Lesson Plan: Scaling Up Art
Provided by the Art Institute of Chicago Department of Museum Education

Suggested Grade Level: 5-6
Estimated Time: One class period

Introduction
In this lesson plan, student make drawings of a work of art in different sizes and consider how the size of an art object impacts one’s response to it and learn to use averages, medians, and percentages. The small size of Richmond Barthé’s sculpture *The Boxer* belies its expressive impact. The image shows a fighter with a muscular, athletic build ready for his next fight. His remarkable pose is as graceful as a dancer's, but the determined expression on his face conveys the physical pain of his profession.

Lesson Objectives
- Determine average and median measurements
- Use percentages to compare different sizes

Key Terms
- proportions
- average
- median
- percentage

Instructional Materials
- *The Boxer*, photocopied or printed onto a transparency
- Overhead projector
- Butcher paper
- Large rulers or a tape measure
- Pencils and markers
Procedures

Activity
Distribute a printout of *The Boxer* to each student. Have students measure the height of the sculpture in the reproduction. Explain that the actual sculpture is 18 inches high. Ask students to think about how size impacts one's response to works of art.

Have students use the overhead projector to project the sculpture onto butcher paper taped to a wall. Ask them to enlarge the image until it is 18 inches high and make an outline drawing of it on the butcher paper.

Encourage students to measure one another and determine the average and median sizes of students in the classroom. Designate the average or median size as "life size" and then have students use the overhead projector to produce a "life-sized" image of the sculpture. Outline that image in a similar fashion.

Explain to students that they can use percentages to compare the different sizes of all three images. (For example, if the printout of *The Boxer* is 10 inches high and the original sculpture is 18 inches high, then the size of the printout is 56% of the actual sculpture)

Evaluation
Base students' evaluation on their ability to understand and apply averages and percentages.

Illinois Learning Standards
Math: 6
Fine Arts: 25