The Dalí on the “Fly” Art Mobile draws connections between the artist Salvador Dalí and the worlds of math and science, which he drew inspiration from for his art. Featuring an array of painting reproductions, 3-D objects, and an orientation film, the art mobile provides a visually fun environment for young students to explore the connections between these disciplines and the world of Dalí.

**Dalí on the “Fly” Orientation Film**

- Eight-minute Orientation Film
- Grandpa and his nine-year-old granddaughter, Gala, two gadflies, tour The Dalí Museum after hours discussing the works of Salvador Dalí.
- Using live action with animation, this surreal educational documentary film about the art of Salvador Dalí, teaches art students about Surrealism and how Dalí’s art was inspired by dreams, math and science.
- Grandpa, the gadfly tour guide, knew Dalí well and was featured in Dalí’s paintings.
- The film ends with a call to action, asking students, “What Inspires YOU and YOUR Art?”
- Post curriculum materials are available for students to create art after a visit to the Art Mobile or The Dalí Museum St. Petersburg.

**Dalí on the “Fly” Interior**
Snail, Crutch and Melting Clock - 3-D Sculpture – employs three of Dalí’s iconic symbols

Snail:

- The spiral of the shell relates to the golden spiral, called the Fibonacci curve sequence of numbers.
- The Fibonacci sequence consists of numbers, each of which is the sum of the prior two numbers in the sequence.
- It is nature's numbering system and appears everywhere in nature, from the nautilus shell, leaf arrangement in plants, to the pattern of the florets of a flower, the bracts of a pinecone, and the scales of a pineapple.
- In mathematics, the Fibonacci numbers are the numbers in the following sequence: 0, 1, 1, 2, 3, 5, 8, 13, 21, and 34...

Crutch:

- A crutch is generally thought of as assistance for the injured or disabled.
- It is generally a temporary object in one's life, and it helps to hold up the body when one is unable to support oneself.
- Dalí’s symbolic use of the crutch is similar, in that he uses it for support, but it seems to be more for emotional support than for the physical.
- It is also a symbol for respect – as in The Weaning of Furniture - Nutrition

Melting Clock:

- The melting clock became an icon for Dalí and Surrealism.
- The melting clock is a symbol for the dream world and means time is fluid and meaningless.
- The melting clock illustrates how time can be fluid, as in a dream.
- Dalí also makes a reference to our dependence on clocks and how the world runs by the clock. Scheduling events is essential for life to function normally.
- If clocks melt, then time becomes meaningless, leading to chaos.
Spectacles with Holograms and Computers for Seeing Imagined Objects, 1975
From the print series Imaginations and Objects of the Future

- A portrait – possibly a self-portrait
- Part of a suite of prints that Dalí created envisioning future objects
- The invention is “spectacles” to see a new or different interpretation of visuals.
- Shows Dalí was a visionary thinker; this was his premonition of what was to be – possibly of what technology would be able to do.
- The scene is a brain at work supported by a crutch. The brain is filled with ants, and ants are envisioned on the wall.
- Note Dalí’s signature; he had 671 different signatures throughout his career. This signature was quite an unusual signature for Dalí. Find other Dalí signatures in the Art Mobile.
  - Why would an artist need to sign his work?
  - Why should you sign your work?

The FLY

- Salvador Dalí was obsessed with verbal puns and visual plays on words
- Multiple meaning of “fly”
- The Art Mobile presents Dalí’s work through varied views – like that from a fly’s eye
- Dalí was intrigued by the parabolic design of the fly eye and the perspective that this inspires in viewing the world
- The fly is a symbol of the multiple ways of seeing.
- The gadfly is also an iconic symbol in Spanish history and culture.
- The gadfly appears in many of Dalí’s paintings and references a Spanish Catalan folk legend about Saint Narciso. In this legend, on three occasions gadflies emerge from the tomb of St. Narciso to drive away French invaders. Dalí used this myth to underline the Catalan people's strength against foreign influence and to express his patriotic devotion to his homeland's independence.

FIND all the flies in the The Hallucinogenic Toreador
  - At the top of the painting, files transform into “madronos”, the small black balls of thread that were once sewn into the hair nets worn by the toreadors.
  - The flies metamorphose into colored circles, forming a 3-D square in the center of the piece.
  - A large fly replaces the eye of the double image dying bull. This is Islero, the bull who gored Manolete, the famous bullfighter.
  - The gadflies flying towards young Dalí in the sailor suit
The *Eye of Perception* sculpture is a large 3 dimensional reinvention of one of Dalí’s famous jewelry pieces, *The Eye of Time*.

- The pupil of the eye is a circular mirror, which accurately reflects the observer’s image.
- The iris of the eye is made up of many small convex mirrors, which reflect and distort the image to demonstrate the multiple ways of seeing.
- Every mirror reflects your image, but no two are alike, and the image is constantly changing.
- The eyelid and exterior is covered with thousands of crystals which reflect and break up light into the colors of the spectrum.
- The sculpture demonstrates how light is reflected, distorted and separated into different wavelengths of color.
- No two convex mirrors reflect an identical image and they constantly change reflecting and distorting every movement in the room.
- This sculpture uses light to come to life.
Self-Portrait, 1918-19, Oil on canvas

- Self-portrait
- Period of work – Early
- Influence: Impressionism, rich brush strokes, complex composition
- Dalí depicts himself at his easel in the balcony doorway of his studio in his home in Cadequés, Spain.
- He depicts himself as an emergent artist with samples of his canvases hanging on the wall behind him.
- This painting is a statement of Dalí’s artistic vocation and his exploration of light and color.
- Painted at 14 years old; Dalí is self-taught at this point and shows remarkable precocious painterly skills at a young age.
- Dalí was investigating many styles of art at this time.
- Science interested Dalí at a very young age and persisted as an interest throughout his life.
- He used math & optics to create this piece; by using 3 mirrors, he was able to see his profile while in the act of painting.
- He was interested in optics with early toys, zoetropes, opticon and mirrors.
- The observer’s eye mixes the color as the light is reflected.
- Using contrasting warm and cool colors, red and blue, he was able to capture the intensity of the Mediterranean light.
Nature Morte Vivante (Still Life - Fast Moving), 1956, Oil on canvas

- Still life
- Title is a word play: "still life—fast moving"
- Painted at 52 years old, second half of his career during Classic/Nuclear-Mystical Period
- Major theme and influences: mathematics and science
  - Uncertainty Principle, Golden Section/Rectangles, study of aesthetic proportions, natural spirals
- During this atomic era, Dalí was fully absorbed by scientific discoveries of the time and mathematical theory.
- It illustrates that our world of solid objects is made of subatomic particles in constant motion; to visualize this, Dalí chose to reinterpret a traditional still life painting.
- Familiar still life objects circle each other in unsuspended animation. He captures movement frozen in time.
- Through the elements in motion, there is a sense of suspended time – “Still life in motion.”
- This painting also depicts the importance of spirals, which Dalí believed were nature’s most perfect form. Dalí uses spirals as a symbol of cosmic order.
- The Golden Spiral can be found in both nature (cauliflower) and man-made forms (architectural spiral railing).
- Spiral structures are found throughout this work: rhinoceros horn, twisting fruit dish, meteor-like head of cauliflower.
- The cauliflower florets look like the top of a mushroom cloud or a meteor, but Dalí uses them because its growth patterns of the perfect Golden Spirals.
- Dalí’s friend, mathematician Matila Ghyka, who studied the Golden Section, helped Dalí to create his compositions. This painting is laid out rigorously according to the Golden Ratio.
- Dalí illustrates Heisenberg’s “uncertainty principle” which basically states that at the atomic level, science can measure an atomic particle’s exact velocity or its exact location in space, but science cannot do these two things at the same time.
  - Dalí demonstrates this several times with doubled objects (the fruit dish, apple, and cherry) where the located version of the object casts a shadow, and the momentum of the similar object resembles the shooting of the object through space with no shadow.
    (Position produces a shadow. Momentum does not produce a shadow.)
**Galacidalacidesoxiribunucleicacid (Homage to Crick and Watson), 1963, Oil on canvas**

- Period of work: Later
- Longest one word title of Dalí’s career.
- Title: combines Gala, Dalí, El Cid, Allah, DNA
- Themes: Cycle of life (birth, death, rebirth), Crick and Watson, and Barcelona flood of 1962
- Shows interest in modern scientific discoveries in relation to a specific Spanish tragedy (many people died and lost).
- A flooded landscape in the center of the canvas depicts the deadly flash flood.
- The canvas is separated into contrasting themes and forms on the left vs. right of the canvas: life vs death.
- Left: visual of an organic molecule, a DNA molecule - life (the persistence of genetic human memory)
  - The spiral represents life.
  - An homage to Crick and Watson, recipients of the 1962 Nobel Prize for proposing that DNA has a double helix shape
- Right: visual of an inorganic cubic structure, figures making up salt molecule – nonlife/death (figures pointing guns at each other; if one pulls a trigger, all die)
  - The cube represents destruction/death.
- Upper Middle: God lifting Christ back into heaven to be reborn. The muscles in God’s arm twist in the form of a double spiral. Here Dalí focuses on the religious subject of the resurrection in order to combine his interest in modern science with his awareness of this human tragedy. Dalí used the resurrection theme to offer solace and hope to the Catalan victims by suggesting rebirth.
- Upper left: double image, God’s head contains the image of Mary and Christ’s silhouette
- Bottom: Gala, Dalí’s wife, as Madonna, witnesses Christ’s ascension
• Title similar to *Nature Morte Vivante*, also a still life
• Symmetry, pattern, attention to detail, form and mathematics
• This painting seems very simple at first sight.
• This painting can be read like a mathematical equation.
• Balance of form: left side is light and right side is dark, day – night, good – bad
• Elements on the table arranged in simple patterns.
• A B A B A = fish – bread – fish – bread – fish
• A B C B A = flying fish – bread – flounder – bread – flying fish
• Two loaves of bread which look like strange rocks, similar to Catalan bread on the outside of Dalí’s museum in Spain
• Flounder in the middle creating a pentagram shape, referring to Dalí’s interest in three-dimensional shapes and forms (polyhedra).
• Bread and fish are religious references. Dalí’s mother was Catholic and his father, atheist.
The Weaning of Furniture - Nutrition, 1934, Oil on panel

- 30 years old when he painted this surreal landscape piece.
- Middle and height of the surrealist period of his career
- Painting technique captured scene as photorealism; a hand-tinted photograph of something impossible
- This is a view from the barracks from his home in Port Lligat.
- Influenced by Sigmund Freud and the world of dreams and dream imagery
- Themes: Animate & inanimate objects become parts of the same memory; the nanny and furniture are both part of same childhood memory.
- On the left side of the canvas are perfectly painted boats - reality.
- On the right he created and painted an impossible reality – SURREALITY.
- The scene is made up of puzzle pieces that fit together.
  - Larger cabinet fits into back of lady
  - Small cabinet with bottle fits into opening of larger cabinet
- The figure in the painting with the opening in her back is Dalí’s childhood nanny, Lucia.
- Dalí fondly remembers Lucia and being weaned.
- Small cabinet has medicine bottle because Lucia cared for Dalí when he was ill as a child.
- The crutch offers comfort to Lucia who is becoming old and weak.
- Crutch is a symbol of respect for Lucia in her old age.
- Techniques of surrealism:
  1. Dislocation: Placing objects where they don’t belong – a cabinet on the beach.
  2. Juxtaposition: Putting things together that don’t normally go together – crutch holding up Lucia’s back.
  3. Transformation or Metamorphosis: Turning something familiar into something unusual – a hole in Lucia’s back.
The Disintegration of the Persistence of Memory, 1952-54, Oil on canvas

- Period of Work: Classic/Nuclear-Mystical
- Small painting created over a two year period
- Demonstrates his interest in science and subatomic particles
- Theme – Science changes our understanding of the world
- Dalí returns to the concept of the best known painting of his career, The Persistence of Memory, 1931.
- Here he shows graphically what has changed in the world.
- By showing the elements of the painting breaking apart and peeling back, he reveals the disintegration of the familiar and how his perception has changed. Now the mysteries of the universe are explained through science.
- The melting clock became an icon for Dalí and Surrealism.
- Melting Clock is a symbol for the dream world and means time is fluid and meaningless.
- The melting clock illustrates how time can be fluid, as in a dream.
- Dalí also makes a reference to our dependence on clocks and how the world runs by the clock. Scheduling events is essential for life to function normally.
- If clocks melt, then time becomes meaningless, leading to chaos.
- Rhinoceros horns, containing perfect mathematical spirals, are like bombs being dropped.
- Using one point perspective in the composition of this painting, Dalí visually demonstrates his vision of the underlying order of the universe.
Old Age, Adolescence, Infancy (The Three Ages), 1940, Oil on canvas

- Period of Work: Surrealism
- Painted at the end of Dalí’s period as a surrealist
- Major Themes/Influences: double images and riddle of the Sphinx (Greek mythology)
- Prime example of Dalí’s painterly skills in creating double images
- This visual puzzle illustrates through the double images the answer to the Riddle of the Sphinx.
  - “What walks on four legs in the morning, two legs at noon, and three legs in the evening?”
  - Answer: Man crawls as a child on all fours in infancy, walks upright on two legs in adolescence, and uses a cane as a third leg in old age.
- Viewed up close, this is a landscape painting (Port Lligat, Spain), figures, ruins and mountains, but when viewed from a distance, the scene transforms into a still life painting of three heads on pedestals.
  - On the left, a women stands in an opening; her shadowed face forms Old Age’s eye; her body forms Old Age’s nose and mouth; and a cluster of trees form the hair.
  - In the center, Dalí as a child in his sailor suit, and his nanny (Lucia from The Weaning of Furniture – Nutrition) appear on a beach looking at white buildings across the bay. These buildings become Adolescence’s eyes, while the nanny’s scarf and shawl form his nose and lips.
  - On the right, a woman mends a fishing net on the beach; she is turned away from the viewer. Her head is Infancy’s eye, and her beaded belt becomes his grinning teeth and lips.

- Combining double images with an ancient riddle, Dalí combines the world of reality with dreams, the conscious and sub-conscious mind.
The Hallucinogenic Toreador, 1969-70, Oil on canvas

- This is a retrospective of Dalí’s iconography, and one his most ambitious double image paintings.
  o 4 double images: toreador full body silhouette, toreador face, bull, dog
- This painting surveys the achievements of Dalí’s career within the underlying theme of Dalí’s home country Spain.
- Major Themes: Venus de Milo, Toreador (Spanish bullfighter), Cubism, Abstract Expressionism, Optical Art
- A toreador is a bullfighter, one of the great heroes of Spanish culture.
- Inspired by a box of Venus pencils, Dalí saw the face of the toreador in the shadows of the Venus
  o 31 Venus images in the painting
- In the center of the canvas there is a hidden face in the Venus. She becomes the face of Manolete, the famous Spanish bullfighter gored to death.
  o The Venus’ green skirt becomes the bullfighter’s tie.
  o At the top of the green skirt there is a button. The bullfighter’s shirt collars form to the right and left of the button.
  o The shadows crossing the Venus’ stomach form the bullfighter’s lips and chin.
  o Her left breast forms his nose.
  o Her face forms his eye.
  o The contours of the bullfighter’s face are defined by the shadow of the Venus in the red skirt.
  o The red skirt of the Venus on the right become the red cape of the bullfighter in the middle.
  o The cluster of dots and flies to the left of his tie become his sequined jacket.
- Abstract Art: Silhouette shape of full body bullfighter raising his cap, dedicating the bullfight to Gala, Dalí’s wife, in upper left corner.
- Optical Art: Bright colored dots resemble the “banderillas” stuck into bull’s body during bullfight.
- Cubism: Lower left corner. Based on cubist painting by Juan Gris Dalí’s, a Spanish artist who produced modern art.

Gadflies in the The Hallucinogenic Toreador
- At the top of the painting, flies transform into madroños, the small black balls of thread that were once sewn into the hairnets worn by the toreadors.
- The flies metamorphose into brightly colored dots, resembling 3-D Optical art square in the center of the piece.
- Dots becoming flies recall gadfly story, St. Narciso & Miracle of the Flies.
- A large fly replaces the eye of the dying double image bull hidden in the rocks. This is Islero, the bull who gored Manolete, the famous bullfighter.
- The gadflies are flying toward young Dalí, who is in the sailor suit holding a hoop.