



SCHOLASTIC

art

The A in
STEAM:
Art and
Design

OCTOBER/NOVEMBER 2018

scholastic.com/art

Vol. 49 No. 2 ISSN 1060-832X



How does Tony
Oursler explore
technology in
this sculpture?

Find out on
page 8!



DEBATE
Can robots
be artists?

CAREER
Video game
designer

SCHOLASTIC
art

OCTOBER/
NOVEMBER 2018
VOL. 49 • NO. 2
ISSN 1060-832X

- 2** Art News + Notes
- 4** STEAM
- 12** Hands-on Project
- 13** Debate: Robo-Artists
- 14** Great Art Jobs
- 16** Student of the Month

MORE ONLINE:
scholastic.com/art

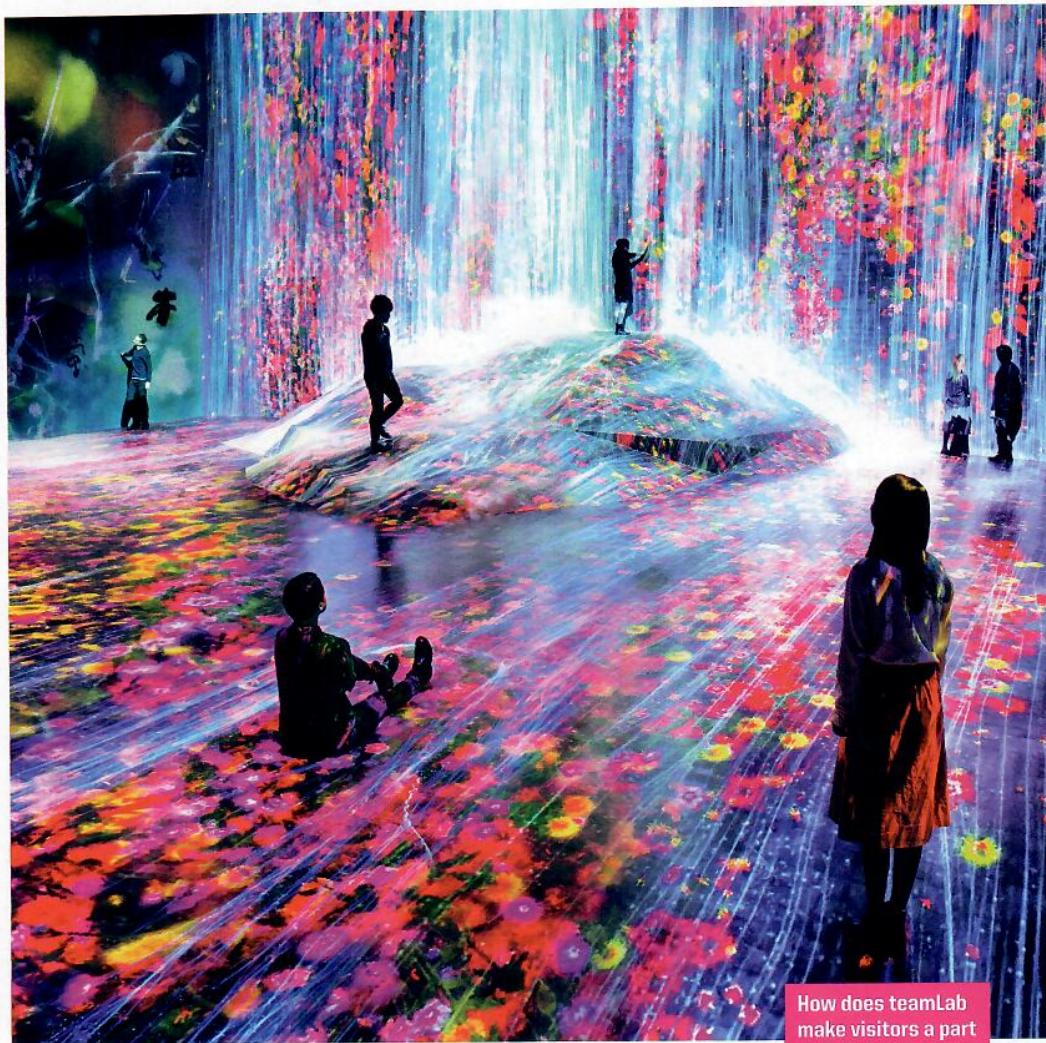
Slideshow:
Zaha Hadid

Debate:
Can robots be artists?

How-to Video:
Design Your Dream Shoe

Tony Oursler (b. 1957), *S-e-l*, 2016. C-print on dibond, wooden racks, two smart TV, counterweights, video reproduction system and painting, 103.54x74.01in. (263x188cm). Private collection, Madrid, Spain. Courtesy of the artist, Galleria MPA, and Lehmann Maupin, New York, Hong Kong, and Seoul.

POSTAL INFORMATION: Scholastic Art® (ISSN 1060-832X; in Canada, 2-c no. 55867) is published six times during the school year, Sept., Oct./Nov., Dec., Jan./Feb., Mar./Apr., May/June, by Scholastic Inc. Office of Publication: 2931 E. McCarty Street, P.O. Box 3710, Jefferson City, MO 65102-3710. Periodical postage paid at Jefferson City, MO 65101 and at additional offices. Postmasters: Send notice of address changes to SCHOLASTIC ART, 2931 East McCarty St., P.O. Box 3710, Jefferson City, MO 65102-3710.



How does teamLab make visitors a part of this artwork?

Mori Building Digital Art Museum: teamLab Borderless, 2018. Courtesy of borderless, teamlab.art.

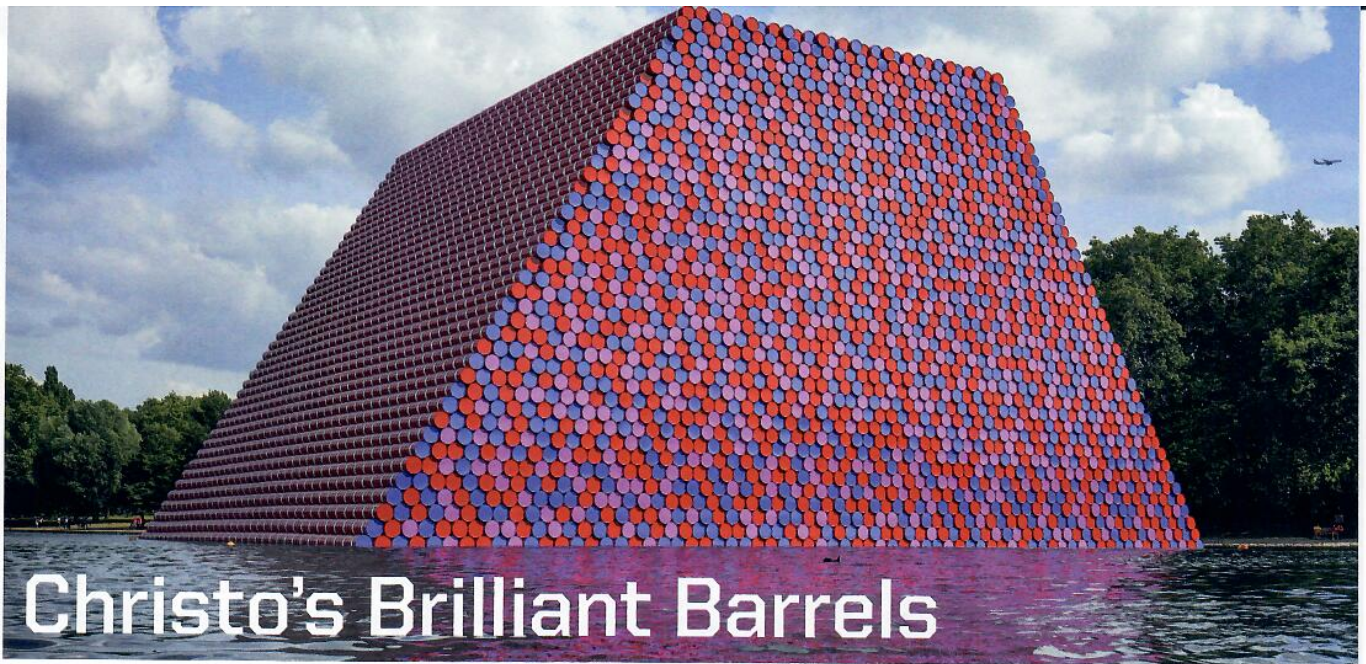
Beyond Boundaries

A new digital museum in Tokyo enchants visitors with what the museum's curators call borderless art—installations that invite people to interact with the artwork and one another. The Mori Building Digital Art Museum is divided into zones, each featuring vibrant projected images and animations. According to the museum's creators, it is the world's largest museum dedicated to digital interactive art.

More than 500 computers and almost as many projectors envelop the 100,000-square-foot space in hypnotic natural imagery. Engineers installed

sensors in some zones so that the digital simulations react to visitors' movements. In the zone shown above, visitors stand on a rock under a digital waterfall as animated water splashes around them.

A group of animators, artists, computer programmers, and engineers—known as teamLab—collaborated to produce this digital exhibition. "Artworks can transcend boundaries, influence, and sometimes intermingle with each other," says Toshiyuki Inoko (toh-shuh-YOO-kee ee-NOH-koh), the founder of teamLab. "In this way, all the boundaries between artist, people, and artworks dissolve."



Christo's Brilliant Barrels

In the heart of London, a vibrant structure floats upon a lake, reflecting multicolored patterns onto the water. Located in Hyde Park, the sculpture is the latest work by artists Christo and his wife Jeanne-Claude (now deceased). Called *The London Mastaba*, the title refers to a flat-roofed ancient Mesopotamian structure. Christo and his team built the 650-ton work with more than 7,500 barrels. They installed it on a floating platform anchored to the lake bed.

For almost 50 years, Christo and Jeanne-Claude collaborated to create temporary works. It took a year for local authorities to grant Christo permission to build *The London Mastaba*. The team constructed it in two-and-a-half months. They secured steel scaffolding to the platform. Then they transported the barrels into the park. Finally, they attached the barrels to the frame. Christo hopes to install an even larger mastaba in Abu Dhabi in the United Arab Emirates using more than 400,000 barrels!

How do Christo and Jeanne-Claude reference ancient Mesopotamia in their sculpture?

Christo (b. 1935) and Jeanne-Claude (1935-2009), *The London Mastaba*, 2016-2018. 7,506 stacked painted barrels on a floating platform, 68ft tall (20.11m tall). Temporary exhibit in London, England. David Azia/The New York Times/Redux.

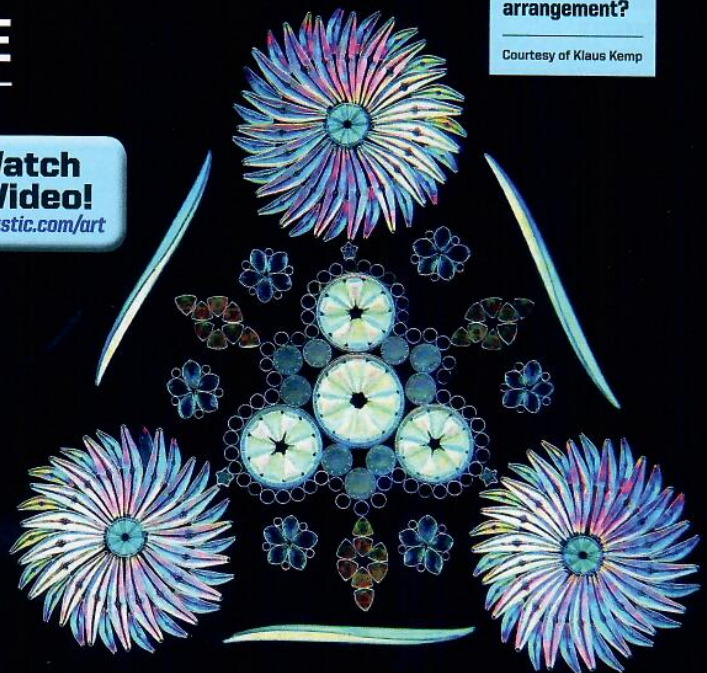
How does Kemp use pattern in this diatom arrangement?

Courtesy of Klaus Kemp

MINI MASTERPIECE

People have been making art out of algae since the 1800s. Today English artist Klaus Kemp (klovs kemp) experiments with this obscure art form. He collects the glass-like shells of single-celled organisms, called diatoms, in shallow bodies of water. They are tiny—most between 0.005 and 0.2 millimeters—and come in many different shapes. Kemp cleans them, arranges them in intricate patterns on a glass slide, and glues them into place. The finished works are so tiny that they must be viewed through a microscope!

Watch a Video!
scholastic.com/art



Inspiration to Innovation

Learn how art and science
have gone hand in hand
for more than 500 years

Leonardo da Vinci is the artist who painted the *Mona Lisa*, the most famous artwork in the world. But Leonardo wasn't only an artist—he was also a scientist and an engineer. He lived during the Italian **Renaissance**, a period of invention and discovery between 1400 and 1600. In addition to painting, Leonardo studied technology, math, and the human body.

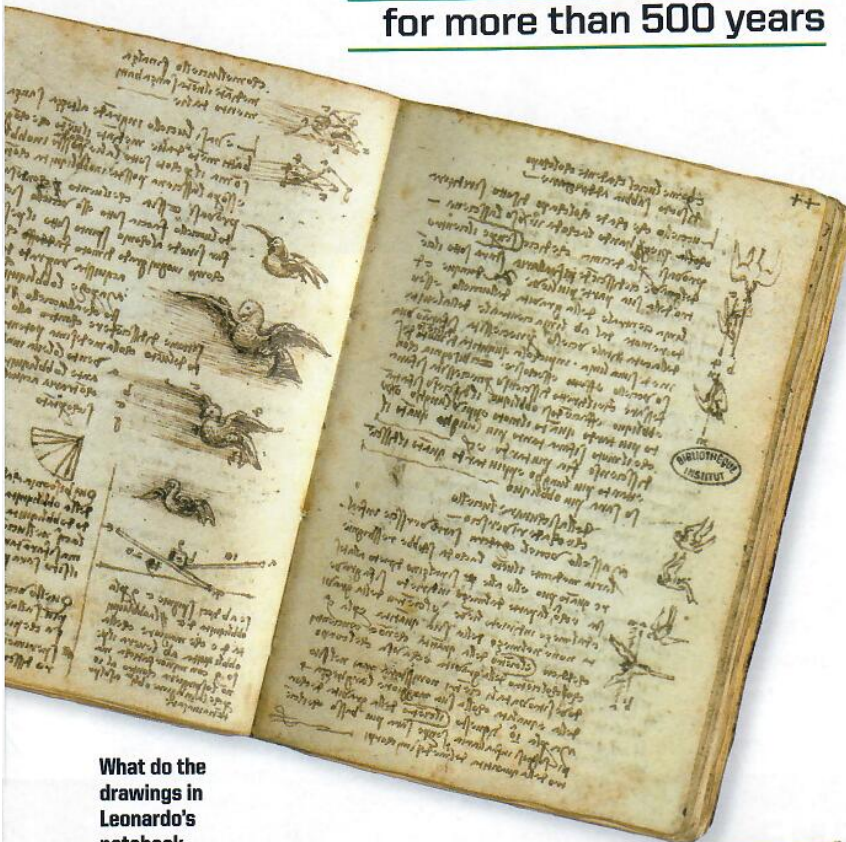
People often think of art and science as completely different from each other. But Leonardo believed the two pursuits had a lot in common. Artists and scientists both make observations and strive to describe the world around them. Leonardo's scientific curiosity informed his artwork, and creative thinking helped him envision technologies far beyond his time. Today the combination of science, technology, engineering, art (and design), and mathematics is abbreviated as **STEAM**. Just like in Leonardo's time, weaving these fields together leads to innovations the world has never seen before.

Master Observer

Leonardo kept thousands of pages of notes and sketches about his many areas of study. In the 1480s, he took

“A bird is an instrument working according to mathematical law, and it is in the capacity of man to reproduce such an instrument.”

—Leonardo da Vinci

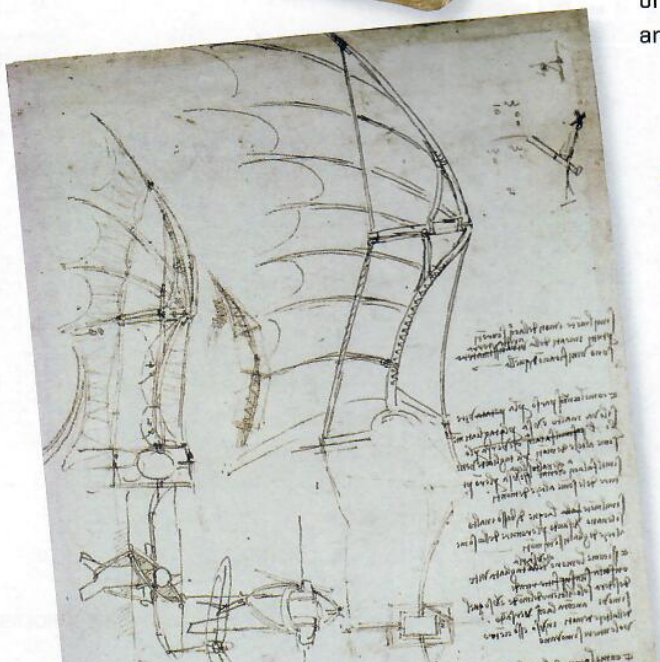


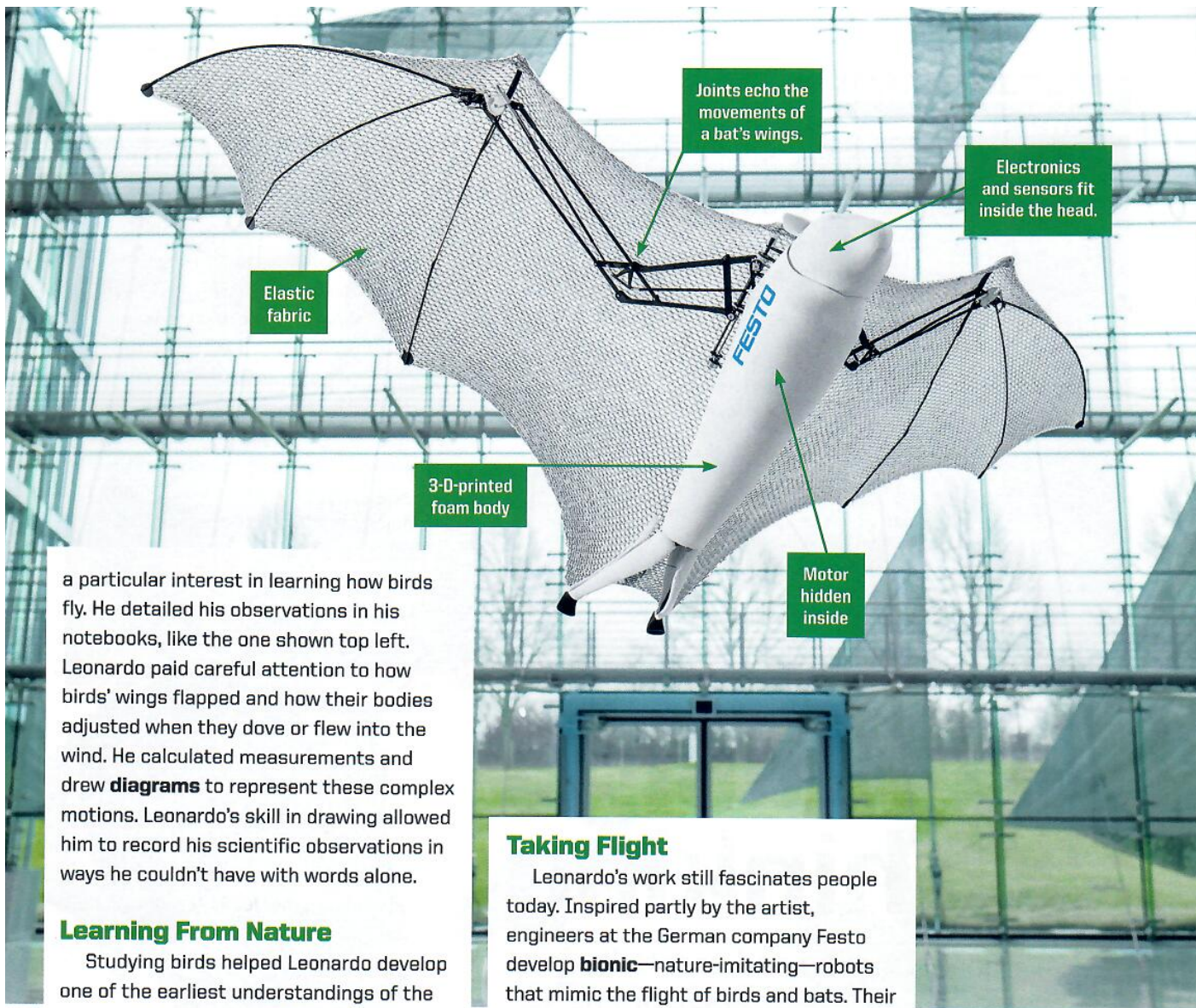
What do the drawings in Leonardo's notebook communicate?

Leonardo da Vinci (1452-1519), Manuscript E, *Flight of Birds*, 1513-1515. Pencil and ink, 5.94x4.01in. (15.1x10.2cm). Bibliotheque de l'Institut de France, Paris, France. RMN-Grand Palais/Art Resource, NY.

How does Leonardo illustrate his ideas about flight?

Leonardo da Vinci, *Ornithopter Wings*, 1478-1518. Pencil and ink, 25.59x17.71in. (65x45cm). Biblioteca Ambrosiana, Milan, Italy. Art Resource, NY.





a particular interest in learning how birds fly. He detailed his observations in his notebooks, like the one shown top left. Leonardo paid careful attention to how birds' wings flapped and how their bodies adjusted when they dove or flew into the wind. He calculated measurements and drew **diagrams** to represent these complex motions. Leonardo's skill in drawing allowed him to record his scientific observations in ways he couldn't have with words alone.

Learning From Nature

Studying birds helped Leonardo develop one of the earliest understandings of the science of flight. This inspired him to imagine designs for human-powered flying machines. Leonardo drew hundreds of sketches and diagrams of these inventions, and he included notes about how they might work.

The notebook page at bottom left shows one of Leonardo's early ideas for a flying contraption with bat-like wings. He included detailed diagrams of the levers, gears, and pulleys he believed would make it work. As he learned more about animal flight, the artist **revised** and improved on his designs. As far as anyone knows, Leonardo was never able to build his flying machines. But nearly 400 years after he died, the people who designed the first airplanes used many of the same scientific concepts.

Taking Flight

Leonardo's work still fascinates people today. Inspired partly by the artist, engineers at the German company Festo develop **bionic**—nature-imitating—robots that mimic the flight of birds and bats. Their latest, the BionicFlyingFox, above, mimics the movements of the world's largest bat. It uses gears and levers powered by a motor to flap thin fabric wings. As Leonardo did, the engineers began with diagrams that illustrate how the robot would work. They also developed computer software that helps control the robot's flight.

Working on inventions like the BionicFlyingFox helps Festo engineers think creatively and solve technological challenges. By bringing together science, technology, engineering, art, and math, they are making exciting breakthroughs. Like Leonardo did centuries before them, these engineers dream of technologies that might seem out of reach. But they know that, with a little creativity, anything is possible.

How did Festo engineers improve on Leonardo's design to build a functioning flying robot?

©Festo AG & Co. KG, all rights reserved.

Watch a Video!
scholastic.com/art



What characteristics do people consider when buying a car?

Design Thinking

Collaboration and creativity lead to products that make life better

When someone considers buying a car like the BMW i8 above, he or she thinks about how well it runs and how safe it is. But they're also probably evaluating the car's shape and color. Most car buyers care as much about these **aesthetic** factors—the way something looks—as they do about a vehicle's technical capabilities. This is true of most products. Every day, you use hundreds of different products. Though you may not think about it, a team of designers and engineers collaborated to make each one of them—and thought about how to make it appeal to you.



What problem does the Nike HyperAdapt solve for its users?

Problem-Solving Design

Designers and engineers work together to develop new products using the **design thinking process**. They start by identifying a problem or challenge. Designers at Nike began work on a new sneaker technology when they noticed an issue many athletes face. As they exert themselves during a game or a race, athletes' feet tend to swell, making their shoes too tight.

Scott Olson/Getty Images (car); Courtesy of Nike (shoe)

The team at Nike talked to athletes and did tests to learn about the problem and brainstorm ways to solve it. They experimented with different ideas until they found a solution that might work: a sneaker with sensors and motors that automatically loosen or tighten the shoelaces in real-time, adjusting to the user's feet. Then they created a **prototype**, or model, that athletes could try. They incorporated the athletes' feedback about how it works—and looks—into the final product, shown lower left, called the Nike HyperAdapt. Unlike regular shoelaces tied in a bow, the self-adjusting laces look clean, modern, and sophisticated. These technologically advanced shoes solve a specific problem—while looking futuristic and distinctive.

Revise and Reboot

If a product isn't working the way the designers intended, they usually modify the design and try again. In 1999, Sony introduced Aibo—a robotic dog, below, for people who can't care for a live pet. Just like a real dog, the puppy-sized robot could sit, fetch, and respond to people's voices. But it looked very mechanical, which some people disliked.

Sony recently **redesigned** Aibo, at right, to make it cuter and more technologically complex. Smoother joints make its movements look more natural, and it blinks and raises its ears in realistic ways. Advanced software and cameras

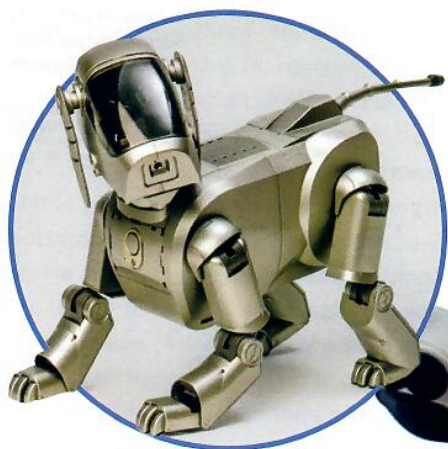
in the nose and tail also help the robot learn from its owner, giving the person an experience similar to caring for a live pet.

User-Focused Products

Good designers focus as much on the user as the product. Car designers incorporate feedback from customers each time they introduce an updated model. Nike's athletic-footwear designers create shoes that provide different kinds of support depending on a shoe's intended use. Similarly, the designers and engineers who worked together to produce Aibo explored how they could improve the robot's technology and aesthetics to make the product more appealing.

How do the people who created these products use the design thinking process to solve problems? Would any of these products be possible without the integration of science, technology, engineering, design (art), and math?

DESIGN THINKING PROCESS



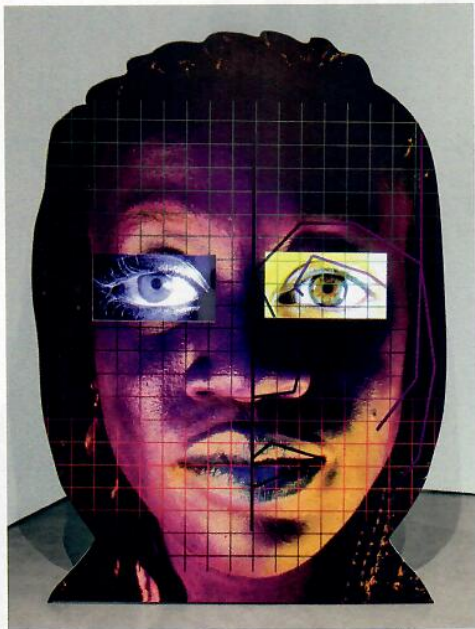
What design features make the new Aibo, above, more lifelike than the original version, left?

SPOTLIGHT STEAM

Art of the Future

These contemporary artists use STEAM to bring their ideas to life

Close your eyes and think of the first work of art that comes to mind. Is it made of paint on canvas, or is it perhaps sculpted of clay or stone? For centuries artists worked with these traditional materials. But today many contemporary artists experiment with science, technology, engineering, and math to express their ideas.



How does Oursler use technology to make a comment on its role in our lives?

Tony Oursler (b. 1957), *S>el*, 2016. C-print on dibond, wooden racks, two smart TV, counterweights, video reproduction system and painting, 103.54x74.01in. (263x188cm). Private collection, Madrid, Spain. Courtesy of the artist, Galleria MPA, and Lehmann Maupin, New York, Hong Kong, and Seoul.



Man and Machine

Throughout his career, American artist Tony Oursler (OUR-sler) has used modern technology—especially **video art**—in his work. In his 2016 **series** *A*gR_3*, he explores facial recognition software. This type of software identifies people based on their **facial features**. *S>el*, shown on the cover and at left, incorporates a larger-than-life photograph of a woman. A **grid** divides her face into sections. Videos of eyes, which move independently of one another, appear where the woman's eyes

How is Karle's process similar to Leonardo da Vinci's (pages 4-5)? How is it different?

Amy Karle (b. 1980), *Breathe*, part of *Internal Collection*, 2016-2017. Silk, polyester, cotton, natural and synthetic fibers. Courtesy of the artist.

would be. Eerie recordings of whispering voices emanate from the sculpture. The artist says his goal for this series is to “invite the viewer to glimpse themselves from another perspective—that of the machines we have recently created.”

Biology Inside Out

American artist Amy Karle uses complex 3-D printing technology to create **garments** inspired by human anatomy. Karle hopes her wearable works inspire new ways of thinking about the body. For each dress, she studies and then draws by hand a system or organs in the human body. She uses a computer to create digital designs, and then she laser-cuts the silk, polyester, or cotton cloth. After that, she sews the material into a garment. The example at left represents the respiratory system. Karle works in **new media**, artwork that incorporates digital art, animation, video games, 3-D printing, or other technologies. Karle explains, “I use tools and technology as a mirror to the self, as a mirror of who we are, who we want to and could become.”

Sky-high Sculpture

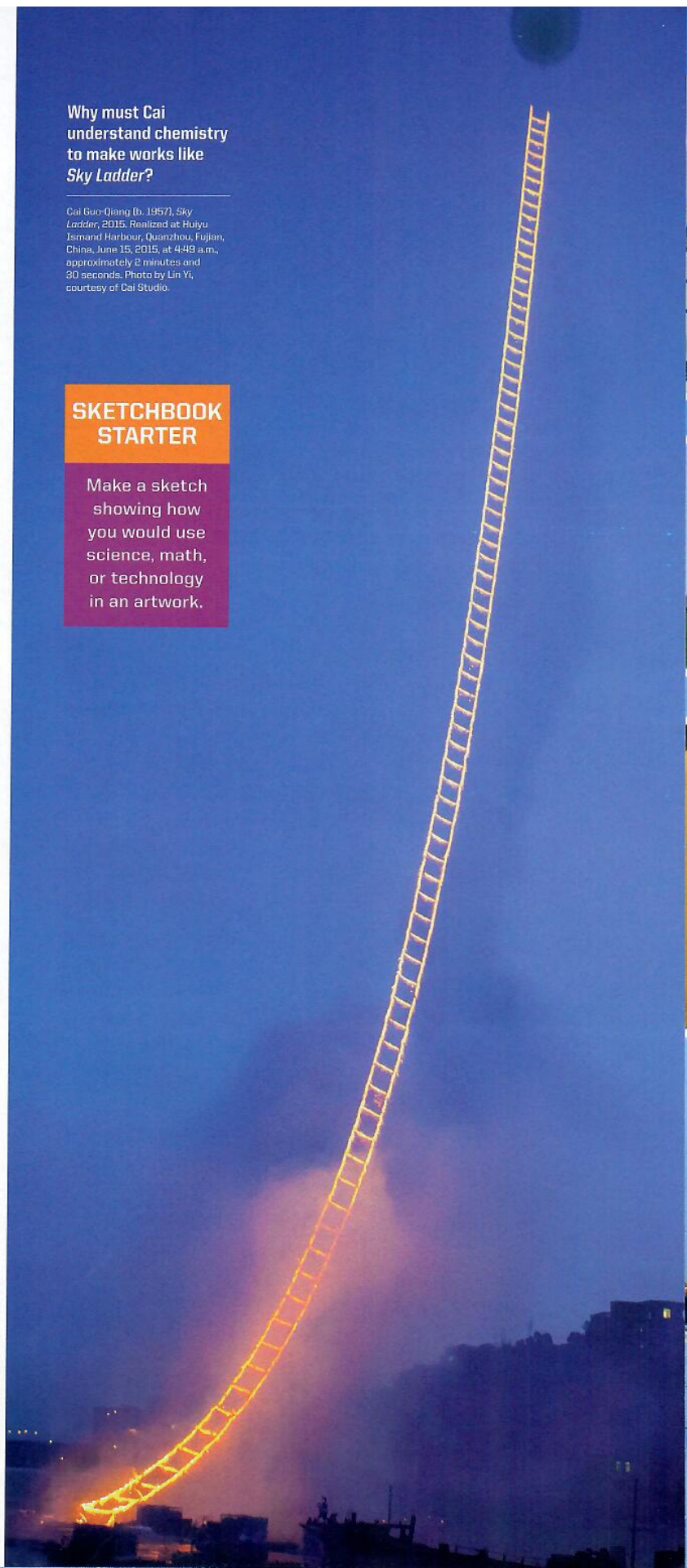
Chinese artist Cai Guo-Qiang (tsie gwaw-chiang) spends a great deal of time learning about the chemistry involved in making gunpowder and fireworks. The artist, who now lives in New York City, uses what he learns in works like his 2015 *Sky Ladder*, right. He first imagined this work when he was a child. The artist tried to create *Sky Ladder* three times before he was successful on his fourth try. Cai wrapped a ladder in a delicate blend of gunpowder and fireworks. Then he used a large balloon to lift it 1,650 feet into the air. When Cai ignited the bottom, the spark traveled up the ladder. He aimed to use the **ephemeral** blazing ladder to connect the earth and the sky. Cai says, “I don’t think any art is meant to be kept forever, immortal on the earth that we inhabit.”

Why must Cai understand chemistry to make works like *Sky Ladder*?

Cai Guo-Qiang (b. 1957), *Sky Ladder*, 2015. Realized at Huiyu Island Harbour, Quanzhou, Fujian, China, June 15, 2015, at 4:49 a.m., approximately 2 minutes and 30 seconds. Photo by Lin Yi, courtesy of Cai Studio.

SKETCHBOOK STARTER

Make a sketch showing how you would use science, math, or technology in an artwork.



5

Disciplines of STEAM

Most buildings are box-shaped, with straight walls and flat ceilings. The Heydar Aliyev (hay-DAHR ah-LEE-yehf) Center, shown here, has neither. Iraqi-British architect Zaha Hadid (zha-HA HA-deed) designed this cultural center in Azerbaijan, a country in Central Asia. By bringing together science, technology, engineering, art, and math, Hadid developed a stunning feat of architecture that seems to defy gravity.

1 SCIENCE

Typical buildings are based on an ancient design using vertical columns, called **posts**, with horizontal beams, called **lintels**, balanced on top. The downward force of gravity keeps the lintels balanced on top of the posts. Hadid's design doesn't include horizontal planes. Instead, the surface of the building curves in an **organic form**. To develop the structure so it would be safe and functional, Hadid's team had to think about how gravity would act on it, where it would need the most support, and how to provide that structural support.

How did Hadid and her team use STEAM to transform this building from an idea to reality?

Watch a Slideshow!
scholastic.com/art

2 TECHNOLOGY

Architects usually work with a combination of hand-drawn and digital **renderings** that show how a building will be constructed. They use computers to help them translate extremely complex designs from images on paper to reality. One of the architects at Hadid's firm explains, "The computer is just a tool. . . . We're the ones who provide the data, we're the ones who actually drive it."

3 ENGINEERING

The materials and the process the team used to construct the building were especially important given the form's complexity. To craft the building's **asymmetrical** curving walls, Hadid and her team first created a **load-bearing structure** made of concrete and steel, shown in the photo top right. Then they secured **contoured** white panels onto this scaffold-like structure. This "skin" is made of **fiberglass**, a lightweight material known for its strength and versatility. The fiberglass allowed the team to increase the building's durability without making it any heavier than necessary. Seams between each panel allow the structure to adjust to changes in temperature, strong winds, and even earthquakes, ensuring that it is safe as well as visually stunning.

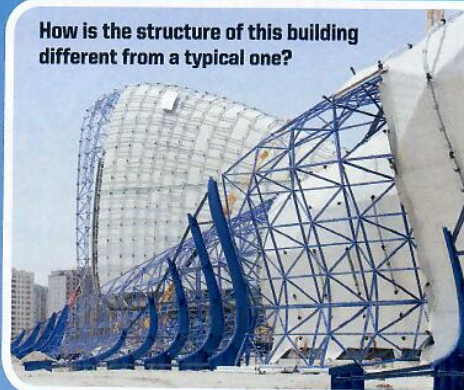
4 ART

The architects believed that the cultural center's location in central Baku, the capital of Azerbaijan, should be reflected in its design. They wanted it to be a building that locals and tourists interact with—and they do. Children love trying to run up the building's sloped walls! As visitors move from outside the building through its glass doors, the curving lines continue, creating a **unified** design. Hadid blurs the lines between the interior and exterior.

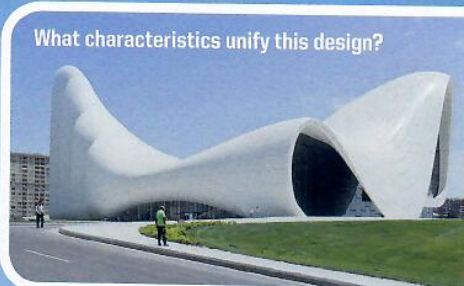
5 MATHEMATICS

The auditorium, bottom right, may look like a **free-form** space, but its measurements are based on extremely precise math. Business meetings, operas, ballets, and musical performances all take place in the space. This presented a complex challenge because each of these events requires unique acoustics (how sound is transmitted in a space). An acoustic specialist helped Hadid calculate exactly how to contour each surface to create an optimal acoustic performance.

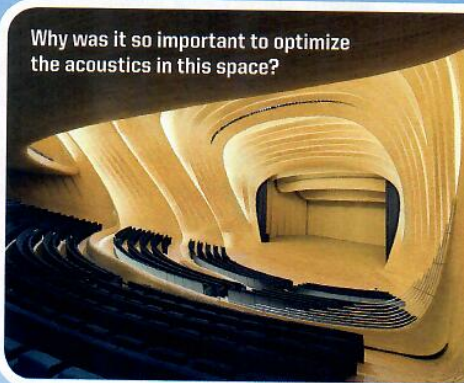
How is the structure of this building different from a typical one?



What characteristics unify this design?



Why was it so important to optimize the acoustics in this space?



HANDS-ON PROJECT STEAM

Design Your Dream Shoe

Use what you've learned about user-focused design to develop a new shoe

Studio Project Prompt:

- Brainstorm, sketch, and create a proposal for a new shoe.

Parameters:

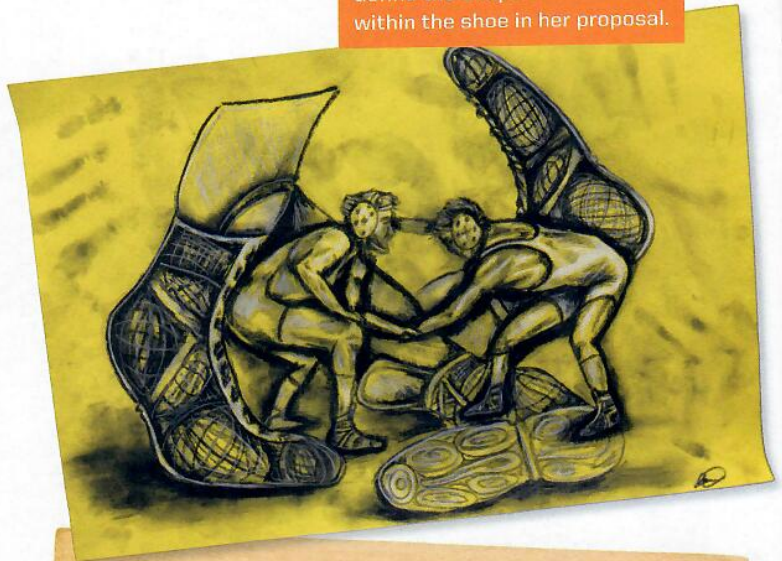
- Design a shoe for a specific sport or activity.
- Learn about the anatomy of a foot by making sketches of feet in a variety of positions.
- Present your proposal in any media that will clearly convey your ideas.
- You might add notes about your design choices and the materials you would use to construct your shoe in your proposal.

Before you begin, check out these examples by the students at Andover High School in Andover, Massachusetts!

Watch
a Video!

scholastic.com/art

▼ Livia uses contour lines to define the shape of the foot within the shoe in her proposal.



▲ How does Rocco represent his product's function in the design?

▲ How does Imani show the shoe from several points of view?

Prepared by Meghan Reilly Michaud,
Andover High School,
Andover, Massachusetts

Scott Eilers/AP Images for Scholastic Inc.

Robo-Artists

Engineers have designed robots that can paint, but are these machines making art?

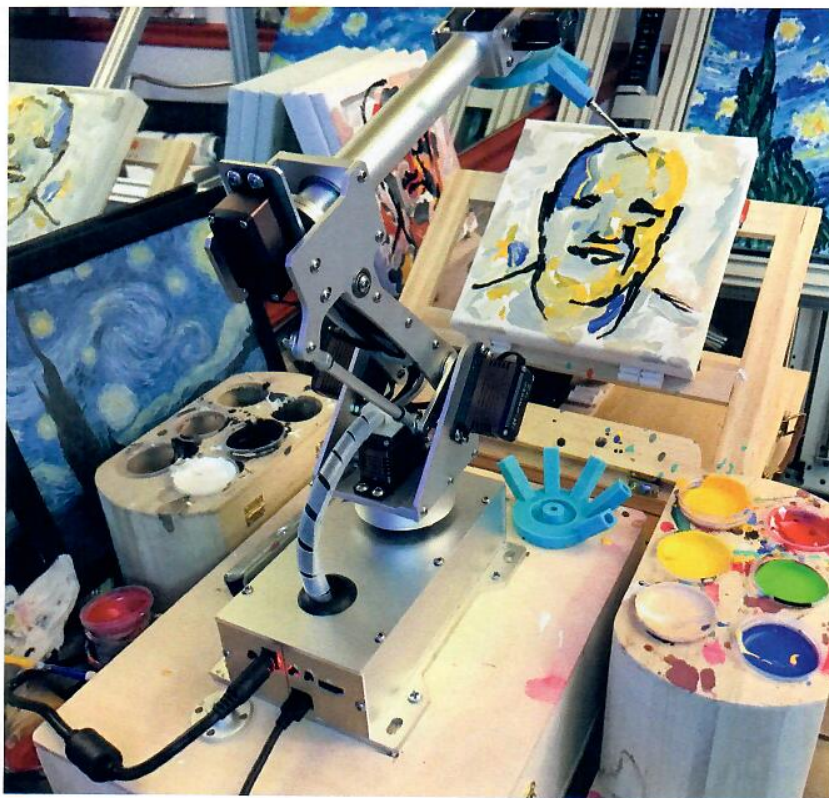
A robot called CloudPainter dips one of the brushes on the end of its mechanical arm into a cup of paint. It spins around and adds a final dab of color onto a canvas.

It has just completed an original painting. But is this robot-generated portrait a work of art? Or is painting a form of expression that only a human can truly achieve?

Engineers are designing robots sophisticated enough to paint impressive-looking works. In fact, it's often hard to tell that a person didn't paint them. Many of the bots recently showed off what they could do at the third annual online RobotArt competition—which CloudPainter won. Invented by American artist and software engineer Pindar Van Arman, CloudPainter functions using artificial intelligence (a computer system able to perform tasks normally associated with human intelligence, like making decisions). Van Arman programs the robot to paint without outside input, making choices as it works to improve its paintings over time—just like a human artist.

Van Arman says he's trying to replicate human creativity with his robot. While he admits CloudPainter isn't quite there yet, he does believe it has developed its own unique artistic style. CloudPainter also produces images that are new and unexpected.

Critics argue that robots like CloudPainter just appear to be creative.



The machines only do what they've been programmed to do. The critics say robots lack human experiences, imagination, and emotions, which are necessary to give art meaning and value.

Many artists think robots can serve as a useful tool—like a paintbrush—to help them make art. But that also raises the question of whether a robot or its designer should get credit for the works it creates. What do you think: Can a painting made by a machine ever equal one created by a person?

Can robots like CloudPainter, shown above, make art?

Courtesy of Pindar Van Arman, www.cloudpainter.com.

Watch a Video!
scholastic.com/art

CRAFT AN ARGUMENT

1. How is the way CloudPainter makes paintings similar to and different from that of a human artist?
2. Why do some say a painting made by a robot shouldn't be considered art?
3. Should a painting created by a robot be held in the same light as one made by a human artist? Why or why not?

Tell us what you think!
scholastic.com/art



Brenden Sewell



Sewell oversees a team of designers, artists, and engineers who developed *Endless Mission*. They created the environment, the characters, and the narrative.

Designing Virtual Worlds

Brenden Sewell talks about creating new video games

Scholastic Art: What is your job?

Brenden Sewell: I am a creative director at E-Line Media. We create video games that are fun to play and have a social impact. For example, our latest game—*Endless Mission*—allows players to gain an understanding of coding so that they are playing a fun game and also developing a skill that they can apply in the real world. In my role as creative director, I manage the process of making a video game from the initial idea to the finished product.

SA: What is the process for making a new video game?

BS: We begin with concepting—figuring out the idea for the game. At this point the team is very small. After we have a clear concept, we go into preproduction. During this phase, we create exact prototypes for the look of the characters, the mechanics [how the characters move], and the world [setting] in the game. Then we go into the

production phase. This is when we bring in all the designers, artists, and engineers who actually build the game.

SA: How do you decide how an object or a character will look?

BS: We prototype different ideas. The silhouette—or the basic shape—is very important when figuring out what an object or a character looks like. For example, in *Endless Mission*, we have a cart game with three carts. We had to establish a unique silhouette [shape] for each cart so that players could quickly recognize each one from a distance in order to come up with a strategy to avoid it or pass it. After figuring out the silhouette, we experiment with and finalize the colors and textures.

SA: How do the roles of designer, artist, and engineer differ?

BS: A designer thinks in terms of “What do I want a player to experience? What is the character’s mission? What challenges will the character face?” The designers also work with the artists to come up with the game’s visuals—the lighting, the colors,

the mood, and the appearance of objects and characters. The engineers take the designers' prototypes and implement them through code in a software program.

SA: What skills make you successful?

BS: I need to have the ability to maintain a vision across a whole project. I also need strong social skills to effectively manage people from different departments.

SA: Did you always want to be a video game designer?

BS: As a kid, I was a hobbyist game player. But I didn't see game design as a profession. It just hadn't clicked that this is a job people can have. It wasn't until I got involved in a game development program in college that I saw it as a career option. I was studying cognitive science, artificial intelligence, programming, and software development. The ability to merge my creative passions with my tech background seemed like a perfect mix.

SA: What is challenging about your job?

BS: On a daily basis, I need to make dozens of decisions for which there is no right or wrong answer. We just have to experiment

a bit and go with our gut feelings about what will give the players the right experience. That makes it risky and challenging. But it also makes it exciting!

SA: What do you love about your job?

BS: Every single day, my mission is to create fun and joyful experiences for people who play our games!

CAREER PROFILE

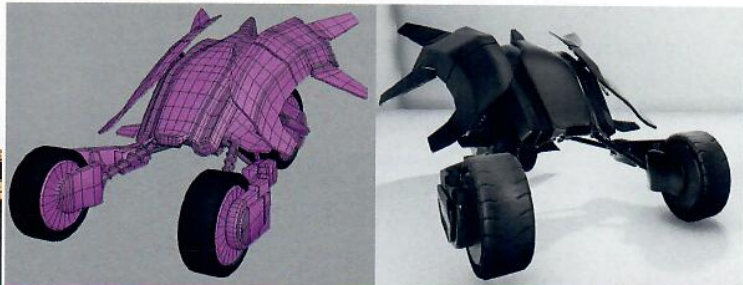
VIDEO GAME CREATIVE DIRECTOR

SALARY: Video game creative directors can earn from \$45,000 to \$135,000 or more per year, depending on project, experience, and location.

EDUCATION: Most video game creative directors have a bachelor's degree in video game design, computer programming, computer science, or a related field.

GETTING STARTED:

- ▶ Use free online tutorials to learn how to make video games.
- ▶ Create a portfolio. Include your best character and environment illustrations.
- ▶ Stay informed. Read video game magazines and blogs to learn the latest industry trends.



Sewell's team developed prototypes for the carts (above left) in *Endless Mission*. Then they finalized each unique shape (above right) and experimented with textures and colors (below).



STUDENT OF THE MONTH

Perfecting the Pour

This award-winning artist experiments with his working process to develop new designs

Arthur Harmath, 18, started buying woodworking tools two months into his first shop class. "I love taking a random chunk of wood and turning it into something awesome," he says. Arthur, who plans to join the military, hopes to someday start a small business selling his sculptures.

What inspired this sculpture? I wanted to show a flowing motion. I thought sculpting honey flowing out of a mug would capture this idea best, instead of water, milk, or some other liquid.

What materials did you use? The mug and the honey are cherry wood. The base is black walnut. Cherry is my favorite wood. It's very forgiving—not too hard, not too soft—so it's easy to work with, and it has a nice golden color.

What was your working process? First, I cut out the base and the pouring honey. Then I used Dremel bits—small woodcarving tools—to shape the honey as I turned it on a spindle. I sanded it by hand. The mug is fragmented, so I had to find the correct angles for each piece. Then I glued them all together. I cut a handle, sanded it, and glued it on. Finally, I added an oil finish to the mug and base, and a polymer finish to the honey to make it slick and shiny.

How did you figure out how to make the work balanced?

I experimented with what looked the best. I think I could have done a better job, because it does tip a little bit. But that's a mistake I wouldn't make again.

Did you have to modify your design as you worked?

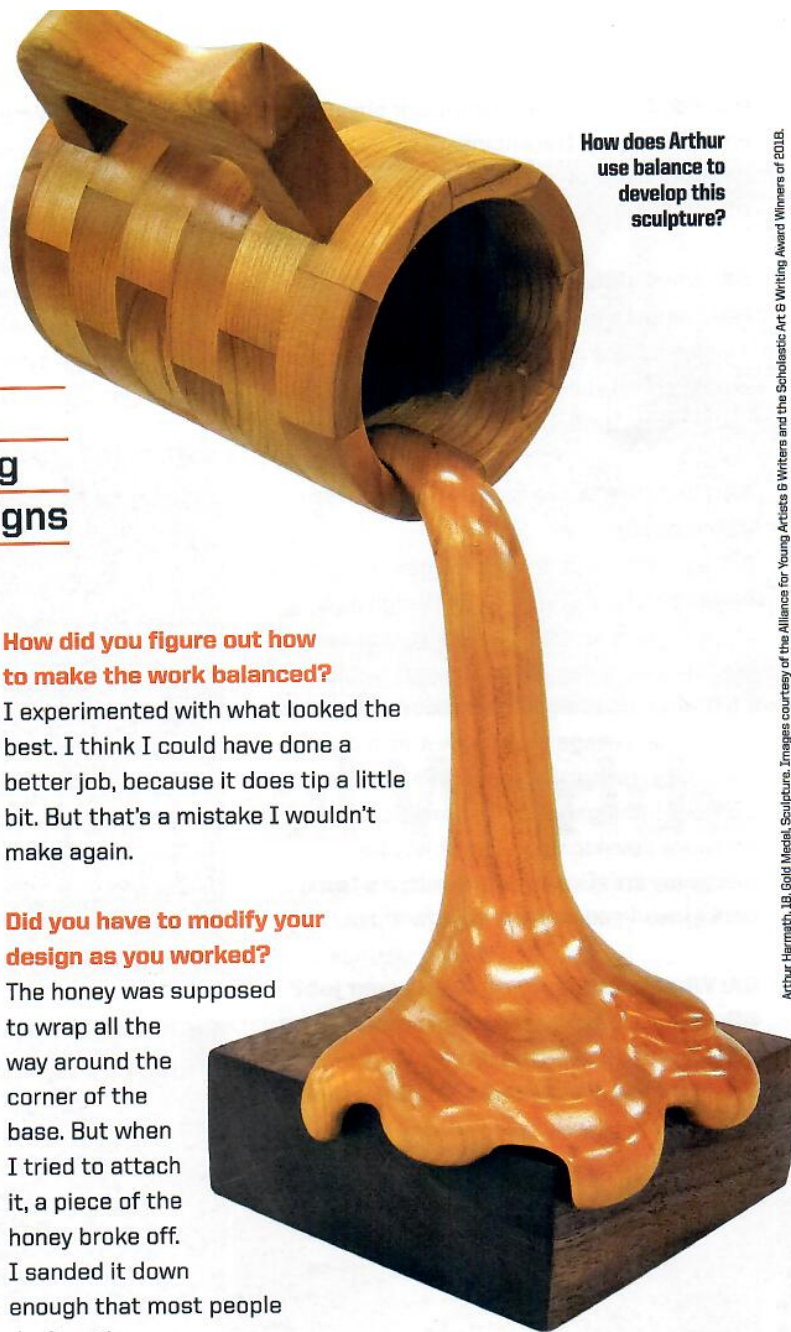
The honey was supposed to wrap all the way around the corner of the base. But when I tried to attach it, a piece of the honey broke off. I sanded it down enough that most people don't notice.

Were you satisfied with your work?

Sometimes the wood can look dull. I was amazed at how the finish brightens it and brings out the wood's golden color.

Do you have advice for aspiring artists like yourself? Stick to what you love. What's life if you're not happy?

How does Arthur use balance to develop this sculpture?



Arthur Harmath, 18, Gold Medal Sculpture. Images courtesy of the Alliance for Young Artists & Writers and the Scholastic Art & Writing Award Winners of 2018.

Arthur Harmath



Arthur won a Gold Medal for his sculpture in the 2018 Scholastic Art & Writing Awards. To find out more about this program, visit artandwriting.org.