This work can be used to demonstrate: Genetics



**Guillermo Kuitca** (Argentinean, 1961- )  
  
*People on Fire*, 1993  
Mixed media on canvas, 76 1/4 x 109 7/8 in. (193.7 x 279.1 cm.)  
Purchased with funds from various donors, by exchange, 93.3  
© Guillermo Kuitca 1993

Guillermo Kuitca is fascinated by maps, houseplans, and genealogical charts as metaphors for locating oneself. In *People on Fire*, he uses that visual vocabulary to chart a bleak human terrain. Instead of towns, the lines connect people, stitching a taut fabric of faceless names. With the routine fervor of a clerk, the artist diagrams this community, even color-coding each name by gender.  
  
Ominously, he leaves several sites blank, explaining them as symbolic of the people unknown yet connected to the whole. But to anyone aware of modern Argentine history, the blanks would as readily call to mind the Desparecidos, the thousands of the artist’s countrymen who "disappeared" in the military terror of the late 1970s. Still, there is more than random fear and menace. There is something apocalyptic in this image of the human tribe encircled by roiling washes of blood red and ash.

This work can be used to demonstrate: Motion and Forces



Tar Baby vs. St. Sebastian by Michael Richards

Artwork is representative of the Tuskegee Airmen. There is also an interesting story about the artist Michael Richards.

This work can be used to demonstrate: Weather



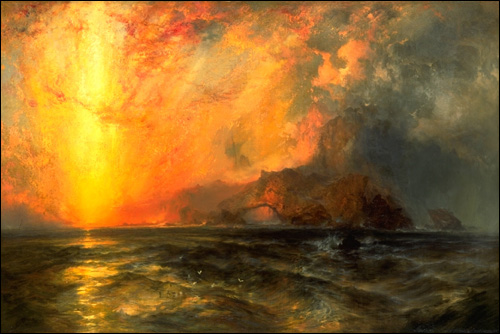
**Jacob van Ruisdael** (Dutch, 1628/29-1682)  
  
*Wooded Landscape with Waterfall*, about 1670  
Oil on canvas, 41 x 56 1/2 in. (104.1 x 143.5 cm.)  
Purchased with funds from the State of North Carolina, 52.9.56

This work can be used to demonstrate: Weather



**Martin Johnson Heade** (American, 1819-1904)  
  
*Salt Marsh at Southport, Connecticut,* about 1862-63  
Oil on canvas, 9 7/8 x 20 1/8 in. (25.1 x 51.1 cm.)  
Purchased with funds from the State of North Carolina and various donors, by exchange, 87.10

This work can be used to demonstrate: Scattering of Light through the Atmosphere



**Thomas Moran** (American, 1837-1926)  
  
*Fiercely the red sun descending/Burned his way along the heavens,* 1875-76  
Oil on canvas, 33 3/8 x 50 1/16 in. (84.8 x 127.1 cm.)  
Purchased with funds from the North Carolina Art Society (Robert F. Phifer Bequest), 52.9.34

This work can be used to demonstrate: The Scattering of Light through the Atmosphere



**Louis Rémy Mignot** (American, 1831-1870)  
  
*Landscape in Ecuador,* 1859  
Oil on canvas, 24 x 39 1/2 in. (61.0 x 100.3 cm.)  
Purchased with funds from gifts by the American Credit Corporation, in memory of Guy T. Carswell; and various donors, by exchange, 91.2

A native of Charleston, South Carolina, Louis Mignot enjoyed a brief but highly successful career as the only southerner among the landscape painters of the Hudson River school. The turning point in his career came in the summer of 1857 when he accompanied the painter Frederic Church on a four-month expedition to Ecuador. The two friends trekked from the coastal rainforests through the Andean highlands, dominated by a stupendous range of snow-capped volcanoes. Mignot was profoundly challenged both by the extravagance of the scenery and by Church, whose grandly operatic interpretation of nature informs *Landscape in Ecuador*.

Like most of Mignot's pictures, this painting is not a literal transcription of a specific scene. It is, instead, an imaginative composite of various views and motifs, derived from his travel sketches. The artist invites the viewer on a journey both adventurous and spiritual: the eye roving through dense and humid jungle across viaduct and rolling grasslands towards a distant town, and upward over ascending ridges to the summit of El Altar. Presiding over all is the newly risen sun, a clear emblem of transcendent divinity.

The picture must have seemed the very image of a tropical Paradise to an untraveled American in 1859. In fact, many of the artist's contemporaries imagined America, both South and North, as a second Eden, manifestly destined by God. *Landscape in Ecuador* celebrates the concord of human and divine aspirations, soon to be shattered by the outbreak of civil war.

This work can be used to demonstrate: Wind and/or Simple Machines



Vollis Simpson (American, 1919 - )  
*Wind Machine*, 2002  
Steel and other media  
30ft 0in x 30ft 0in x 15ft 0in (9m 14.4cm x 9m 14.4cm x 4m 57.2cm)  
Purchased with funds from the William R. Roberson, Jr. and Frances M. Roberson Endowed Fund for North Carolina Art, 2002 (2002.4)

Vollis Simpson has been building wind machines since he was stationed on Saipan during World War II. After the war he designed and built heavy equipment for moving houses and opened a repair shop in a rural crossroads community in eastern North Carolina. He continued to be interested in wind power and constructed several other large windmills, one of which powered the heating system in his house. He gradually retired from his house-moving business and in 1985 began making a cluster of [monumental](JavaScript:OpenGlossaryWindow(%22317%22)) wind machines that he erected on one corner of his brother's farm outside of Lucama, North Carolina.  
  
Mr. Simpson is one of North Carolina's most original and inventive artists. He combines such diverse materials as highway signs, fan blades, candle holders, and bicycle wheels and mounts them on armatures of industrial machine parts, creating highly kinetic sculptures that move at the slightest breeze.

This work can be used to demonstrate: Air Pollution



Camille Pissarro (French, 1830 - 1903)  
*The Saint-Sever Bridge, Rouen: Mist*, 1896  
Oil on canvas  
1ft 11in x 2ft 10in (58.4cm x 86.4cm)  
Gift of Wachovia Bank and Trust Co., N.A.

Few subjects recall the impressionists’ fascination with changing effects of atmosphere and water as much as Pissarro’s view of Rouen. Among the members of this group, Pissarro was the most receptive to experimentation with new ideas and approaches. Having painted in Rouen earlier, Pissarro was drawn back to the city in 1896 by Claude Monet’s success with a series of paintings of Rouen Cathedral. He selected a less [monumental](JavaScript:OpenGlossaryWindow(%22317%22)) subject than Monet’s cathedral, preferring the distant views of the Seine bridges visible from his hotel window. Pissarro completed 16 canvases of the bridges that year, delighted by the combination of natural mist and the smoke from boats and factories. Like Monet’s cathedrals, Pissarro’s Rouen bridge paintings vary greatly in color and quality of light, depending on time of day and weather conditions. He wrote to his son Lucien of his work, saying, “what interests me especially is a motif of the iron bridge in the wet, with much traffic, carriages, pedestrians, workers on the quays, boats, smoke, mist in the distance, the whole scene fraught with animation and life.”� Such urban scenes are more frequent in Pissarro’s oeuvre than in that of any other major impressionist.

This work can be used to demonstrate: The Scattering of Light through the Atmosphere



Claude Monet (French, 1840 - 1926)  
*The Seine at Giverny, Morning Mists*, 1897  
Oil on canvas  
2ft 11in x 3ft 0in (88.9cm x 91.4cm)  
Purchased with funds from the North Carolina Art Society (Robert F. Phifer Bequest) and the Sarah Graham Kenan Foundation, 1975 (75.24.1)

In 1896 and 1897, Monet rose at 3:30 in the morning in his village of Giverny to work on a project of capturing early morning light as it appeared through the fog. By dawn, he was in the small boat he kept on a branch of the Seine for use as a floating studio. An observer recorded that the painter worked simultaneously on fourteen canvases, all depicting this exact spot, shifting from one to another as the strengthening sun burned through the mist. Monet spent the decade of the 1890s pursuing his innovative concept of series paintings, showing the same motif in varying conditions of light, time, and atmosphere. Of the twenty known versions of this subject, this one is among the most delicate, the features of the distant [landscape](JavaScript:OpenGlossaryWindow(%22223%22)) obscured by the [diffused](JavaScript:OpenGlossaryWindow(%22367%22)) light through the mist.

This work can be used to demonstrate: The Scattering of Light through the Atmosphere



Claude Monet (French, 1840 - 1926)  
*The Cliff, Etretat, Sunset*, 1883  
Oil on canvas  
1ft 11in x 2ft 8in (58.4cm x 81.3cm)  
Purchased with funds from the State of North Carolina

*The Cliff, Etretat, Sunset* is a typical example of the impressionist [style](JavaScript:OpenGlossaryWindow(%2280%22)), demonstrating an interest in atmospheric conditions and the effects of light as the day progresses. Colors are vibrant and applied to the [canvas](JavaScript:OpenGlossaryWindow(%22153%22)) in separated brushstrokes that create the illusion of motion on the water’s surface. Close examination of the setting sun reveals Monet’s technique of applying one color of paint over another that is still wet. He thus achieved a partial mixture, not a thorough blending of the colors as traditional painters had done on their palettes.  
  
The monumentality of the famous cliffs at the resort of Etretat in Monet’s native Normandy distinguishes them from most of his other subjects. The rock formations are known as the Elephant and the Needle because of their shapes.

This work can be used to demonstrate: Force and Motion



Ralph Helmick and Stuart Schecter (American, 1952 and 1958 - )  
*Rabble*, 2003  
Mylar butterflies suspended from stainless-steel cables  
0in x 1ft 3in x 3ft 8in (0cm x 38.1cm x 1m 11.8cm)  
Commissioned by the North Carolina Museum of Art with funds from the North Carolina Art Society (Robert F. Phifer Bequest)  
© 2006 Ralph Helmick and Stuart Schecter

Ralph Helmick and Stuart Schechter make ceiling-hung sculpture they describe as [three-dimensional](JavaScript:OpenGlossaryWindow(%22178%22)) pointillism. Each of their works consists of thousands of suspended [elements](JavaScript:OpenGlossaryWindow(%22220%22)) that merge into one large [composite](JavaScript:OpenGlossaryWindow(%2234%22)) [form](JavaScript:OpenGlossaryWindow(%2245%22)). In this work, about 1,200 subtly moving butterflies are massed together in the shape of a jetfighter. (Its title, *Rabble*, is the generic for a flock of butterflies or swarm of insects.) The suspended specimens slowly flap their wings, animating the plane caught in midflight. Viewers listening closely will be able to hear the wings tapping against each other, an unanticipated sonic effect. To stabilize the aircraft, the artists anchored each butterfly with a small pewter weight, round like a miniature globe. Contrails, streaming out behind the jet, are realized by about four hundred fabric flowers, as vividly colored and varied as the butterflies.

This work can be used to demonstrate: The Scattering of Light through the Atmosphere:



Thomas Cole (American, 1801 - 1848)  
*Romantic Landscape*, 1826  
Oil on canvas  
1ft 4in x 1ft 10in (40.6cm x 55.9cm)  
Purchased with funds from the State of North Carolina, 1952 (52.9.9)

For Thomas Cole, [landscape](JavaScript:OpenGlossaryWindow(%22223%22)) painting was more than the [depiction](JavaScript:OpenGlossaryWindow(%2239%22)) of scenery. Through his paintings of the vast American wilderness, the artist hoped to stir the viewer to contemplate the natural purity and boundless promise of the New World. Both his art and his spiritual zeal inspired several generations of American [landscape](JavaScript:OpenGlossaryWindow(%22223%22)) painters known collectively as the [Hudson River school](JavaScript:OpenGlossaryWindow(%22262%22)).  
  
This small painting dates from Cole's early career, when the young painter was first exploring the dramatic possibilities of [landscape](JavaScript:OpenGlossaryWindow(%22223%22)) art. Based on studies made in New York's Catskill [Mountains](JavaScript:OpenGlossaryWindow(%22344%22)), the [composition](JavaScript:OpenGlossaryWindow(%2235%22)) presents a [romantic](JavaScript:OpenGlossaryWindow(%2274%22)), deeply moral vision of primeval nature, its wildness contrasting with the "civilized" landscapes of Europe. That Cole intended such paintings as hymns to nature and nature's God is evident in his poetry, particularly "Lines from Lake George", written in the same year as this painting:

This work can be used to demonstrate: Weather



Thomas Hart Benton (American, 1889 - 1975)  
*Spring on the Missouri*, 1945  
Oil on Masonite  
2ft 6in x 3ft 4in (76.2cm x 1m 1.6cm)  
Purchased with funds from the State of North Carolina, 1977 (77.1.3)  
© 2006 T.H. Benton and R.P. Benton Testamentary Trusts/UMB Bank Trustee/Licensed by VAGA, New York, NY

In February 1937 Thomas Hart Benton was sent by the Kansas City Star to sketch the flood-devastated region of southeastern Missouri. The artist reported that "the roads of the flood country were full of movers . . . Every once in a while seepage from under the levee would [force](JavaScript:OpenGlossaryWindow(%2217%22)) evacuation of a house and you would see a great struggle to get animals and goods out of the rising water."  
  
Benton's quick, vivid sketches later led to *Spring on the Missouri*. However, in translating the drawings into a painting, the artist reimagined the scene as [symbolic](JavaScript:OpenGlossaryWindow(%22146%22)) of mankind's valiant and unrelenting struggle with the forces of nature.

This work can be used to demonstrate: Weather



**Ludolf Backhuysen** (Dutch, 1631 - 1708)

*Ships in a Stormy Sea Off a Coast*, about 1695-1700  
Oil on canvas, 59 3/8 x 91 1/8 in. (150.8 x 231.5 cm)  
Purchased with funds from various donors, by exchange, and the North Carolina Art Society (Robert F. Phifer Bequest), 98.13