

STEAM RESOURCES

In conjunction with a tour of the Hunter permanent and temporary collections, consider themes you can focus on to connect Science, Technology, Engineering and Math with the Arts!

Here are a few to get you started.



Lawrence Carmichael Earle Hunters, Old and New

Mansion, 1st Floor, gallery 03

Defining Technology

- What is technology? Is paper technology? Are firearms technology? What sorts of technological advances have we made in this generation? How have initial ideas grown? Can you think of an example? (cell phones—each iteration is advancing technology) What are some current forms of technology we use daily? How could you improve/build on those?
- Consider the role of technology—those who create them as well as those who use them.
 - What is our relationship with these tools? Describe why some people are excited about new technologies while others may be more hesitant.

Landscape: Environment and habitat

- Looking at art and the portrayal of nature and mans influence on nature
- Seasons, animals, and habitats as they are documented both realistically and stylistically in art works



Putorious Vision, Linn (Mink)

John James Audubon

1844

Mansion, 2nd Floor, Gallery 08



Landscape

Robert Seldon Duncan

1851

Mansion, 2nd Floor, Gallery 04

Transportation Technology and Engineering

- Trains, planes and automobiles (and bridges and roads and...) depicted in art.
- o Buoyancy
- o Steam Power
- o Industry
- \circ Mechanics



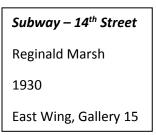


Wreck of the Ol' 97

Thomas Hart Benton

1943

East Wing, Gallery 14





Untitled (Sailboats) John Henry Twachtman 1890 Mansion, Gallery 2nd Floor 05

- Military technology (ships, submarines, weapons and other technological connections Human migration—city trains, ships across oceans, rural trains, slave ships – historical as well as contemporary visions and depictions
- What sorts of principles allow transportation to actually work? These are boats, but what about airplanes or cars or trains? How could we build our own car, boat, plane, etc.? How do these ideas translate to other areas or other mechanical systems (things with moving parts)?

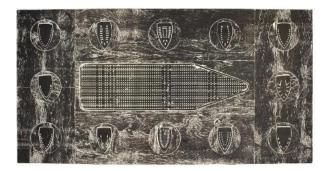


Burning of the Philadelphia

Edward Moran

1897

Mansion, 1st Floor, Gallery 02



Stowage

Willie Cole

1997

East Wing, Gallery 18



Robert Rauschenberg Opal Reunion

Gallery 17

Physical Laws in Nature (Wings, Spider Web)

- Repetition/Balance/Structural Strength (Spider Web, Artwork itself with the portion that juts out)
- Simple Machines (oar/lever)
- Space, star formation, space exploration (Images of stars)
- Economics/Statistics (Newspaper)
- How does nature direct us to discovery and also support physical laws? What kind of simple machines do we see here? Are simple machines technology? How do we use simple machines daily? How are stars formed? How do we explore space? How do these elements of technology and science combine together, in this Opal Reunion and in any field to make exploration, engineering, discovery, application possible?

Math and Art

Op Art-Geometry, line shape and color to evoke mood and meaning



#17	
Charles Joseph Biederman	
Oil and Aluminum Relief	
East Wing, gallery 16	

Chemistry and Art—The science behind art mediums and their function

- Articles on the chemistry of paint as well as how the invention of the TUBE impacted the advancement of painting (ie- plein air, impressionism etc)
 - See hand out—List of colors (indicates pigments and chemical origins)
 - Also consider chemistry of Water colors, egg tempera, acrylic and pastels—all using pigments suspended in different materials
 - See handout on the role of the impact of packaging and art materials <u>http://www.smithsonianmag.com/arts-culture/Never-Underestimate-the-</u> Power-of-a-Paint-Tube-204116801.html#ixzz2pqYRgXIR



Phenomenal Royal Violet Visitation Paul Jenkins 1977 East Wing, Gallery 17

Photography-

• Black and white photography, chemical processing and the advent of digital technology to capture a still image—the advancement of imaging technology. Temporary Exhibits will be perfect for this theme but the museum has plenty of historically relevant and contemporary works on view at any time)



Athens, GA (Girl on a Car)

1996

East Wing, Gallery 18

Mark Steinmetz



Bliss (from the Submerged Series)

Kenda North

East Wing, Gallery 18

Reflection/Refraction

• What are the properties of glass and metals that relate to science and technology? What processes did the artists use to make these works of art? Why do you think they chose to work with these materials?

Karen Lamonte: http://www.karenlamonte.com/Studio-Artworks-Sculpture/



Reclining Dress with Impression and Drapery

Karen Lamonte

2006

East Wing, Gallery 18



James Seawright *Mirror V*

Crossroads/Entry to Mansion Staircase

- Parabolas
- Optics
- How do we see? How do mirrors work? How does the shape (convex or concave) influence light? How are mirrors like our eyes? What are some ways we use mirrors in our world today (binoculars, telescopes, cameras, microscopes, etc.)? How do those things entertain, inform, or benefit us?