**RICHARD SERRA 4-5-6**
Lesson written by Kim Brennan

Richard Serra  
American, b. 1939  
4-5-6, 2000  
Forged weatherproof steel, 3 blocks, each 4 x 5 x 6 feet  
Museum purchase from the Jere Abbott Acquisitions Fund

The Museum’s terrace was transformed into a sculpture court to provide a suitable setting for sculptor Richard Serra’s 4-5-6. This transformation was accomplished with the help of architect Frederick Fisher, who designed the Museum’s Lunder Wing. Paul J. Schupf, a Colby trustee and donor of the Paul J. Schupf Wing for the Works of Alex Katz, provided the naming gift for the sculpture court.

**Summary**
"Richard Serra’s three-part sculpture 4-5-6 (4 feet by, 5 feet, by 6 feet) was created specifically for the Paul J. Schupf Sculpture Court and scaled to echo the Museum’s walls that surround it. The title of the work comes from the dimensions of the three identical, 30-ton masses that make up the piece. The blocks were forged from solid COR-TEN steel, a material that oxidizes naturally to weatherproof the sculpture and produce the warm color fundamental to its aesthetic. Each of the block-shaped elements rests on a different face to create the illusion that they are different sizes."

**Pre-Museum-Visit Activities**
View the video on Richard Serra from the PBS series *Art:21*  

**Museum Visit Activities**
Exercises for 4-5-6 that incorporate art, science, and physics:  
Divide schoolchildren into small groups. Give each group a measuring tape and ask the children to write down the measurements of each of the blocks. Have them compare the blocks and decide which is bigger. Is one of them bigger?  
Explain that all the blocks have the same dimensions but their placement creates the illusion that they are different.  
These blocks are solid; each of them weighs thirty tons. Why do you think the sculptor made them solid instead of hollow?  
Talk about artwork that is installed outdoors and the ways in which it needs to be durable in order to survive the weather and the public. What would happen if this kind of outdoorinstalled work wasn’t heavy enough and could be pushed over?  
Talk about the mass of these blocks. Compare them to blocks of equal size but different density. Hold up the examples of blocks made out of wood, metal, plastic, and marble. Ask which ones are heavier. Which are the lightest?  
Discuss density. Objects can have equal volume but different density.  
Talk about the way the surface of the blocks has been treated with a special steel in order to interact with the weather to create a warm rust. The chemical reaction that takes place provides an interesting contrast between the dense box and the active surface, which constantly changes. This surface will eventually rust away little by little, but the block will be around for thousands of years.
Post-Museum-Visit Activities/Assessment
After your visit to the Museum, discuss artists who combine art, science, and math. Leonardo da Vinci was one such artist. The Museum of Science has a page devoted to the ways in which he connected art and science. There are also classroom activities listed there.
"Museum of Science: Exploring Leonardo":
http://www.mos.org/sln/Leonardo/

Lesson Vocabulary Words
- physics
- volume
- surface
- density

Learning Results/Objectives.

E2 The Arts and Other Disciplines
Pre-K-2 Students identify connections between and among the arts and other disciplines.
3-5 Students describe characteristics shared between and among the arts and other disciplines
6-8 Students explain skills and concepts that are similar across disciplines
9-Diploma Students analyze skills and concepts that are similar across disciplines

English Language Arts. E.
Listening and Speaking: Students listen to comprehend and speak to communicate effectively.
E1: Listening.
Pre-K-2: Students use early active listening skills.
3-5: Students apply active listening skills.
6-8: Students adjust listening strategies to understand formal and informal discussion, debates or presentations and then apply the information.
9-Diploma: Students adjust listening strategies for formal and informal discussion, debates or presentations, and then evaluate the information.

E2: Speaking
Pre-K-2: Students use speaking skills to communicate.
3-5: Students use active speaking skills to communicate effectively in a variety of contexts.
6-8: Students adjust speaking strategies for formal and informal discussions, debates, or presentations appropriate to the audience and purpose.

Visual and Performing Arts. B. Creation, Performance, and Expression: Students create, express, and communicate through the art discipline.
B1: Media Skills.
Pre-K-2: Students use basic media, tools and techniques to create original art works.
3-5: Students use a variety of media, tools, techniques, and processes to create original art works.
6-8: Students choose suitable media, tools, techniques, and processes to create original art works.
9-Diploma: Students choose multiple suitable media, tools, techniques, and processes to create a variety of original art works.

Performance Indicators
B1 Skills and Traits of Scientific Inquiry
B2 Skills and Traits of Technological Design
Students will: Act Appropriately in the Museum. Identify this work through, scientific inquiry, how it relates to art and science. Be able to talk about how the artist through the use of technological design brought together aspects of art/science/physics