

## Making a Bronze Sculpture

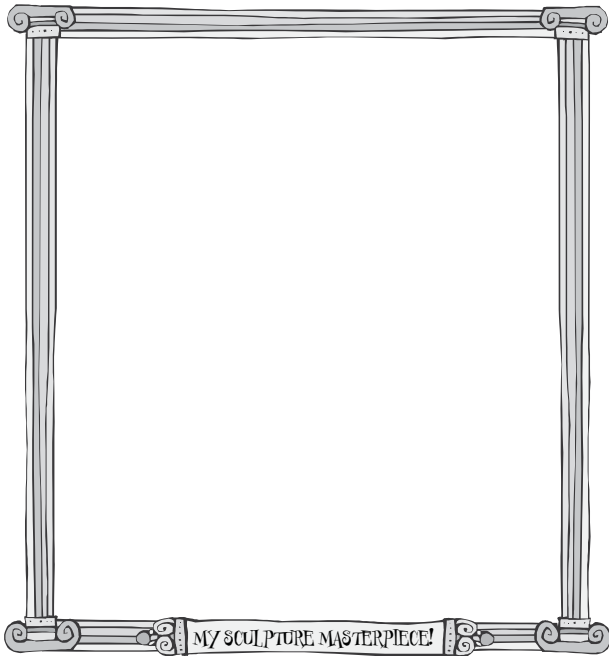
Bronze is the most popular metal for sculptures because of its strength and lack of brittleness. There are many ways to make a bronze sculpture, but the most popular method is called lost wax casting.

There are 4 stages to lost wax casting.

1. Make a wax model that is an exact copy of the final piece.
2. Put clay or plaster around the wax model to make a mold. Make small holes in the mold down to the wax model and fill with wax.
3. Heat the mold until the wax melts out (this is where the name "lost wax" comes from), then cast the mold by pouring liquid bronze into the small holes.
4. Finish the cooled piece by chipping away the mold, filing and buffing the sculpture.

## Design Your Own Sculpture

Now that you've studied some of the sculptures at the Ringling, design your own sculpture. Sketch the design here then join us at the Handz-On activity area to create your sculpture in clay.



## HANDZ-ON FAMILY PROGRAM EVENTS

The Handz-On program is the interactive family program at The John and Mable Ringling Museum of Art. Children, ages 5-10, are invited to bring their favorite adult to the Museum to join us for a unique experience and create art together using a variety of art materials and tools provided by the Museum. Activities change monthly.

Saturdays and Sundays in April (excluding April 8th) from 1-3 pm, make your journey through the galleries more interactive with our Exploration Station and Handz-On activity.

The Exploration Station will be located in the Courtyard and has an assortment of tools and materials artists use to make sculptures. Families can try to carve a piece of wood or stone, sculpt clay, and more!

The Handz-On activity will be located in the Children's Welcome Center in the Visitor's Pavilion. Families can make their own unique sculptures from clay and take their masterpieces home with them.

**Coming soon:** In May, explore the fabrics of Cà d'Zan, learn the ways fabrics are made and decorated, and then design your own fabric.

For more information on the Handz-On program, please visit [www.ringling.org](http://www.ringling.org), or contact Jennifer Sabo, Youth Programs Manager, at [jsabo@ringling.org](mailto:jsabo@ringling.org).



This program is made possible in part by a grant from the Woman's Exchange of Sarasota.  
Created by Education Division, January 2007.

THE JOHN AND MABLE RINGLING MUSEUM OF ART

HANDZ-ON FAMILY ACTIVITY SHEET

# BRONZE SCULPTURES

Sculptural masterpieces of the John and Mable Ringling Museum of Art

**Sculptures** are three-dimensional forms that you can walk around, look at from all different sides, and sometimes even walk through. They can be very tall or really small and can be made of just about anything, including stone, clay, metal, wood, glass, ice, snow, chocolate, and more! The sculptures in this guide are all made of a type of metal called bronze. John Ringling collected more than fifty bronze sculptures to put in the Museum's Courtyard and Loggia alone!



Did you know the oils in our hands could damage the artwork? Please do not touch the art or artifacts.



Have you ever made a sand castle? Sand castles are sculptures made of sand!



**Inside the Museum of Art**

**Standing Tall**

Gallery 21

Look at the poses of the people in this sculpture. Do they look easy? Describe what you see. Try moving into one of the poses in the sculpture while standing on the ground (not on a friend's shoulders). Remember to be careful of the art and people around you.

**What a Relief**

Gallery 16

Sculptures can stand by themselves or be in **relief**, where the sculpture is still attached to a background, and stands out in "High Relief" or "Low Relief" (bas-relief). This is an example of low relief. Look closely at it for thirty seconds and then shut your eyes and describe what you saw. Mention as many details as you remember. Open your eyes and look at the sculpture again. What details did you miss?



Etruscan  
Cover for a Mirror with Head of Athena,  
4th Century B.C.  
Bronze  
Gift of Joseph and Jacqueline Corben, 2001  
SN 11048.2

Paul Gustave Dore  
The Acrobats, about 1880/1883  
Bronze  
Request of John Ringling, 1936  
SN 5338

Chiurazzi Foundry  
Votive Chariot Dedicated to Ceres, 20th Century  
Bronze cast from ancient Roman marble original  
Request of John Ringling, 1936  
SN 5136



**Museum of Art Courtyard**

**A Wild Ride**

Who do you think rode in this chariot? Why? This chariot was dedicated to Ceres, the Roman goddess of wheat and grain, who scattered seeds over the earth while driving her chariot through the skies.

The name "cereal" comes from the goddess Ceres. If you had a chariot like this, where would you go? Describe an adventure you might have in your chariot.



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**Why are some of the bronze pieces green?**





Like most metals, bronze oxidizes over time. This chemical change darkens bronze or turns it green, similar to the way steel rusts. The darker sculptures you see have been cleaned and show the color John Ringling chose when he bought the sculptures. On the other hand, some bronze sculptures that look green were made to look that way on purpose.



**Who am I?**  
Sometimes artwork hold **symbols**, objects that stand for something else, and can tell us more about the artwork.

Chiurazzi Foundry  
Nile River, 20th Century  
Bronze cast from ancient Roman marble copy of Hellenistic original  
Request of John Ringling, 1936  
SN 5453

Can you find these symbols?

- A bunch of wheat 
- A horn of plenty 
- A sphinx 
- A crocodile 
- 16 babies

**What do these symbols tell us?**

This is a sculpture that represents the Nile River. The wheat and horn of plenty symbolize agriculture and the abundance of food near the Nile. The sphinx represents Egypt. The crocodile represents the river. The 16 babies each represent 1 cubit, an ancient form of measurement that is approximately the distance from the elbow to the tip of the middle finger; or about 18 inches. If you multiply the number of babies by 18 inches you get the amount the Nile overflowed each year before planting time, making the ground fertile with minerals from the river.







Chiurazzi Foundry  
Tiber River, 20th Century  
Bronze cast from ancient Roman marble original  
Request of John Ringling, 1936  
SN 5454

**What do these symbols tell us?**

This is a sculpture that represents the Tiber River. The oar in the figure's left hand represents sailing, and the horn of plenty in his right symbolizes agriculture and the abundance of food near the river. The wolf and 2 boys represent the famous legend of the founding of a major city in Italy. According to legend the twin boys, Romulus and Remus, were set adrift in a basket by a wicked uncle soon after they were born. The basket floated to shore where they were rescued and given milk by a wolf. Later a shepherd adopted them and they grew to be strong, healthy men. Romulus eventually founded a city near the Tiber and named it after himself. What is the name of this famous city?

Can you find these symbols?

- A horn of plenty 
- A wolf 
- 2 boys 
- An oar 

Answer: Rome

There are sculptures everywhere on the Ringling Estate! How many can you find? \_\_\_\_\_  
How do they compare to what you've studied here? \_\_\_\_\_