes, Tests, and Project Requirements

**Instructional Strategies:**

- Discuss steps in the ceramic process
- Discuss physical properties of clay
- Discuss complex issues, such as distortion of shapes/form, space, simplified and actual texture, scale, balance and expressive content as they appear in ceramic objects
- Teacher demonstration of clay piece



## **Teacher Resources:**

### **Core:**

- Clay
- Clay tools (potter's needle, cut off wire, wooden modeling tools, sponges, brushes, towels, slab roller, rolling pin)
- Glazes

### **Supplemental:**

- Plastic bags
- Physical ceramic work examples
- Technology integration:
  - [www.pottery-making.org](http://www.pottery-making.org)
  - [www.americanstyle.com](http://www.americanstyle.com)
  - [www.ceramicmonthly.org](http://www.ceramicmonthly.org)
  - [https://www.youtube.com/watch?v=tBDH5ck\\_a68](https://www.youtube.com/watch?v=tBDH5ck_a68) (applique and incising techniques)

## **Accommodations or Modifications for Special Education, ESL or Gifted Learners:**

- Assist students in getting organized
- Demonstrate skills and have students model them
- Give short oral directions
- Use concrete examples to introduce concepts
- Move around the room frequently
- Make verbal instructions clear, short and to the point
- Make assignments that call for original work, independent learning, critical thinking, problem solving and experimentation

### **NJSLS:**

- 1.1.12.D.1
- 1.3.12.D.2,5
- 1.4.12.B.1

## **Suggested Learning Experiences and Instructional Activities:**

- Studio Tour
- Kahoot Review of Vocabulary/ stages of clay
- Elements and Principles Review
- Define related ceramic vocabulary

## **Ceramics II: Unit II: Development Process (Days: 2.5 weeks)**

### **Why is this unit important?**

Students in the Ceramics II course will use basic technical knowledge of the medium learned in Ceramics I to develop a plan to create a work of art or series of work based off a theme, research, planning, and execution by a due date. Students will learn how artists develop their ideas and organize their inspiration in order to produce effective work in a timely manner. Themes of work will be explored which will then lead to the planning and sketching phase. From that phase, students will learn how to focus in on the options that will be most effective for communicating their ideas. Students will develop a timeline and adhere to a due date. This is good preparation for being self-sufficient in planning and meeting goals for artistic creation.

### **Enduring Understandings:**

- Understand that artists making a living off their work must be organized, goal oriented, and organized
- Understand that proper planning and small goal setting leads to progress in any situation
- Understand that technology affects the arts
- Understand that it is beneficial to have many options relating to a theme or idea to then brainstorm best possible outcome

### **Essential Questions:**

- How does an artist prepare for creating art?
- How much planning is involved in the creation of a work(s)?
- How can large goals be reached?
- How are ceramic artists selling their work today/ making a living for themselves?
- How can you best communicate an idea or message through a work of art?

### **Acquired Knowledge:**

- How to translate an emotion or feeling to a work of art
- How to develop an idea into a major piece of artwork
- How to determine due dates based off knowledge of one's own pace when working with the medium of clay

## **Acquired Skills:**

- How to sketch multiple options of the same idea/ theme and show in different ways
- How to narrow down from many options to one that will best communicate idea/ theme of work
- Small goal setting, due dates to reach completion by teacher determined deadline

## **Major Assessments:**

Formative Assessments-

- Do Nows, Exit Slips, Daily Participation Points

Summative Assessments-

- Quizzes, Tests, Self-Assessment, Rubrics, Critiques

Benchmark Assessment-

- Project Grade aligned with Rubric

Alternative Assessment-

- Modified Quizzes, Tests, and Project Requirements

## **Instructional Strategies:**

- Show examples of how practicing artists today meet goals and deadlines
- How to begin planning a work, thumbnail sketches
- Student and teacher conferences on artistic plan
- Students create their own timeline for parts to be completed to reach the end goal of the completed work/ series

## **Instructional Materials:**

### **Core:**

- Clay
- Clay tools (potter's needle, cut off wire, wooden modeling tools, sponges, brushes, towels, slab roller, rolling pin)
- Glazes

### **Supplemental:**

- Plastic bags
  - Physical ceramic work examples
  - **Technology integration:**
    - [www.potterymaking.org](http://www.potterymaking.org)
    - [www.americanstyle.com](http://www.americanstyle.com)
    - [www.ceramicmonthly.org](http://www.ceramicmonthly.org)
- Youtube, Etsy, Instagram

## **Accommodations or Modifications for Special Education, ESL or Gifted Learners:**

- Assist students in getting organized
- Demonstrate skills and have students model them
- Give short oral directions
- Use concrete examples to introduce concepts
- Move around the room frequently
- Make verbal instructions clear, short and to the point
- Make assignments that call for original work, independent learning, critical thinking, problem solving and experimentation

## **NJSLS:**

- 1.5.12adv.Cr1a
- 1.5.12adv.Cr1b
- 1.5.12acc.Cr2b
- 1.5.12acc.Cr2c
- 1.5.12adv.Cr2b
- 1.5.12adv.Cr2c
- 1.5.12adv.Pr4a
- 1.5.12adv.Pr5a
- 1.5.12adv.Pr6a
- 1.5.12adv.Re7a
- 1.5.12adv.Re7b
- 1.5.12adv.Re8a
- 1.5.12acc.Re9a
- 1.5.12adv.Re9a
- 1.5.12acc.Cn10a
- 1.5.12adv.Cn10a
- 1.5.12acc.Cn11a
- 1.5.12adv.Cn11b

## **Suggested Learning Experiences and Instructional Activities:**

- Influence of technology such as Instagram/ Etsy on artists selling their work (show examples)
- How being involved with other goal oriented people/ groups can benefit
- Youtube videos of artists working on meeting deadlines for goals
- How to organize/ small goal setting (graphic organizers, visual reminders)

## **Ceramics II: Unit 3: Surface Decoration (Days: 2.5 weeks)**

### **Why is this unit important?**

Texture and color play an important role in the overall critique of a ceramic work. Surface decoration can range from simple to lavish and ornate. Inlay, incising, graffito, mishima, relief carving, texture impressing, slip application, and glaze selection are just a few of the decisions students will have to make for their projects. How to determine which techniques to use will become important for Ceramics II students to figure out in order for a work to effectively communicate the message intended. Ceramics II students will use techniques learned in Ceramics I and new techniques early on in the course to have a multitude of options to pick from when planning their designs later in the course. Selecting the correct method of surface decoration is crucial to achieving the intended feel or feedback of a work.

### **Enduring Understandings:**

- Understand that texture can be shown in a variety of ways (form, color, size)
- Understand how selection of glaze and application will affect the overall final product

### **Essential Questions:**

- How does an artist select the correct texture for intended theme/ design?
- How does texture relate for form, color, and size?
- How does glaze relate to form, color opacity, and size?

### **Acquired Knowledge:**

- How to translate an emotion or feeling to a work of art through use of surface decoration?
- How to select correct method of surface decoration for theme intended
- How texture and glaze application will affect final piece

### **Acquired Skills:**

- How to create textures through impressing, incising, slip application, and glaze application
- How to create dark opaque effects to light translucent glazing
- How to narrow down options to best techniques to achieve desired effects previously planned in design stage

## **Major Assessments:**

Formative Assessments-

- Do Nows, Exit Slips, Daily Participation Points

Summative Assessments-

- Quizzes, Tests, Self-Assessment, Rubrics, Critiques

Benchmark Assessment-

- Project Grade aligned with Rubric

Alternative Assessment-

- Modified Quizzes, Tests, and Project Requirements

## **Instructional Strategies:**

- Teacher demonstrations of new surface decoration techniques
- Instructional video clips to review
- Teacher samples of effective vs. ineffective techniques
- Class discussions/ critique of works
- New and innovative techniques being used by artists today
- How use of new technology/ innovative current ceramic artists are creating new ceramic surface decoration techniques

## **Teacher Resources:**

### **Core:**

- Clay
- Clay tools (potter's needle, cut off wire, wooden modeling tools, sponges, brushes, towels, slab roller, rolling pin)
- Glazes

### **Supplemental:**

- Plastic bags
- Surface decoration tools and materials
- Glazes
- Variety of brushes/ nontraditional brushes for application
- Physical ceramic work examples
- Pottery Wheels

## **Technology integration:**

- [www.potterymaking.org](http://www.potterymaking.org)
  - [www.americanstyle.com](http://www.americanstyle.com)
  - [www.ceramicmonthly.org](http://www.ceramicmonthly.org)
  - <https://ceramicartsnetwork.org/shop/surface-decoration-techniques/>
- Youtube, Instagram- ex. Ceramic artist that creates his own metal infused glazes, uses magnets to create surface effects

## **Accommodations or Modifications for Special Education, ESL or Gifted Learners:**

- Assist students in getting organized
- Demonstrate skills and have students model them
- Give short oral directions
- Use concrete examples to introduce concepts
- Move around the room frequently
- Make verbal instructions clear, short and to the point
- Make assignments that call for original work, independent learning, critical thinking, problem solving and experimentation

## **NJSLS:**

- |                  |                   |
|------------------|-------------------|
| • 1.5.12adv.Cr1a | • 1.5.12adv.Re7a  |
| • 1.5.12adv.Cr1b | • 1.5.12adv.Re7b  |
| • 1.5.12acc.Cr2b | • 1.5.12adv.Re8a  |
| • 1.5.12acc.Cr2c | • 1.5.12acc.Re9a  |
| • 1.5.12adv.Cr2b | • 1.5.12adv.Re9a  |
| • 1.5.12adv.Cr2c | • 1.5.12acc.Cn10a |
| • 1.5.12adv.Pr4a | • 1.5.12adv.Cn10a |
| • 1.5.12adv.Pr5a | • 1.5.12acc.Cn11a |
| • 1.5.12adv.Pr6a | • 1.5.12adv.Cn11b |

## **Suggested Learning Experiences and Instructional Activities:**

- Influence of technology on new surface decoration effects in the field of ceramics today
- Creating test tiles for experimenting with various surface decoration effects
- Creating test tiles for experimenting with glazes
- Final project that includes use of correct surface design and glaze application to align with intended theme, element of art, or principle of design

## **Ceramics II: Unit 4: Creation Techniques (Days: 2.5 weeks)**

### **Why is this unit important?**

Hand-building techniques have remained unchanged for thousands of years. Today, clay artists often use the same methods as their predecessors as well as newer innovations. The three methods of hand-building (pinch, coil, and slab) are the basis of most variations in clay construction. You can use these methods, alone or in combination, to make simple tiles and elegant vessels. You can experiment with making musical instruments, masks or lidded boxes. Clay hand-building offers a freedom that can lead you into sculptural expressions you may never have imagined you could explore. Hand building techniques will become the basis of knowledge for more advanced techniques students will learn in Ceramics II such as throwing on the potter's wheel and making pieces from the use of molds. Students will need to determine the correct technique to use (hand building, throwing, or use of molds, or a combination) for the desired theme or appearance of the final product. Also, knowledge of the correct technique will lead to creating effective functional pieces.

### **Enduring Understandings:**

- Students will understand which ceramic construction methods are more conducive to producing specific structures.
- Students will incorporate creativity and imagination in combination with specific skills and disciplines to create quality products.
- Students will understand that self-critique is an essential component to the creation of all art.
- Students will understand that the elements and principles of art are an integral part of the creative process.
- Students will understand the firing process for finishing ceramics.

### **Essential Questions:**

- How do specific hand-building techniques affect structure and form?
- What techniques are best suited for specific ceramic structures?
- How is glazing a part of the elements and principles of art?
- How are aesthetic components important to a finished piece?
- How can critique affect the creation of artwork?
- How have different cultures utilized the pinching method of hand-building clay into art?
- What techniques and tools are used in expressing texture and design in the development of a clay work of art?



### **Acquired Knowledge:**

- What's great about clay is its flexibility; it can be used not only to adorn or decorate architecture but also to express complex concepts and ideas
- Knowledge of the wedging process
- Knowledge of the pinch-method of hand-building
- The thickness/thinness rule
- The technical process of joining clay
- Methods and tools utilized in the creation of textural design
- Knowledge of glaze and the technical process for glazing a ceramic piece
- Historical connections associated with the pinching method of hand-building and incorporate that knowledge into the creation of their own artwork

### **Acquired Skill:**

- Develop skills for manipulating and joining clay
- Utilize a sketchbook for product development
- Seamlessly join two consistent pinch pots and create a historically-inspired artwork
- Create textural design
- Utilize and continue to develop a clay vocabulary

### **Major Assessments:**

Formative Assessments-

- Do Nows, Exit Slips, Daily Participation Points

Summative Assessments-

- Quizzes, Tests, Self-Assessment, Rubrics, Critiques

Benchmark Assessment-

- Project Grade aligned with Rubric

Alternative Assessment-

- Modified Quizzes, Tests, and Project Requirements

### **Instructional Strategies:**

- Teacher demonstrations of new surface decoration techniques
- Instructional video clips to review
- Teacher samples of effective vs. ineffective techniques
- Class discussions/ critique of works
- New and innovative techniques being used by artists today
- How use of new technology/ innovative current ceramic artists are creating new ceramic surface decoration techniques

## **Teacher Resources:**

### **Core:**

- Clay
- Clay tools (potter's needle, cut off wire, wooden modeling tools, sponges, brushes, towels, slab roller, rolling pin)
- Glazes

### **Supplemental:**

- Plastic bags
- Surface decoration tools and materials
- Glazes
- Variety of brushes/ nontraditional brushes for application
- Physical ceramic work examples
- Pottery Wheels

### **Technology integration:**

- [www.potterymaking.org](http://www.potterymaking.org)
  - [www.americanstyle.com](http://www.americanstyle.com)
  - [www.ceramicmonthly.org](http://www.ceramicmonthly.org)
  - <https://ceramicartsnetwork.org/shop/surface-decoration-techniques/>
  - <https://www.youtube.com/watch?v=nV-cRJ5HLSM> (sling mold demo)
  - <https://www.youtube.com/watch?v=T0jEI8Ww2sY> (drape mold demo)
  - <https://www.youtube.com/watch?v=BECqviT-Eak> (slump mold demo)
  - <https://www.youtube.com/watch?v=Qyyik5ZF2g4> (leaf press mold demo)
- Instagram-

### **Accommodations or Modifications for Special Education, ESL or Gifted Learners:**

- Assist students in getting organized
- Demonstrate skills and have students model them
- Give short oral directions
- Use concrete examples to introduce concepts
- Move around the room frequently
- Make verbal instructions clear, short and to the point
- Make assignments that call for original work, independent learning, critical thinking, problem solving and experimentation

**NJSLS:**

- 1.5.12adv.Cr1a
- 1.5.12adv.Cr1b
- 1.5.12acc.Cr2b
- 1.5.12acc.Cr2c
- 1.5.12adv.Cr2b
- 1.5.12adv.Cr2c
- 1.5.12adv.Pr4a
- 1.5.12adv.Pr5a
- 1.5.12adv.Pr6a
- 1.5.12adv.Re7a
- 1.5.12adv.Re7b
- 1.5.12adv.Re8a
- 1.5.12acc.Re9a
- 1.5.12adv.Re9a
- 1.5.12acc.Cn10a
- 1.5.12adv.Cn10a
- 1.5.12acc.Cn11a
- 1.5.12adv.Cn11b

**Suggested Learning Experiences and Instructional Activities:**

- Influence of technology on new surface decoration effects in the field of ceramics today
- Creating test tiles for experimenting with various surface decoration effects
- Creating test tiles for experimenting with glazes
- Final project that includes use of correct surface design and glaze application to align with intended theme, element of art, or principle of design

## **Ceramics II: Unit 5: Research- Art History (Days: 2.5 weeks)**

### **Why Is This Unit Important?**

The word 'ceramic' is derived from the Greek word 'keramos' meaning potter or pottery. Keramos, in turn, originated from a Sanskrit root word meaning 'to burn'. Hence, the word keramos was to infer burned substance or burned earth.

Ceramics has been accompanying the human race since ancient times. Archaeologists have unearthed man-made ceramics that date back to at least 25,000 BC. Primitive ceramics were made of basic earthen materials like clay and were burnt in domes. Human inventiveness gradually started with firing these articles at higher temperatures to attain harder ceramic articles. This desire of getting harder substances steered the human races to invent better firing techniques. The human zest and nature's mystery have come a long way from basic earthen wares to modern world advanced ceramics. Students will learn how techniques have evolved over time and how artists are advancing the field of ceramics and making a living off of their craft.

### **Enduring Understandings:**

- Understand that culture affects self-expression whether we realize it or not.
- Understand that every artist has style; every period has style.
- Understand that technology affects the arts.
- Understand how artifacts reflect various cultures in history.
- Understand ceramics are some of the only materials which continue to exist to reflect past people. Hence, we may call them a strong-fragile part of human life.
- Understand that since ancient times, the technology and applications of ceramics have steadily increased.
- Understand how the process of making clay and firing has evolved over time
- Understand how artists continue to develop new ceramic methods and how they are able to make a living off of their craft

### **Essential Questions:**

- Does art define culture? Or, does culture define art?
- How does art created in the past affect art today?
- How important is 'new' in art?
- Why did humankind create ceramics?
- How has ceramics evolved over time?
- How do ceramic artists make a living for themselves/ promote their work for sale?
- How does technology influence artwork sales?

### **Acquired Knowledge:**

- Basic knowledge of ceramic decoration
- Apply the elements and principles of art to the three-dimensional design of ceramic structures
- Acquire knowledge of the uniqueness of clay
- Become familiar with basic glaze formulations
- Acquire a basic knowledge of bisque and glaze firing processes
- Acquire vocabulary specific to ceramic techniques and firing processes
- How to use technology to promote one's work
- Careers in the field of Ceramics

### **Acquired Skills:**

- Research and citing credible sources
- To compare/contrast the past history of ceramics to current trends
- Develop eye-hand coordination in three-dimensional ceramic work

### **Major Assessments:**

Formative Assessments-

- Do Nows, Exit Slips, Daily Participation Points

Summative Assessments-

- Quizzes, Tests, Self-Assessment, Rubrics, Critiques

Benchmark Assessment-

- Project Grade aligned with Rubric

Alternative Assessment-

- Modified Quizzes, Tests, and Project Requirements
  
- RST - Research the ceramic work of an ancient culture from another part of the world.

## EHS Art Research Simulation Task- Ceramics II

### The Japanese Tea Ceremony

The Japanese Tea ceremony is an ancient tradition that is still practiced today. It is simultaneously peaceful and relaxing, political and powerful. The following articles discuss the tradition and aesthetics of the tea ceremony and it's perhaps deeper association with status and political power.

#### The Japanese Tea Ceremony: An Ode to Harmony



1. Like so many traditional Japanese arts, the formal tea ceremony called *chado*, or "the Way of Tea," is an ode to harmony—in this case, the harmony between tea, art, nature, organic materials, and people. Highly influenced by Zen Buddhism, *chado* has been used as a sacred and meditative ritual in Japan throughout the ages. From the processing of the tea to the way it is served, all aspects of the ceremony demand mindfulness and care. While *chado* is typically a privileged experience of the elite, you certainly don't need attend a formal ceremony to infuse its spirit into your everyday tea drinking rituals. The powdered green tea present in the ceremony, *matcha*, can be purchased in specialty stores.

2. Even before the ceremony, the mindfulness around *chado* begins with the cultivation and processing of *matcha*. Brought from China in 1191 by the Zen priest Eisai, it was first valued as a way to keep the devout awake during meditation, then later for its many beneficial properties. *Matcha* is one of the highest quality green teas, made from the whole, young leaves of the *Camellia sinensis* plant. Farmers shade the plants to keep leaves thin, delicate and flavorful. After harvest, they steam them, age them, dry them, grind them into a fine powder, and finally store the *matcha* under air-tight conditions to preserve its intense, bright green color.



Splendidly choreographed between host and guest, *chado* calls on participants to live in the moment and focus on the profound beauty around them.

3. Sixteenth century Japanese philosopher Sen no Rikyu perfected much of the ceremony we know today, calling for a return to *wabi*—simplicity and rustic beauty. During his era of warrior shoguns and samurai, the tea ceremony became a ritual for peace and restraint. Even today, the ceremony continues to teach both guests and hosts the concepts of harmony, respect, purity and serenity. One could easily spend a lifetime mastering this four-hour event. Splendidly choreographed between host and guest, *chado* calls on participants to live in the moment and focus on the profound beauty around them. Guests may walk across a stone path leading to the teahouse, typically through beautifully landscaped gardens. They then proceed to the teahouse, where their host greets them in a simply adorned room of tatami mats made from woven reeds and either a hanging scroll or a vase of fresh flowers.

4. Participants kneel on the mats throughout the ceremony, while the host serves guests small dishes of sweets and cups of *matcha* using deliberate movements as graceful as a Tai Chi master. The host delicately scoops the tea powder into a ceramic cup, pours hot water from a hot iron kettle into the cup with a long-handled ladle, and then mixes the powder and water together with a bamboo whisk to create a thick tea. Every movement calls for total concentration. The host then passes the bowl of tea, allowing everyone to drink from the same vessel in an act of communion. Guests focus their conversation solely on the beauty and craftsmanship of the tea and utensils, all made from organic materials to represent the Five Elements in Taoism—water, earth, wood, fire and metal. Hosts and guests each understand their role in creating the atmosphere.



5. Living in the fast-paced West, slowing down long enough to appreciate beauty, an uninterrupted conversation or a quiet moment in nature seems almost luxurious. The tea ceremony reminds us to live in the moment, connecting with others and with the earth. Whether you attend a formal Japanese tea ceremony or simply invite some friends to a tea party of your own design, bringing mindfulness into your life and daily rituals can cultivate a spirit of harmony and peace.

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1. Which phrase best defines the word “chado” (1)?
  - a. the harmony between tea, art, nature, organic materials, and people...
  - b. a sacred and meditative ritual in Japan...
  - c. a privileged experience of the elite...
  - d. the cultivation and processing of *matcha*.
2. In paragraph 3, which phrase best supports the definition of “wabi” as “simplistic and rustic beauty”?
  - a. the tea ceremony became a ritual for peace and restraint.
  - b. the ceremony continues to teach both guests and hosts the concepts of harmony, respect, purity and serenity.
  - c. calls on participants to live in the moment and focus on the profound beauty around them.
3. In paragraph 5, which phrase best summarizes the intent of the tea ceremony?
  - a. an uninterrupted conversation or a quiet moment in nature...
  - b. connecting with others and with the earth
  - c. bringing mindfulness into your life...



## In The Japanese Tea Ceremony, Politics Are Served With Every Cup

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LAYLA EPLETT



Myanmar democracy activist Aung San Suu Kyi (right) receives a bowl of green tea from Japanese tea master Genshitsu Sen at a tea ceremony in Kyoto during a 2013 visit to Japan. *STR/AFP/Getty Images*

1. In the U.S., Tea Party politics refers to a certain strain of Republican conservatism. But in Japan, tea politics are of an altogether different sort: The ritual drinking of this ancient beverage — often thought of as the epitome of Japanese restraint and formality — has long been entwined with issues of power and national identity.

A thousand years ago, Buddhist monks studying in China brought tea back to Japan. And while the tea ceremony is meant to encourage spiritual contemplation, early on, it became **enmeshed** with very earthly displays of power. Japan's 15th-century aristocrats and other elites adopted the esoteric practice, holding tea parties during which they would also display rare Chinese objects to convey power and wealth.



2. As Andrew Watsy, a professor of Japanese art history at Princeton University, [explained to NPR](#) in 2014, "To be politically powerful at this time also meant that you had to show that you had some sort of cultural sophistication as well."

According to [Kristin Surak](#), a professor of Japanese politics and author of [Making Tea, Making Japan](#), and the tea ceremony is full of contradictions. It's a Zen-like renunciation of the material world — and simultaneously, a place where expensive tea wares convey affluence. It's intended to be a place of equality, but often serves to reinforce power and hierarchies. Although each preparation is meant to be unique, the ritual is the same thing over and over.



A portrait of Sen Rikyū by Tōhaku Hasegawa. Rikyū was a highly influential tea master in 16th century Japan.

3. "It's presented as a universalistic practice open to everyone and pitched as being about *wa*, *kei*, *sei* and *jaku* (harmony, respect, purity and tranquility)," says Surak, who spent more than a decade in Japan, studying the art of the tea ceremony and observing its subtleties. "The claim is that everyone in the world can understand those things, and that if everybody sat around and had a bowl of tea, we could create world peace." She adds, "At the same time, it's also very much particularly, almost exclusively, Japanese."

4. Over the years, the ceremony also took on a political dimension, an aspect that became pronounced in the late 16th century. During this tumultuous time of civil war, two leading generals — Oda Nobunaga and Toyotomi Hideyoshi — unified much of Japan. Both used tea ceremonies as a political tool in this process: They awarded tea wares for victories on the battlefield, and the tea room was used as a space for liaising and negotiations. Tea masters — men who, over years, had mastered the intricate choreography of preparing and serving the tea — wielded great influence. Sen Rikyū was a favored tea master of Nobunaga and later became the second most influential man under Hideyoshi's rule.

Tea continued to be **steeped** in politics and, by the end of the 17th century, elite warriors were expected to be adept in all aspects of the tea ceremony. The ceremony maintained its prominence when Japan opened up to the West in the 1850s.

5. This continued with the rise of capitalism in Japan in the early 20th century. Businessmen became the new rulers of the country, and they used tea ceremonies much like the elites and warriors had before them. Tea was still a way to network and display power — and paradoxically, convey humility.

"Striking, though, is that such powerful men knelt on the floor and served tea themselves, including, for example, the key railroad founders, the shipbuilding magnates, and the leading bankers and politicians. Imagine [J.P. Morgan](#) or [\[John D.\] Rockefeller](#) doing something like that!" says Surak.



A woodblock print by the artist Toyohara Chikanobu depicts a tea ceremony during the reign of Japan's Emperor Meiji. Under Meiji, tea was included in many schools as part of etiquette training for women.

6. During this same period, the tea ceremony shifted from being a predominantly male practice to one aimed toward women. Beginning in the latter half of the 19th century, under the rule of the [Emperor Meiji](#), tea was included in many schools as part of etiquette training for women, as the manners gained were considered valuable on the marriage market. The inclusion of women in their customer base was not only financially advantageous for tea masters, it also reinforced their status and prestige within society.

Once instrumental in times of war, the tea ceremony was also integral in Japan's redefining itself as a peaceful culture following the end of World War II. It became a type of *sogo bunka*, or a "cultural synthesis" of the country's traditions. The combination of politics, culture and tea is still evident in contemporary Japan. Even the country's cultural ambassador to the United Nations, Sen Genshitsu, is a tea master.



7. Although [matcha](#), the Japanese green tea at the heart of the traditional tea ritual, is gaining popularity internationally, Surak believes it is unlikely that the tea ceremony itself will become **diluted** like other globalized exports. Reading the tea leaves into the future of this traditional ceremony, she says: "Because the Tea Ceremony, in capital letters, is controlled by very old families with much invested in preserving the practice as it is — and they've done so quite successfully across the centuries — it's unlikely that this formal variant will spawn international styles."

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[Tea Tuesdays](#) is an occasional series exploring the science, history, culture and economics of this ancient brewed beverage.

Layla Eplett is a writer based in the Bay Area.

4. In paragraph 1, what does the word **enmeshed** mean?

- a. **involved**
- b. confused
- c. synonymous

5. Which phrase **most** clearly helps to understand its meaning?

- a. the tea ceremony is meant to encourage spiritual contemplation...

- b. aristocrats and other elites adopted the esoteric practice...
- c. they would also display rare Chinese objects to convey power and wealth.

6. Following are definitions of the word "steep". In paragraph 4, which definition is **most** intended by the author?

- a. soak (food or tea) in water or other liquid so as to extract its flavor or to soften it.
- b. surround or fill with a quality or influence.

7. Following are definitions of the word "diluted". In paragraph 7, which definition is **most** intended by the author?

- a. make (a liquid) thinner or weaker by adding water or another solvent to it.
- b. to weaken in value

8. Essay (min. 3 paragraphs)

Contradictions exist between the Japanese tea ceremonies simplicity, serenity and beauty and its implied connection to social and political affluence. In a well-written essay, provide several examples of this contradiction. Include and cite examples from both texts.

9. Short answer (min. 1 paragraph)

Discuss how gender roles are reversed in this ceremony. Cite specific examples from the text(s).

### Instructional Strategies:

- Timeline of how ceramics have evolved throughout the ages
- Contemporary and past ceramists
- Discuss (compare and contrast) the purposes of ceramic art from major time periods and cultures
- Research Simulation Task (RST) on a cultural ceramic tradition

### Teacher Resources:

Core:

- Clay
- Clay tools (potter's needle, cut off wire, wooden modeling tools, sponges, brushes, towels, slab roller, rolling pin)
- Glazes
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Supplemental:

- Plastic bags
- Physical ceramic work examples
- Technology integration:
  - [www.potterymaking.org](http://www.potterymaking.org)
  - [www.americanstyle.com](http://www.americanstyle.com)
  - [www.ceramicmonthly.org](http://www.ceramicmonthly.org)

**Accommodations or Modifications for Special Education, ESL or Gifted Learners:**

- Assist students in getting organized
- Demonstrate skills and have students model them
- Give short oral directions
- Use concrete examples to introduce concepts
- Move around the room frequently
- Make verbal instructions clear, short and to the point
- Make assignments that call for original work, independent learning, critical thinking, problem solving and experimentation

**NJSLS:**

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| • 1.5.12acc.Cr2c | • 1.5.12acc.Re9a  |
| • 1.5.12adv.Cr2b | • 1.5.12adv.Re9a  |
| • 1.5.12adv.Cr2c | • 1.5.12acc.Cn10a |
| • 1.5.12adv.Pr4a | • 1.5.12adv.Cn10a |
| • 1.5.12adv.Pr5a | • 1.5.12acc.Cn11a |
| • 1.5.12adv.Pr6a | • 1.5.12adv.Cn11b |

**Suggested Learning Experiences and Instructional Activities:**

- Review/create ceramic history timeline
- Provide visual examples of various historical/cultural ceramic milestones
- Cooperative discussion of cultural viewpoints
- Define related ceramic vocabulary

## Ceramics Worksheet

Name: \_\_\_\_\_ Class: \_\_\_\_\_

Look at three artworks presented by your teacher that are labeled A, B and C. Complete the chart below to compare/contrast the works.		
Which culture is each work from?		
Work A	Work B	Work C
Which characteristics helped you identify the culture? How do those characteristics relate to the function of the piece?		
Work A	Work B	Work C
On the basis of which culture was chosen and the subject matter, when do you think the work was created? WHY?		
Work A	Work B	Work C
What was life like at that time and place and HOW did that influence the artist?		
Work A	Work B	Work C
How was this work valued when it was created as compared to how it is valued today?		
Work A	Work B	Work C

On the next page, write an essay comparing the importance of these works in the history of art. Support your opinions with information from the charts you just completed.

### Ceramics Critique Form

Questions	Write your ideas here. Give first impressions. Say what you see. Do not judge. Describe, analyze and interpret.
What stands out the most when you first see the piece?  Explain why.	
As you keep looking, what else seems important?  Explain why.	
Has contrast been used in this piece and how?	
What leads your eye around this piece?	
Describe the form of the piece.	
What tells you about the building techniques?	
What do you feel was the intent for the piece?  What would you use for the piece?	



What other things interest you about this piece?	
Overall interpretation based on the answers above.	

Overall score from 1-10 (with 10 being the highest):\_\_\_\_

### Art Criticism Scoring Guide

Criteria	4 Advanced	3 Proficient	2 Nearly Proficient	1 Progressing
<p>Art Criticism Introduction</p> <p>Tells plan to critique. Gives information about the work: artist's name, title of piece, when and where it was created, what media was used, its period, style or culture.</p>	<p>Clearly states plan to critique another artist's work or to explain the goal of a personal piece</p> <p>All available information given</p>	<p>States plan to critique another artist's work or to explain the goal of a personal piece</p> <p>Most available information given</p>	<p>Artist's work or a personal piece mentioned</p> <p>Tells artist's name and title</p>	<p>Artist's name or title of work listed</p>
<p>Art Criticism Description</p> <p>'Shopping List' sentences of everything seen in the artwork</p>	<p>Logical, coherent, complete, detailed description of what is seen in the work</p>	<p>Logical, coherent, complete description of what is seen in the work</p>	<p>Complete description of what is seen in the work but slightly unorganized</p>	<p>Random mention of one or two details seen in the work</p>
<p>Art Criticism Analysis</p> <p>Elements (Line, Shape, Form, Color, Texture, Space, Value, Principles (Balance Emphasis, Contrast, Rhythm, Unity, Proportion))</p>	<p>Considers each element and principle to determine which are most important in the work</p> <p>Explains, in detail, how and where each important element and principle is used in the work</p>	<p>Considers elements and principles to determine which are most important in the work</p> <p>Explains how and where each important element and principle is used in the work</p>	<p>Lists elements and principles used</p> <p>Tells how or where some elements and principles are used in the work</p>	<p>Partially lists elements and/or principles</p>

<b>Criteria</b>	<b>4 Advanced</b>	<b>3 Proficient</b>	<b>2 Nearly Proficient</b>	<b>1 Progressin g</b>
<p>Art Criticism Interpretation</p> <p>Explain the artist’s use of symbols (color, shape and cultural meanings), emotional mood or attitude toward the subject, social commentary, spiritual/religious ideas, storytelling or other purpose of the work.</p>	<p>Clearly infers meaning of work</p> <p>Clearly explains connections between the artist’s use of each important element/ principle and the meaning of the work</p>	<p>Explains meaning of work (mood, symbolism, attitude toward subject, social commentary, spiritual purpose, storytelling)</p> <p>Relates artist’s use of elements and principles to ideas</p>	<p>Suggests meaning of work but does not explain: mood. Symbolism, attitude toward subject, social commentary , spiritual purpose, story telling</p>	<p>Lists mood, attitude toward subject or purpose</p>
<p>Art Criticism Judgment</p> <p>Aesthetic theories are beliefs about what makes something ‘Art’</p> <p>Imitationalism – Art should copy the real or ideal world</p> <p>Formalism – Art should be an interesting arrangement of elements/ principles</p> <p>Emotionalism – Are should</p>	<p>Evaluates how the work would be valued according to aesthetic theories (Imitationalism, Formalism, Emotionalism or Functionalism</p> <p>Supports statements with specific references to the work and its context</p>	<p>Explains how the work would be valued according to aesthetic theories (Imitationalism , Formalism, Emotionalism or Functionalism)</p> <p>Gives details, facts and clues from work that support theory</p>	<p>Implies an aesthetic theory but may not use the term</p> <p>Gives opinion of work that supports mood or content with few facts</p>	<p>States personal opinion</p>

<p>express feelings or mood</p> <p>Functionalism – art should serve a purpose in society</p>				
<p>Grammar, Style, Form</p>	<p>Free of errors</p> <p>Consistently uses third person in other artist’s work or first person if own piece</p> <p>Uses sophisticated sentence variety , precise vocabulary</p> <p>References last name only after introductory paragraph</p> <p>All steps of critique model in correct order</p>	<p>Few minor errors in spelling or grammar</p> <p>Uses third person in other artist’s work or first person if own piece</p> <p>Some sentence variety, appropriate vocabulary</p> <p>References last name only after introductory paragraph</p> <p>All steps of critique model in correct order</p>	<p>Errors in grammar and spelling without affecting clarity</p> <p>Some use of first or second person</p> <p>Little sentence variety</p> <p>First and/or last name of artist used throughout essay</p> <p>All steps of critique model present but out of order</p>	<p>Multiple grammatical errors interfere with content and readability</p> <p>Uses first, second and/or third person</p> <p>First and/or last name of artist used throughout essay</p> <p>Steps of critique model may be missing or out of order</p>

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## GLOSSARY OF TERMS

**AIR BUBBLES:** Pockets of air trapped in clay or plaster.

**AGATEWARE:** Clay patterns and structures formed by laminating, mixing or inlaying different colored clays to give an effect like agate stone.

**APPLIQUE:** A decorating technique by which bits of clay are adhered directly to plastic clay.

**ARMATURE:** A support around which clay is modeled; it may be of paper, wood, wire, plaster or other material.

**BANDING WHEEL:** Portable turntable for rotating pottery while it is being formed, decorated or otherwise worked on; also called a bench wheel.

**BAT:** A disk or slab of plaster of paris on which pottery is formed or dried. It is also used to remove excess moisture from plastic clay.

**BISQUE:** Once-fired but unglazed clay. Derives from the French "bisquet" meaning half-baked.

**BISQUE FIRE:** First firing of ware usually at a low temperature (012-04) to drive off water and harden ware so as to facilitate glazing.

**BLOWING:** Pieces exploding in the kiln when being fired faster than the moisture content can escape; prevented by thorough drying and slow firing; also may be caused by residues of organic material that may be in the clay.

**BODY STAINS:** Colorants added to plastic clay or slip.

**BONE DRY:** Clay containing no absorbed moisture except air humidity: clay ready for firing.

**BURNISHING:** Polishing the surface of leather-hard clay by use of a smooth tool, stone, spoon back or other smooth object.

**CALIPERS:** A tool to measure diameter of objects.

**CARVING:** Decorating by cutting into the clay surface.

**CASTING:** Pouring clay slip into plaster molds to produce copies of ceramic ware.

**CLAY:** A decomposed granite-type rock. To be classed as a clay, the decomposed particles so that it will be plastic. Clays should be free of vegetable matter, but will often contain other impurities which affect their color and firing temperatures. They are classified into various types, such as ball clays, fire clays and slip clays. Pure clay is expressed chemically as  $Al_2O_3 \cdot 2SiO_2 \cdot 2H_2O$ .

**CLAY ADHESIVE:** Slurry containing a few drops of vinegar to promote adhesion in joining and repairing unfired clay.

**COILING:** A method of hand-building pottery in which the clay ingredients are calculated to mature at a desired temperature and to have desired working characteristics.

**COMBING:** A method of decoration developed by dragging a coarse comb or tip of a feather over two contrasting layers of wet clay slip or glaze.

**CONE PYROMETRIC:** A three-sided pyramid composed of clay and glaze factors made to bend and melt at specific temperatures; used to determine the end of firing or to shut off a kiln-sitter.

**CRACKLE GLAZE:** A glaze containing minute cracks in the surface. The cracks are decorative and are often accentuated by coloring matter that is rubbed in. They are caused in cooling by the different rates at which the body and the glaze contract after firing.

**CRAWLING:** Separation of the glaze coating during firing which exposes areas of unglazed clay caused by too heavy an application. The glaze cracks upon drying or forms uneven contraction rates between glaze and body.

**CRAZING:** Accidental or intentional crackling of glaze, usually caused by combining glazes that mature at different temperatures, or by glaze cooling faster than the body.

**DIPPING:** Immersing a clay object in glaze or engobe solution.

**DRAPE MOLD:** Any form over which or into which a slab of clay is formed or draped to conform to the shape of the object.

**DRAPING:** Forming a clay object by placing a slab or clay over or into a preformed mold or other shape.

**DRYFOOT:** To clean the bottom of a glazed piece before firing.

**EARTHENWARE:** Porous pottery that matures at low firing temperatures.

**EGYPTIAN PASTE:** A low-fire self-glazing porous body, first developed in the fifth millennium B.C. by the Egyptians; it is used primarily for jewelry.

**EMBOSSING:** Raised ornamentation.

**ENGOBE:** White or colored clay slip used to decorate clayware before bisque firing.

**EXTRUDED CLAY:** Clay forced through an opening of a pug mill into a desired shape.

**FIRE:** To heat clay object in a kiln to a specific temperature.

**FOOT:** The ring-like base of a ceramic piece, usually heavier than the surrounding body.

**GLAZE:** Glassy surface coating of vitreous material fired on ceramic ware to decorate it or to seal the pores.

**GLAZE FIRE:** A firing cycle to the temperature at which the glaze materials will melt to form a glass-like coating.

**GREENWARE:** Unfired pottery; also called raw-ware.

**GROG:** Clay that has been fired and crushed in a variety of mesh sizes. It is added to clay to reduce shrinkage and to add texture and/or tooth.

**HIGH RELIEF:** A highly raised or deeply carved pattern on a clay surface.

**INCISING:** Creating patterns by cutting on or through leather-hard clay.

**JOINING:** Adhering clay surfaces together with cross-hatching, slurry, pressure and tooling.

**KILN:** A furnace made of refractory clay materials for firing ceramic products.

**KILN FURNITURE:** Refractory shelves and posts upon which ceramic ware is placed while being fired in the kiln.

**KILN WASH:** A refractory mixture, usually of kaolin and flint, applied to kiln shelves and floor to prevent fired glaze from adhering.

**KNEADING:** Working clay with the fingers or the heel of the hand in order to obtain a uniform consistency and to reduce air pockets.

**LEAD GLAZE:** A glaze containing raw lead, involving toxic hazards.

**LEATHER HARD:** The condition of the raw ware when most of the moisture has left the body, but when it is still soft enough to be carved or burnished easily.

**MAJOLICA:** High gloss tin-bearing glaze.

**MAT GLAZE:** A dull-surfaced glaze with no gloss but pleasant to the touch, not to be confused with an incomplete fired glaze.

**MATURITY:** That point in a firing where the clay has reached its maximum non-porosity and hardness and when the glaze has flowed and formed a strong bond with the clay.

**MISHIMA:** Incised lines filled with engobe to the original level of surface.

**OVERGLAZE:** The final glaze application of decorative details brushed over glaze; often a low-fire glaze over a pre-fired high-glaze.

**OXIDATION FIRE:** A firing condition when the fire has sufficient oxygen to cause complete combustion free of carbon or carbonaceous gases.

**OXIDES:** Various metal compounds used as colorants in glazes and clay bodies.

**PEELING:** Separation of the glaze or slip from the body. Peeling may be caused when slip is applied to a body that is too dry or when a glaze is applied too thickly or to a dusty surface.

**PIN TOOL:** A needle-like tool used to trim uneven tops of wheel thrown clay objects.

**PLASTICITY:** Refers to that quality in a clay that allows it to be worked and reshaped without cracking or crumbling.

**PINCH POT:** Finger manipulation of clay in the palm of the hand to form a lump of clay into a hollow shape.

**PLASTER OF PARIS:** Hydrate of calcium sulphate, made by calcining gypsum. It hardens after being mixed with water. Because it absorbs moisture and it can be cut and shaped easily, it is used in ceramics for drying and throwing bats, as well as for molds and casting work.

**PORCELAIN:** A hard, nonabsorbent clay body that is white and translucent.

**POTTERY:** Earthenware; a shop in which ceramic objects are made.

**PRESSING:** Forming of clay objects by pressing soft clay between two plaster molds, such as in the production of cup handles. To impress designs into clay with various plaster or other objects or carved stamps.

**PUG MILL:** A machine for mixing clays and ingredients, reclaiming clay scraps and preparing clay bodies to a uniform plastic consistency.

**RAKU:** A ceramic process using an open clay, heavy with grog. Highly resistant to sudden thermal changes; may be placed in and removed from a hot kiln. An ancient Oriental ceramic form associated with a ceremonial tea custom.

**RAW CLAY:** Clay as it is mined from the ground, unblended with other clays and ceramic materials.

**RAW-WARE:** Refers to unfired and dry pottery.

**RECONSTITUTED OR RECYCLED CLAY:** Used but unfired clay that has been allowed to dry and is then re-liquefied for reuse.

**REDUCTION FIRE:** A firing condition in which the amount of oxygen mixing with the fuel is reduced so that the carbon in the fuel must seek out and combine with the oxides in the clay and glazes to combust. This causes changes in color and texture of the clay and glaze.

**REFRACTORY:** The quality of resisting the effects of high temperature.

**RIB:** A tool of wood, bone or metal that is held in the hand while throwing to assist in shaping the pot or to compact the clay.

**SCORE:** To scratch lines in unfired clay before applying moisture to facilitate joining; also to scratch decorative designs in unfired clay.

**SETTING:** The hardening of plaster after it is combined with water; also the firming of a clay body from loss of moisture.



**SHRINKAGE:** Contraction of the clay in either drying or firing.

**SGRAFFITO:** Decoration by incising or scratching through slip or glaze to reveal the background color or material.

**SLAB CONSTRUCTION:** Forms, hand-built with pressed or rolled flat sections of clay.

**SLIP:** A clay in liquid suspension used decoratively or as a binding agent. Clay slips often have oxides added to them for decorative purposes.

**SLIP TRAILER:** A plastic squeeze bottle or device for extruding a thin trail of slip or engobe to make surface decoration.

**SLURRY:** A clay body of a creamy consistency, used for joining moist clay sections.

**SPRAY BOOTH:** A boxlike booth equipped with a ventilating fan to remove spray dust, which, whether toxic or not, is harmful.

**SPRAYING:** Applying glazes with a compressed-air spray machine.

**SPRIGGING:** Applying clay in a plastic state to form a relief decoration.

**STACKING:** Loading the kiln for maximum number of items with efficient distribution.

**STAMPING:** A method of decoration by pushing objects against plastic clay.

**STILT:** A ceramic tripod upon which glazed ware is placed in the kiln.

**STONEWARE:** High-firing clay with little or no rate of absorbency. Closer to porcelain than earthenware, it is more plastic and depends upon its impurities for its color and texture.

**TACTILE:** Texture that can be felt by touching it.

**TEMPLATE:** A pattern of paper, metal or wood, placed against a clay surface or form, for guiding the shape of the design.

**TERRA COTTA:** An earthenware body, generally red in color and containing grog. It is the common body type used in ceramic sculpture.

**THROWING:** The act of forming clay on the potter's wheel.

**TOOLMARKS:** Marks made by hands and forming tools that are left visible on a finished clay form as part of the completed design.

**TRANSLUCENT:** Transmits diffused light rays, as in porcelain or china, or in opalescent glazes.

**TRANSPARENT:** Transmits light rays with clear visibility.

**TURNING:** Trimming on the potter's wheel when shapes are leather hard, usually to shape a wall, foot or rim.

**UNDERGLAZE:** Color decoration applied on the bisque-ware before the glaze is applied. **VINEGAR ADDITIVE:** A few drops of vinegar added to slurry. Causes clay flocs to swell and increase bonding.

**WARPING:** Distortion of a pot in drying because of uneven wall thickness or a warm draft of air, or in firing when a kiln does not heat uniformly.

**WAX RESIST:** Pattern created by brushing a wax medium over an area of clay, slip or glaze to resist the final glaze application when the wax is dry.

**WEDGING:** Manipulating a clay body by twisting, kneading or pounding to remove air pockets and develop a uniform plastic consistency.

**WHEEL:** A rotating wheel for throwing technique; also a bench wheel or banding wheel for aid in hand-forming and decorating.

## **Sample Standards Integration**

### **21st Century Skills & Career Readiness Practices**

#### **CRP6. Demonstrate creativity and innovation.**

For Example – In all projects students are required to develop original artwork and are critiqued on creativity.

#### **CRP4. Communicate clearly and effectively and with reason.**

For Example – In several units students must self and peer assess clearly and with reason, based on certain criteria. Students also complete an RST addressing cross-curricular standards.

#### **CRP10. Plan education and career paths aligned to personal goals.**

For Example – In the course introduction, students are involved in discussion about possible careers in fine arts and research different artists and techniques throughout the course.

#### **9.3.12.AR-VIS.1 Describe the history and evolution of the visual arts and its role in and impact on society.**

For Example – The standard is implemented during the Unit 1 introduction and in Unit 5 during the Research Simulation Task.

#### **9.3.12.AR-VIS.2 Analyze how the application of visual arts elements and principles of design communicate and express ideas**

For Example – This standard is ongoing throughout curriculum in rubrics and Critiques.

## **Technology Integration**

#### **8.1.12.A.2 Produce and edit a multi-page digital document for a commercial or professional audience and present it to peers and/or professionals in that related area for review**

For Example – In Unit 5, students research and create a professional document in response to the RST prompt.

## **Interdisciplinary Connection**

#### **NJSLSA.W1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence**

#### **NJSLSA.W6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.**

#### **NJSLSA.W8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.**

#### **NJSLSA.W9. Draw evidence from literary or informational texts to support analysis, reflection, and research.**

For Example – In Unit 5, the above standards are addressed through the Research Simulation Task. Students research, close read and analyze multiple sources, collaborate via Google classroom, and craft an essay for presentation to the class.

## LGBTQ+/Disabilities and Diversity Resources

Name of unit	Name and description of new activity, strategy or content focus to be included
Unit 1: Introduction to Ceramics II	Maria Martinez: Indigenous Artist, Coil pots, decorative design, use of ceramics ancient to art form connection
Unit 2: Developmental Process Unit	Lourdes Jimenez: Mexican/ American: sustainable ceramic practices, use of unfired and fired clay bodies for work, site specific installations, inspiration in nature and surroundings
Unit 3: Surface Decoration: Underglazing	Anita Fields: Native American Osage Culture: how what we wear can tell a story, show the shoe images she creates and how they reflect back to her cultural heritage, how we adorn ourselves
Unit 4: Techniques for Making Pottery Mixed Media Unit / Throwing Unit (Trimming)	April D. Felipe: Caribbean American/ multicultural identity, use if mixed media in her artwork to tell a story  Ayumi Horie (Japanese American Artist) : Dry Throwing Technique, fundraising for political awareness and affiliation/ activism and ceramic community engagement
Unit 5: Research: Art History	Adam Chau- Asian American Queer Artist, technique: infusion of technology into art and how through technology we can replace the human hand and still highlight techniques of past (blue on white), use of CNC machine with traditional brushes to create appearance of the human hand, commentary on the new "self-portrait" in our digital age and social medias  Research into why he uses the blue on white (Chinese) ancient- modern