







Iowa West Public Art

JONATHAN BOROFSKY MID-AMERICA CENTER MOLECULE MAN

IOWAWESTPUBLICART.ORG

ABOUT THE ARTIST

Jonathan Borofsky was born in Boston, Massachusetts. He studied art in college in the United States and France, receiving a Master of Fine Arts from Yale University in 1966. When he first

center of his first one-person show.



decided to work as an artist in New York City, he set himself the task to count from one to infinity and wrote down numbers for a couple hours a day for several years as an art making activity, adding sketches with the numbers. His 34-inch stack of 8.5" x 11" pages, titled Counting, with numbers from 1 to 2,346,502, became the

Counting and repetition continue to be characteristics of Jonathan Borofsky's art which now focuses on the human figure, often mechanical in nature. His figures are often in motion or showing physical activity reflecting his feeling that, "...if I can get myself moving and start doing something physical, I usually feel good." In fact, the artist says, "I think everything in art is a self-portrait."

Jonathan Borofsky draws upon his dreams and memories for inspiration, particularly a dream he remembers about "a series of small black and white doodled drawings of stick figures" and "framed works spinning with the aid of an electric motor."

In the early 1990s, Jonathan Borofsky's focus shifted from paintings, sculptures and installations inside galleries to large-scale outdoor public art. He has created more than 30 public sculptures for cities around the world. His giant figures in Canada, Germany, Switzerland, Japan, Korea and the United States dominate their cities and invite people to interact with them.

Jonathan Borofsky emphasizes how much thinking influences art making. He says, "I am a student of the mind, how the mind works, why we hurt each other, why we help each other, why we do what we do."

HISTORY OF THE SITE

Jonathan Borofsky's Molecule Man stands near the entrance of the Mid-America Center. This Council Bluffs arena is a premier entertainment and convention center offering live entertainment and sporting events. Jonathan Borofsky specifically chose the Mid-America site at the spot where Interstates 29 and 80 cross because it is visible to so many visitors. The 50-foot sculpture really stands out when it is illuminated at night. Jonathan Borofsky explained, "Whether the city is large or small, the pleasure for me is the same. I enjoy creating symbols about our shared humanity, and then placing them in public settings where they become part of people's everyday life."

The large-scale sculpture has been specially built to stand up to midwestern weather conditions, even 100 mile-per-hour straight line winds. The artist specifically chose a metal known for its strength, "aircraft aluminum," which is used to build airplanes.

WORK OF ART

MEDIUM AND DESCRIPTION

Jonathan Borofsky's *Molecule Man* is a 50-foot tall aluminum sculpture weighing approximately 33,000 pounds. The base of the sculpture is 44 feet in diameter. The sheer size of the installation required a specially trained installation team and sophisticated engineering. The process began with artist's sketches, which were made into computer-aided design drawings. These drawings guided the cutting of aluminum sheets.

The sculpture represents three connecting human figures made of 2.5-inch thick platealuminum sheets welded together. The human figures are not solid, but have 1,216 holes cut into them creating a patterned texture. The artist says, "I was fascinated by this molecule idea because of the simple fact that even though we appear to be quite solid, we are in fact composed of a molecule structure, which in itself is mostly composed of water and air."

INTERPRETATION

Jonathan Borofsky's work is titled *Molecule Man*. What is a molecule? Visit the Educator Resources area of www.iowawestpublicart.org and look at diagrams of molecules. In what way do the figures in *Molecule Man* resemble a molecule?

Our bodies are made up of molecules. Molecule Man has 1,216 holes in it. Do you suppose you have more or fewer molecules in your body? The New York Hall of Science Web site says, "Molecules are so small that there are more molecules in your body than there are stars

The sculpture Molecule Man is 50 feet tall. How is this different from a molecule? How tall are you? If you and your friends could stand one on top of another how many of you would it take to reach to the top of *Molecule Man*?

Jonathan Borofsky made another *Molecule Man* sculpture in Berlin, Germany. It is 100 feet tall. How many of you would it take to reach the top of that sculpture? Link to an image of *Molecule Man* in Berlin in the Educator Resources section at www.iowawestpublicart.org.

For Borofsky the three figures joining in the center not only refer to the lightness in our own solid bodies but also to the molecules of all human beings coming together to create

All human beings are made up of molecules. It is one way that people all over the world are all the same. Jonathan Borofsky believes that his sculptures show how human beings come together to share our world. They show the "common moment" where there is the possibility for overcoming our differences and understanding each other better.

What do you see in the sculpture that shows this idea? (Consider how the figures join in the middle at a common point.)

Look at these Jonathan Borofsky sculptures at www.iowawestpublicart.org:

Walking Man, Verden, Germany, 2005 Hammering Man, Frankfurt, Germany, 1990 Dancers, Denver, Colorado, 2003

Man with Briefcase, Fort Worth, Texas, 2002

How are all these sculptures similar? How are they different? Which show the body as a solid form? Which one is a silhouette? Which use negative (empty) space? Which looks like a line drawing? How is the Man with Briefcase different? Where is the negative space?

Now look at these sculptures at www.iowawestpublicart.org:

Shiva Nataraja (Lord of the Dance), from India 1100s Henry Moore, Reclining Figure, 1939

Where is the negative space in these works?

VOCABULARY

Medium – the material or form used by an artist

Molecule – the smallest particle of a substance that retains the chemical and physical properties of the substance and is composed of two or more atoms

Negative space – empty space, space around an object or form

Positive space – space in an artwork that is filled with something, such as lines, designs, color, or shapes (Opposite - negative space)

Pattern – a repeated decorative design

Scale – the relative size of something

Silhouette – the shape and outline of someone or something typically colored in solid black

Texture – the tactile quality of the surface of a work of art or a visual design which represents a tactile quality

Three-dimensional – having length, breadth and depth; existing in real space

CLASSROOM CONNECTIONS

EXPLORE BIG IDEAS:

Artists explore how people work.

Connect with other Art, Artists and Cultures

Visit www.iowawestpublicart.org to look at the sculptures below by Jonathan Borofsky:

Walking Man, Verden, Germany, 2005 Hammering Man, Frankfurt, Germany, 1990 Singing Man, Seoul, Korea

Man with Briefcase, Fort Worth, Texas, 2002 Dancers, Denver, Colorado, 2003 Walking Man, Munich, Germany, 1995

Which of these figures are working at a job? What do you see in the sculpture that makes you say that? What are the other figures doing? Could these actions also be jobs?

Along with Borofsky's Hammering Man and Man with Briefcase consider these images.

You can find links to them at www.iowawestpublicart.org:

Diego Rivera, Detroit Industry, mural, 1932-33 Fernand Léger, The Builders, 1950 Jacob Lawrence, The Shoemaker, 1945 Ancient Egyptian scribe, ca. 2500 BCE

Duane Hanson, Housepainter, 1995 William King, Sunrise, 2007

What kind of jobs are the people doing in each of these images? What do you see in these images that gives you clues to the types of jobs? Are there special objects, tools or clothing that you see?

The ancient Egyptian scribe is a writer who knew how to draw the complicated Egyptian hieroglyphics. He sits cross-legged with a papyrus paper scroll on his lap as he writes with

Jonathan Borofsky says, "Hammering Man is a worker. Hammering Man celebrates the worker... the people who produce the commodities on which we depend." The arm of Hammering Man actually moves up and down causing the hammer to pound. Go to www.iowawestpublicart.org for a link to an image of this sculpture moving. Borofsky wants to have Hammering Man sculptures around the world all working at the same time. He says, "It is a symbol for working with others on the planet ... and helps to connect all of us together."

Which of these jobs require people to be active and moving? Pick one of these workers and write or tell a story about what they are doing now and what things they will do next. What is the final product of their work?

Along with the two Walking Man sculptures look at the following images at www.iowawestpublicart.org:

Ancient Greek pot depicting long-distance runners, ca. 333 BCE Jacob Lawrence, Munich Olympic Games, 1971

What is similar about these images? What is different about these images? How do the artists make you think these people are moving? Which of the figures are moving the fastest? Why do you think that? Put these images in order from slowest to fastest. What kinds of jobs require people to walk or run?

Along with Borofsky's Singing Man and Dancers look at these images at www.iowawestpublicart.org:

Romare Bearden, Empress of the Blues, 1974 William King, Circus, 2007 Utagawa Toyokuni, Kabuki Actor, ca. 1810

Edgar Degas, Little Dancer, ca. 1922

In the Japanese print an actor from the Kabuki theater is portrayed. He is acting in a play about a hero with superhuman strength who saves people from an evil ruler.

What are the people in these images doing? What do you see that gives you clues to what they are doing? Do you do any of these things? Could these people be working at jobs? Where might they be working?

Now visit www.iowawestpublicart.org and look at:

Carmen Lomas Garza, Empanadas, 1991 Duane Hanson, Man on a Mower, 1995

William King, Interstate, 2007 Mayan ball players, ca. 8th-9th Century

The ancient Mayans lived in the countries now known as Mexico, Guatemala, Honduras, El Salvador and Belize. They played a ballgame that they believed helped keep the sun moving across the sky. Ballplayers had to keep the ball moving without using their hands or feet. They played this game with large, solid rubber balls that were very heavy. They wore protective gear like big wooden belts.

What are the people doing in all these images? What do you see that gives you clues to what they are doing? Do you do any of these things? Could these people be working at jobs? What kinds of jobs? Do people who have other kinds of jobs still do these activities? In what context?

Experiment with Art Making

Look again at Jonathan Borofsky's Hammering Man, Man with Briefcase and Molecule Man.

How do these three use positive and negative space differently?

Think about something you like to do now or a job you might like to have in the future. What kind of clothing would you wear? Would you work with special tools or objects? Would you be active or still?

Make an outline drawing on a 6" x 9" piece of construction paper of a figure doing your chosen activity. Will you include the outline of an object like the hammer or briefcase in Borofsky's sculptures? Will you choose a special gesture to describe the activity?

Now very carefully cut around your outline keeping the surrounding paper intact with only one cut to reach your outline. You now have both a negative and a positive image.

Choose a 9" x 12" piece of construction paper in a contrasting color. Fold it in half like a book. Glue your positive image on one side and your negative image on the other. Stand your artwork up. How do your images look like Borofsky's sculptures?

EXPLORE BIG IDEAS:

Artists show how we can work together to improve the world.

Connect with other Art, Artists and Cultures

Visit www.iowawestpublicart.org and consider these Jonathan

Borofsky sculptures:

Man Walking to the Sky, Kassel, Germany, 1992 Woman Walking to the Sky, Strasbourg, France, 1994 Walking to the Sky, New York, New York, 2004

All of these sculptures represent people walking up 80- to 100-feet stainless steel poles. The 100-foot pole in Walking to the Sky in New York City is at a 75° angle.

Using a protractor, draw a 75° angle. Do you think a hill at a 75° angle would be easy or hard to climb? Why do you think the artist would show people walking to the sky on a thin pole? What do you think he means by this?

Jonathan Borofsky remembers a story that his father used to tell him about a friendly giant who lived in the sky. In this story he and his father would travel up to the sky to talk to the giant. They would ask the giant what needed to be done to help people on earth. The artist sees the sculptures as a celebration of how hard we can work to reach important goals to improve the world.

How do the artist's ideas about the works compare to what you thought they meant? Can works of art mean more than one thing?

In Walking to the Sky Borofsky gives us examples of people of different ages, genders and ethnicities. Why do you think Borofsky included different kinds of people? What do you think he is trying to say about people living together in the world?

Review your discussion of *Molecule Man*. How is he presenting similar ideas?

Look at the following works at www.iowawestpublicart.org:

Navajo sand paintings Maya Lin, Civil Rights Memorial, 1989

Frederic Auguste Bartholdi, Statue of Liberty, 1886 Faith Ringgold, Sunflower Quilting Bee, 1991 Andy Goldsworthy, Three Cairns, 2002

Use the Web sites provided on www.iowawestpublicart.org to research these works of art.

Which one is used in a ritual to return the world to its original state of harmony and beauty? Which ones were made to celebrate the idea of freedom? Which ones were made to celebrate those people who worked for the right to freedom? Which one was made to raise people's awareness and understanding of our earth? What do you think these artists are trying to say about people living together in the world?

Experiment with Art Making

You have now looked at art works that celebrate people's actions, raise awareness and show how people come together for common goals to improve the world. Sometimes artists protest things that they believe need to be changed. One of the most famous protest works is Pablo Picasso, Guernica, 1937. Visit www.iowawestpublicart.org for a link to this image.

Guernica shows the bombing of the city of Guernica, Spain, by German bombers, on April 26, 1937, during the Spanish Civil War. Upon hearing of the tragedy, Pablo Picasso immediately began working on this painting. Guernica shows the tragedies of war and the suffering war inflicts upon individuals, and in particular, innocent civilians. Picasso didn't paint a realistic image of the bombing, but instead used symbols to communicate his ideas. For example, the bull represents Spain and the woman with the lamp is searching for truth.

Do you see any images that might be a more direct representation of the bombing?

In 1985 the pop artists Michael Jackson and Lionel Ritchie wrote a song, "We Are the World," which was recorded by a group of well-known popular music stars to raise money for famine relief in Africa. See www.iowawestpublicart.org for a link to the lyrics. Look at the chorus.

What kinds of similar ideas are expressed in the art you have been looking at and in this song?

Think about ways you would like to change the world to improve it for the good of all or think about something or someone in history that has improved the world.

Create a poster that will do one of the following: Celebrate or commemorate a person or event that improved the world; Raise awareness about something that needs to be changed to improve the world; Show how people could come together to improve the world; Protest some event or condition that you think harms the world.

Write a one-paragraph artist's statement or the lyrics to a short song about the ideas you are trying to express. Display your artist's statement with your poster.

CONNECT WITH OTHER SUBJECTS

The above activities and discussions address the following subject areas:

Science: molecules, ecology

Math: ratio and scale, angles

Social Studies: occupations, historical events, historical research, cultures (including: Egyptian, Mayan, Greek, Japanese, Native American), community service and global awareness Music: popular culture

Language arts: artist's statement

WHAT IS IWPA?

lowa West Public Art (IWPA) is an initiative of the lowa West Foundation that started in 2004. IWPA is guided by a community-driven Public Art Master Plan, which selected over fifty public art sites in the City of Council Bluffs, Iowa. IWPA's vision for the year 2015 is a community with a national and international reputation for high quality art that attracts visitors from all over the world and fuels economic development. Learn more at www.iowawestpublicart.org.

Curriculum author credits: Center for Innovation in Arts Education, University of Nebraska at Omaha, Shari Hofschire, Dr. Joanne Sowell





JONATHAN BOROFSKY ABOUT THE ARTIST

Jonathan Borofsky was born in Boston, Massachusetts. He studied art in college in the United States and France, receiving a Master of Fine Arts from Yale University in 1966. When he first decided to work as an artist in New York City he set himself the task to count from one to infinity and wrote down numbers for a couple hours a day for several years as an art making activity adding sketches with the numbers. His 34inch stack of 8.5" x 11" pages, titled Counting, with numbers from 1 to 2,346,502,

became the center of his first one-person show.

Counting and repetition continue to be characteristics of Jonathan Borofsky's art which now focuses on the human figure, often mechanical in nature. His figures are often in motion or showing physical activity reflecting his feeling that, "...if I can get myself moving and start doing something physical, I usually feel good." In fact, the artist says, "I think everything in art is a self-portrait." Jonathan Borofsky draws upon his dreams and memories for inspiration, particularly a dream he remembers about "a series of small black and white doodled drawings of stick figures" and "framed works spinning with the aid of an electric motor."

In the early 1990s, Jonathan Borofsky's focus shifted from paintings, sculptures and installations inside galleries to large-scale outdoor public art. He has created more than 30 public sculptures for cities around the world. His giant figures in Canada, Germany, Switzerland, Japan, Korea and the United States dominate their cities and invite people to interact with them.

Jonathan Borofsky emphasizes how much thinking influences art making. He says, "I am a student of the mind, how the mind works, why we hurt each other, why we help each other, why we do what we do."

HISTORY OF THE SITE

Jonathan Borofsky's Molecule Man stands near the entrance of the Mid-America Center. This Council Bluffs arena is a premier entertainment and convention center offering live entertainment and sporting events. Jonathan Borofsky specifically chose the Mid-America site at the spot where Interstates 29 and 80 cross because it is visible to so many visitors. The 50-foot sculpture really stands out when it is illuminated at night. Jonathan Borofsky explained, "Whether the city is large or small, the pleasure for me is the same. I enjoy creating symbols about our shared humanity, and then placing them in public settings where they become part of people's everyday life."

The large-scale sculpture has been specially built to stand up to midwestern weather conditions, even 100 mileper-hour straight line winds. The artist specifically chose a metal known for its strength, "aircraft aluminum," which is used to build airplanes.



WORK OF ART

MEDIUM AND DESCRIPTION

Jonathan Borofsky's Molecule Man is a 50-foot tall aluminum sculpture weighing approximately 33.000 pounds. The base of the sculpture is 44 feet in diameter. The sheer size of the installation required a specially trained

installation team and sophisticated engineering. The process began with artist's sketches, which were made into computer-aided design drawings. These drawings guided the cutting of aluminum sheets.

The sculpture represents three connecting human figures made of 2.5-inch thick plate-aluminum sheets welded together. The human figures are not solid, but have 1.216 holes cut into them creating a patterned texture. The artist says, "I was fascinated by this molecule idea because of the simple fact that even though we appear to be quite solid, we are in fact composed of a molecule structure, which in itself is mostly composed of water and air."

INTERPRETATION

Jonathan Borofsky's work is titled Molecule Man. What is a molecule? Visit the Educator Resources area of www.iowawestpublicart.org and look at diagrams of molecules. In what way do the figures in *Molecule* Man resemble a molecule?

Our bodies are made up of molecules. Molecule Man has 1,216 holes in it. Do you suppose you have more or fewer molecules in your body? The New York Hall of Science Web site says, "Molecules are so small that there are more molecules in your body than there are stars in the universe."

The sculpture Molecule Man is 50 feet tall. How is this different from a molecule? How tall are you? If you and your friends could stand one on top of another how many of you would it take to reach to the top of Molecule Man?

Jonathan Borofsky made another Molecule Man sculpture in Berlin, Germany. It is 100 feet tall. How many of you would it take to reach the top of that sculpture?

Link to an image of Molecule Man in Berlin in the Educator Resources section at www.iowawestpublicart.org.

For Borosky the three figures joining in the center not only refer to the lightness in our own solid bodies but also to the molecules of all human beings coming together to create our existence.

All human beings are made up of molecules. It is one way that people all over the world are all the same. Jonathan Borofsky believes that his sculptures show how human beings come together to share our world. They show the "common moment" where there is the possibility for overcoming our differences and understanding each other better.

What do you see in the sculpture that shows this idea? (Consider how the figures join in the middle at a common point.)

Look at these Jonathan Borofsky sculptures at www.iowawestpublicart.org:

Walking Man, Verden, Germany, 2005

Man with Briefcase, Fort Worth, Texas, 2002

Hammering Man, Frankfurt, Germany, 1990

Dancers, Denver, Colorado, 2003

How are all these sculptures similar? How are they different? Which show the body as a solid form? Which one is a silhouette? Which use negative (empty) space? Which looks like a line drawing? How is the Man with Briefcase different? Where is the negative space?

Now look at these sculptures at www. iowawestpublicart.org:

Shiva Nataraja (Lord of the Dance), from India 1100s Henry Moore, Reclining Figure, 1939

Where is the negative space in these works?

VOCABULARY

Medium – the material or form used by an artist

Molecule – the smallest particle of a substance that retains the chemical and physical properties of the substance and is composed of two or more atoms

Negative space - empty space, space around an



object or form

Positive space – space in an artwork that is filled with something, such as lines, designs, color, or shapes (Opposite – negative space)

Pattern - a repeated decorative design

Scale - the relative size of something

Silhouette - the shape and outline of someone or something typically colored in solid black

Texture – the tactile quality of the surface of a work of art or a visual design which represents a tactile quality

Three-dimensional - having length, breadth and depth; existing in real space

CLASSROOM CONNECTIONS

EXPLORE BIG IDEAS

Artists explore how people work.

Connect With Other Art, Artists And Cultures

Visit www.iowawestpublicart.org to look at the sculptures below by Jonathan Borofsky:

Walking Man, Verden, Germany, 2005

Man with Briefcase, Fort Worth, Texas, 2002

Hammering Man, Frankfurt, Germany, 1990

Dancers, Denver, Colorado, 2003

Singing Man, Seoul, Korea

Walking Man, Munich, Germany, 1995

Which of these figures are working at a job? What do you see in the sculpture that makes you say that? What are the other figures doing? Could these actions also be jobs?

Along with Borofsky's Hammering Man and Man with Briefcase consider these images. You can find links to them at www.iowawestpublicart.org:

Diego Rivera, Detroit Industry, mural, 1932-33

Fernand Léger, The Builders, 1950

Jacob Lawrence, The Shoemaker, 1945

Duane Hanson, Housepainter, 1995

Ancient Egyptian scribe, ca. 2500 BCE

William King, Sunrise, 2007

What kind of jobs are the people doing in each of these images? What do you see in these images that gives you clues to the types of jobs? Are there special objects, tools or clothing that you see?

The ancient Egyptian scribe is a writer who knew how to draw the complicated Egyptian hieroglyphics. He sits cross-legged with a papyrus paper scroll on his lap as he writes with a pen and inks.

Jonathan Borofsky says, "Hammering Man is a worker. Hammering Man celebrates the worker...the people who produce the commodities on which we depend." The arm of Hammering Man actually moves up and down causing the hammer to pound.

Go to www.iowawestpublicart.org for a link to an image of this sculpture moving.

Borofsky wants to have Hammering Man sculptures around the world all working at the same time. He says, "It is a symbol for working with others on the planet... and helps to connect all of us together."

Which of these jobs require people to be active and moving? Pick one of these workers and write or tell a story about what they are doing now and what things they will do next. What is the final product of their work?

Along with the two Walking Man sculptures look at the following images at www. iowawestpublicart.org:

Ancient Greek pot depicting long-distance runners, ca. 333 BCE

Jacob Lawrence, Munich Olympic Games, 1971

What is similar about these images? What is different about these images? How do the artists make you think these people are moving? Which of the figures are moving the fastest? Why do you think that? Put these images in order from slowest to fastest. What kinds of jobs require people to walk or run?

Along with Borofsky's Singing Man and Dancers look at these images at



www.iowawestpublicart.org:

Romare Bearden, Empress of the Blues, 1974 William King, Circus, 2007

Utagawa Toyokuni, Kabuki Actor, ca. 1810

Edgar Degas, Little Dancer, ca. 1922

In the Japanese print an actor from the Kabuki theater is portrayed. He is acting in a play about a hero with superhuman strength who saves people from an evil ruler.

What are the people in these images doing? What do you see that gives you clues to what they are doing? Do you do any of these things? Could these people be working at jobs? Where might they be working?

Now visit www.iowawestpublicart.org and look at:

Carmen Lomas Garza, Empanadas, 1991 William King, Interstate, 2007 Duane Hanson, Man on a Mower, 1995 Mayan ball players, ca. 8th-9th Century

The ancient Mayans lived in the countries now known as Mexico, Guatemala, Honduras, El Salvador and Belize. They played a ballgame that they believed helped keep the sun moving across the sky. Ballplayers had to keep the ball moving without using their hands or feet. They played this game with large, solid rubber balls that were very heavy. They wore protective gear like big wooden belts.

What are the people doing in all these images? What do you see that gives you clues to what they are doing? Do you do any of these things? Could these people be working at jobs? What kinds of jobs? Do people who have other kinds of jobs still do these activities? In what context?

Experiment with Art Making

Look again at Jonathan Borofsky's Hammering Man. Man with Briefcase and Molecule Man.

How do these three use positive and negative space differently?

Think about something you like to do now or a job you might like to have in the future. What kind of clothing

would you wear? Would you work with special tools or objects? Would you be active or still?

Make an outline drawing on a 6" x 9" piece of construction paper of a figure doing your chosen activity. Will you include the outline of an object like the hammer or briefcase in Borofsky's sculptures? Will you choose a special gesture to describe the activity?

Now very carefully cut around your outline keeping the surrounding paper intact with only one cut to reach your outline. You now have both a negative and a positive image.

Choose a 9" x 12" piece of construction paper in a contrasting color. Fold it in half like a book. Glue your positive image on one side and your negative image on the other. Stand your artwork up. How do your images look like Borofsky's sculptures?

EXPLORE BIG IDEAS

Artists show how we can work together to improve the world.

Connect With Other Art, Artists And Cultures

Go to iowawestpublicart.org and consider these Jonathan Borofsky sculptures:

Man Walking to the Sky, Kassel, Germany, 1992 Woman Walking to the Sky, Strasbourg, France, 1994 Walking to the Sky, New York, New York, 2004

All of these sculptures represent people walking up 80 to 100 feet stainless steel poles. The 100-foot pole in Walking to the Sky in New York City is at a 75° angle.

Using a protractor, draw a 75° angle. Do you think a hill at a 75° angle would be easy or hard to climb? Why do you think the artist would show people walking to the sky on a thin pole? What do you think he means by this?

Jonathan Borofsky remembers a story that his father used to tell him about a friendly giant who lived in the sky. In this story he and his father would travel up to the sky to talk to the giant. They would ask the giant what needed to be done to help people on earth. The artist sees the sculptures as a celebration of how hard we can work to reach important goals to improve the



world.

How do the artist's ideas about the works compare to what you thought they meant? Can works of art mean more than one thing?

In Walking to the Sky Borofsky gives us examples of people of different ages, genders and ethnicities. Why do you think Borofsky included different kinds of people? What do you think he is trying to say about people living together in the world?

Review your discussion of *Molecule Man*. How is he presenting similar ideas?

Look at the following works at www. iowawestpublicart.org:

Navajo sand paintings

Frederic Auguste Bartholdi, Statue of Liberty, 1886 Faith Ringgold, Sunflower Quilting Bee, 1991 Andy Goldsworthy, Three Cairns, 2002

Maya Lin, Civil Rights Memorial, Montgomery, AL., 1989

Use the Web sites provided on www.iowawestpublicart.org to research these works of art.

Which one is used in a ritual to return the world to its original state of harmony and beauty? Which ones were made to celebrate the idea of freedom? Which ones were made to celebrate those people who worked for the right to freedom? Which one was made to raise people's awareness and understanding of our earth? What do you think these artists are trying to say about people living together in the world?

Experiment with Art Making

You have now looked at art works that celebrate people's actions, raise awareness and show how people come together for common goals to improve the world. Sometimes artists protest things that they believe need to be changed. One of the most famous protest works is Pablo Picasso's Guernica, 1937.

Visit www.iowawestpublicart.org for a link to this image.

Guernica shows the bombing of the city of Guernica, Spain, by German bombers, on April 26, 1937 during the Spanish Civil War. Upon hearing of the tragedy,

Pablo Picasso immediately began working on this painting. Guernica shows the tragedies of war and the suffering war inflicts upon individuals, and in particular, innocent civilians. Picasso didn't paint a realistic image of the bombing, but instead used symbols to communicate his ideas. For example, the bull represents Spain and the woman with the lamp is searching for truth.

Do you see any images that might be a more direct representation of the bombing?

In 1985 the pop artists Michael Jackson and Lionel Ritchie wrote a song, "We Are the World," which was recorded by a group of well-known popular music stars to raise money for famine relief in Africa.

See www.iowawestpublicart.org for a link to the lyrics. Look at the chorus.

What kinds of similar ideas are expressed in the art you have been looking at and in this song?

Think about ways you would like to change the world to improve it for the good of all or think about something or someone in history that has improved the world.

Create a poster that will do one of the following:

- Celebrate or commemorate a person or event that improved the world
- Raise awareness about something that needs to be changed to improve the world
- Show how people could come together to improve the world
- Protest some event or condition that you think harms the world.

Write a one-paragraph artist's statement or the lyrics to a short song about the ideas you are trying to express. Display your artist's statement with your poster.

CONNECT WITH OTHER **SUBJECTS**

The above activities and discussions address the following subject areas:

Science: molecules, ecology

Math: ratio and scale, angles

JONATHAN BOROFSKY MID-AMERICA CENTER MOLECULE MAN lowa West Public Art

Social Studies: occupations, historical events, historical research, cultures (including: Egyptian, Mayan, Greek, Japanese, Native American), community service and global awareness

Music: popular culture

Language arts: artist's statement

WHAT IS IWPA?

lowa West Public Art (IWPA) is an initiative of the lowa West Foundation that started in 2004. IWPA is guided by a community-driven Public Art Master Plan, which selected over fifty public art sites in the City of Council Bluffs, lowa. IWPA's vision for the year 2015 is a community with a national and international reputation for high quality art that attracts visitors from all over the world and fuels economic development. Learn more at www.iowawestpublicart.org.

Curriculum author credits: Center for Innovation in Arts Education, University of Nebraska at Omaha, Shari Hofschire, Dr. Joanne Sowell