

The J. Paul Getty Museum

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Capturing the Moment in 3-D

Grades/Level: Upper Elementary (3–5), Middle School (6–8)

Subjects: Visual Arts, History–Social Science

Time Required: 3–5–Part Lesson

Three to four class periods

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For the Classroom

- [Curriculum Home](#)
- [Lesson Plans](#)
- [Image Bank](#)
- [About Sculpture in Western Art](#)
- [4 Basic Sculpture Techniques](#)
- [Glossary \(RTF-147KB\)](#)

Lesson Overview

Students will examine the sculpture *Rearing Horse* by Adriaen de Vries. They will then draw and sculpt animals from life, trying to capture motion frozen in a moment.

Learning Objectives

Students will be able to:

- examine and analyze how Adriaen de Vries depicted arrested motion in his sculpture *Rearing Horse*.
- consider how Adriaen de Vries balanced his sculpture *Rearing Horse*.
- observe and sketch live animals in motion.
- create a three-dimensional sculpture showing an animal in arrested motion.

Materials

- Image of *Rearing Horse* by Adriaen de Vries
- Paper and pencils
- Sculpting tools
- Modeling clay or self-hardening clay, i.e., Crayola® Model Magic®



[Download this lesson \(RTF, 241KB\)](#)

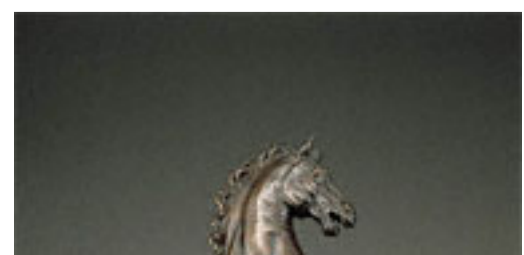


[Rearing Horse, de Vries \(PDF, 297KB\)](#)

Lesson Steps

1. Begin by asking students the suggested "Questions for Teaching" for *Rearing Horse*, found in the Image Bank, or by clicking the image in the Materials section above.

2. After examining the sculpture, ask students to explain what they think the artist's "arrested motion" means and how it is captured in the sculpture.



the term “arrested motion” means and have a discussion about the concept.

3. Ask students to consider what the artist went through to depict arrested motion in this sculpture. (Explain to students that de Vries lived in a time before cameras, so he would not have been able to take a picture of a horse as a model to work from.) What would de Vries have had to know and understand about horses and their anatomy to capture the form of this rearing horse? (Anatomy and musculature. He would also have had to observe a horse rearing up on its hind legs many times to get a feel for the pose. We know that de Vries made preliminary sketches to jot down his ideas before executing them in three dimensions.)



Rearing Horse, Adriaen de Vries, 1610

4. What would de Vries have needed to know about the weight of the materials he used in order to balance the sculpture, so that he could create a horse balanced on two legs? (The artist would have had to consider the weight of the bronze sculpture and its base in order to keep the sculpture from toppling over. Bronze, which is very durable, can also be very lightweight due to the fact that it is usually cast into hollow sculptures.)

5. [Watch the video about Adriaen de Vries' casting techniques.](#)

6. Next, have students try to draw a sketch that depicts an animal in arrested motion. Over a weekend students should draw their pet, or a friend's pet, (i.e., a dog or cat), trying to capture the animal while it is running or walking. Have students create at least four quick sketches of their animal in motion from different points of view. These drawings should be quick gesture drawings. Instruct students to spend only 3–4 minutes on each drawing, quickly sketching the basic forms of the animal, and concentrating on depicting the arrested motion.

7. When students return to class with their drawings, have them discuss what they found challenging about this activity. Have them share some of the techniques they came up with in order to record the arrested motion of the pet they were drawing.

8. Next have the students create a sculpture of an animal in arrested motion in clay or self-hardening clay, using their sketches and observations. Students can use a variety of tools to carve or model their animal—from toothpicks and pencils to artists' carving and sculpting tools. Have students be mindful of the details that portray an illusion of movement, such as the position of each limb and joint. Some students may create very complex animal poses in motion. These students will need to create an armature, or wire skeleton, so that the sculptures will hold their poses and be durable. Students can also create supportive bases to hold the sculptures' weight. Discuss with each student whether their sculpture would need support if it were created in hollow bronze, as opposed to air-drying clay.

9. Once students have completed their sculptures, have them come together and discuss the successes in their work, and the places where they might improve upon their work. How closely did the final sculpture follow the sketches each student made of their animal?

Assessment

Students will be assessed on their participation in discussion, their completion of at least four sketches, and completion of their sculpted animal in arrested motion.

Extensions

Have students examine the work of [Eadweard Muybridge](#), a photographer who used the camera to study the movements of animals and humans. Look at the image [The Attitudes of Animals in Motion](#) and read the information about the image to students.

Have students compare their techniques for capturing motion in their drawings and sculptures to the techniques Muybridge used to capture motion in this image of a man and a dog.

Standards Addressed

Common Core Standards for English Language Arts

Grades 3–5

SPEAKING AND LISTENING

3.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.

3.4 Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.

4.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.

4.3 Identify the reasons and evidence a speaker or media source provides to support particular points.

5.3 Summarize the points a speaker or media source makes and explain how each claim is supported by reasons and evidence, and identify and analyze any logical fallacies.

5.6 Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation. (See grade 5 Language standards 1 and 3 for specific expectations.)

Grades 6–8

SPEAKING AND LISTENING

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.

2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.

Presentation of Knowledge and Ideas

4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

Visual Arts Content Standards for California Public Schools

Grade 3

4.0 Aesthetic Valuing

Make Informed Judgments

4.2 Identify successful and less successful compositional and expressive qualities of their own works of art and describe what might be done to improve them.

Grade 4

Grade 4

2.0 Creative Expression

2.3 Use additive and subtractive processes in making simple sculptural forms.

Grade 5

2.0 Creative Expression

2.2 Create gesture and contour observational drawings.

4.0 Aesthetic Valuing

4.4 Assess their own works of art, using specific criteria, and describe what changes they would make for improvement.

Grade 6

2.0 Creative Expression

Creating, Performing, and Participating in the Visual Arts

2.4 Create increasingly complex original works of art reflecting personal choices and increased technical skill.

Grade 8

2.0 Creative Expression

2.2 Design and create maquettes for three-dimensional sculptures.

2.6 Design and create both additive and subtractive sculptures.