

COMMON CORE CONNECTION

COLLABORATIVE FIGURE MODELING

COMMON CORE STANDARDS

CCSS.ELA-LITERACY.CCRA.SL.1 Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

CCSS.MATH.PRACTICE.MP2 Reason abstractly and quantitatively.

CCSS.MATH.PRACTICE.MP4 Model with mathematics.

OVERVIEW

Creating a stone sculpture required the collaboration of many different artists. In this lesson, students will use background information about William Henry Rinehart and pieces from the Walters' exhibition *Rinehart's Studio: Rough Stone to Living Marble* to help them to work collaboratively to create a clay sketch from a live model.

SUPPLIES

- Clay
- Clay carving tools
- Drawing paper
- Drawing pencils
- Erasers
- Gesture Drawing Handouts

BACKGROUND ON WILLIAM HENRY RINEHART

William Henry Rinehart was born in Union Bridge, Maryland, in 1825. He was the fourth of eight brothers born to a well-to-do farming family. His father, Israel Rinehart, expected his sons to continue the family enterprise and to get a good education; however, Rinehart did not demonstrate aptitude for either farming or schoolwork. It was not until he began to work at a small stone quarry on his father's property that his true vocation as a sculptor was realized. He soon moved to Baltimore, where he became an apprentice stonecutter. He supplemented his education at the stone yard by attending classes in drawing and design at the Maryland Institute of the Mechanic Arts (now the Maryland Institute College of Art), and he participated in local exhibitions.

Desiring to refine his craft even further, Rinehart traveled to Italy in 1855 in order to study Classical works first hand. He spent a year in Florence, likely working with a master carver, and then returned to Baltimore, where he established a studio in Carroll Hall, located at the corner of Calvert and Baltimore Streets, exhibiting several of the sculptures he had produced in Italy. Although Rinehart received several sculptural commissions, he was not able to attract the clientele he needed to establish himself in Baltimore; a year later he again set sail for Italy, this time settling in Rome, where he lived until his untimely death from a lung ailment in 1874.

Upon his death, Rinehart left behind a busy studio and many unfinished orders. His friends, assistants, and patrons, including William T. Walters, began the process of closing his workshop: examining account books, supervising the completion of works, and finding buyers for unsold pieces.

BACKGROUND ON THE SCULPTING PROCESS

The breakdown of labor in a sculpture studio was no secret during the 19th century; numerous firsthand accounts describe workshops in Italy.

To obtain marble, first workman would insert wooden wedges into cracks in the stone and then soak the wedges with water. As the wood expanded, the marble block gradually became dislodged.

- Because the marble blocks were so heavy, workmen cut off any excess stone before transporting them. The marble blocks were carried down the mountain on carts drawn by up to 12 oxen. This was such an arduous effort for the animals that they could only work in this capacity for an average of 6 months. Once off the mountain, the stone was delivered to a studio in Carrara or shipped by sea from the nearby port in Luni to other Italian cities, such as Rome.

- In the workshop, the artist first created a *bozzetto* (clay sketch). According to studio records and eyewitnesses, Rinehart used live models for his sketches.
- A plaster cast of the clay sketch was then created through the technique of waste molding. In this process, wet plaster is poured into a mold made of plaster of Paris, usually colored with dye to distinguish it from the plaster model itself. When the plaster hardens, the mold is hacked away, and the resulting model is given a clean finish.
- Once the plaster model was created, the carving process could begin. The first step was to “rough out” the marble block by taking measurements from the plaster model; based on its size, a workman hewed off excess marble. When the marble block was the general shape and size of the model, the more specialized aspects of the carving began.
- In the 19th century, artists used a pointing system to replicate the plaster model in marble. The pointing instrument is a vertical rod to which another slender rod is attached. The smaller rod moves in every direction and is held firm by a screw. Primary points of the model are marked and measured by the pointing apparatus, which is then attached to the marble block. Each point on the model is marked on the marble, and the small rod of the pointing apparatus is used to measure the proper depth at each point. Using this rod as a guide, the artist drills into each measured point until he reaches the required depth and then chips away at the marble between the holes until he establishes the surface of the sculpture. This process is repeated across each section of the work. An example of this process can be seen in this image from the Walters’ exhibit *Rinehart’s Studio: Rough Stone to Living Marble*.



- Metal hammers and chisels were used to cut away the excess stone and came in a variety of forms and sizes, depending upon the complexity of the work. Smaller chisels were used when carving inscriptions, such as Rinehart’s signature at the base of his works.
- Once the general shape of the work was achieved, rasps were used to scrape away the stone and to smooth the surface; details were shaped and clarified with their knife-like edges. Calipers measured the accuracy of the points on the marble in both two and three dimensions.

ACTIVITIES

NOTE: There are some excellent videos on youtube that give a general overview of sculpting as well as specific tips. Please preview these videos to determine if they are appropriate for your students.

- ❶ With a partner, ask students to take turns sketching using their partners as live models. Allow them to choose a comfortable position, mostly upright. Using tips from the **Gesture Drawing Handout**, ask them to make three drawings: a view from the front, a view from the side, and a view from the back. These sketches should not be too detailed; they should give the students a general idea of their models. Give students about 15 minutes to sketch each partner.
- ❷ Examining the sketches, have students choose one position for their clay sketch.
- ❸ Instruct students to attach a dowel rod vertically on their cardboard circle with clay.
- ❹ Working together, students should place clay blocks on their dowel rod using the shapes indicated in their reference drawings.
- ❺ Refine shapes by taking away and/or adding clay and by using clay tools.
- ❻ Smooth out and add texture where necessary.
- ❼ When the clay sketch is complete, ask students to discuss and reflect on the process:
- ❽ How did working collaboratively benefit your sculpture?
 - What was challenging about working collaboratively?
 - How was having a sketch helpful in the sculpting process?

EXTENSIONS

- Creating a clay sketch is mostly an additive process. Students can practice a subtractive sculpting process by using their clay sketch to carve a sculpture, like Rinehart's marble sculptures. Possible sculpting materials could include soap, florist foam, or Carv-Foam.
- William Henry Rinehart had a workshop of craftsmen who assisted him with his sculptures; however, Rinehart is the one who has achieved renown. Do you think the craftsmen should also get credit for creating the works of art? Why or why not?

HOW TO: GESTURE DRAWING

↳ a drawing that describes the position of a figure, animal, or object.

(also, a great warm up!) **Wow!**

Qualities of a gesture drawing:

* Quick

* NO DETAIL

* Use BASIC Shapes

○ □ ▭
etc.

* Show internal structure

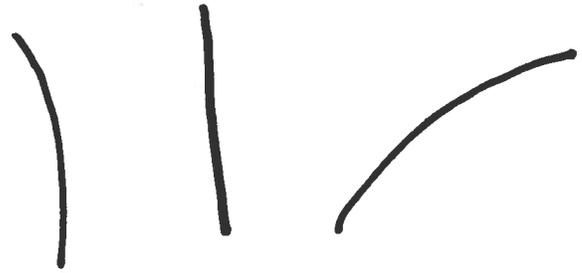


Process:



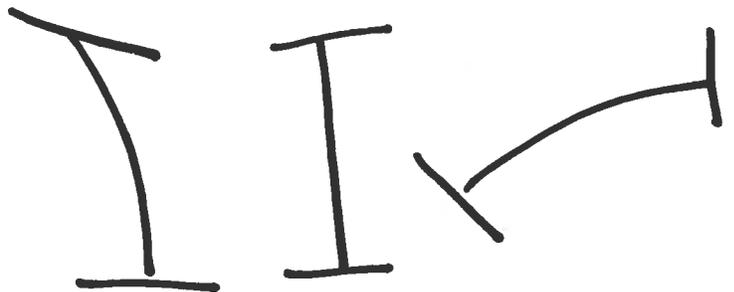
① Begin with a line that shows the position of the spine.

ex.

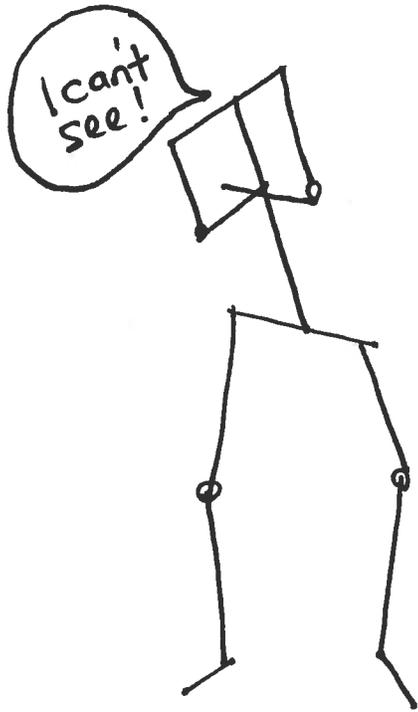


② Next, add lines to show the positions of the shoulders and hips

ex.



③ Then, use lines to add the legs and arms. Show the joints (knees and elbows) with a circle.



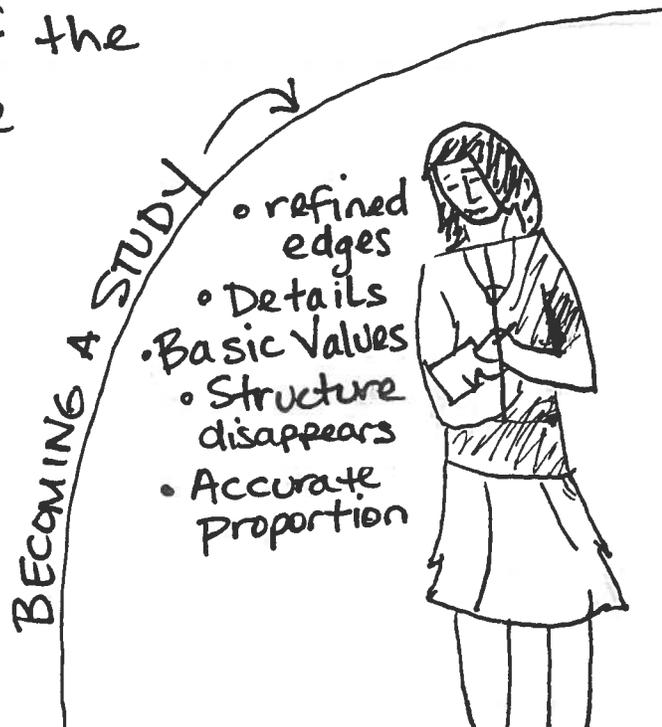
④ Draw the HEAD



⑤ FIND SHAPES
Use simple shapes to block out the form of the figure



Trapezoids, rectangles,
Circles, squares:
▭, ▭, ▭, etc.



- refined edges
- Details
- Basic Values
- Structure disappears
- Accurate Proportion