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Editorial cartoons can be powerful media for expressing opinions and ideas with few or no words. This cartoonist is making a statement about recent events such as the Colonial Pipeline hack and other ransomware assaults. (See Monetary Motivation’s Dark Side in Ka-Ching! on page 14.) Do you think the image works to convey the artist’s meaning? What do you think the picture is saying?
UNITED STATES: Pizza, Paint, and Parking

A Detroit pizzeria owner tired of seeing people get tickets for mistakenly parking in a handicap zone near his restaurant. So he got a bucket of blue paint, the color of handicap signs and marked the street himself. Tony Sacco says there's a single sign on the curb indicating that parking is reserved for drivers with a handicap tag. But parking enforcers say as many as four car-lengths are specified by that one sign. Sacco thinks that's unclear. He told the ticketers, “People don’t understand this is handicapped.” According to Sacco, the ticket-writers replied, “That’s their problem. They should read the sign.” Blue paint and TV coverage got the city’s attention. Officials apologized for the confusion. They agreed to make signage changes. Meanwhile, crews power-washed Sacco’s paint away. Sacco is pleased with his paint job even if city officials aren’t. He says, “I did the right thing.”

MEXICO: Teotihuacán Site Threatened

Bulldozers in Mexico were hard at work. They were destroying outlying parts of an archaeological site. So Mexico sent in 250 National Guard troops and 60 police officers to seize land next to the pre-Hispanic ruins of Teotihuacán. Mexican archaeological officials had been trying since March to halt the private amusement park construction project. The seizure allows authorities opportunity to investigate and preserve the area that is deemed a national heritage site. Teotihuacán was once a city with more than 100,000 residents. It is thought to be more than 2,000 years old. Mexico’s antiquated legal system makes enforcing building codes and zoning laws difficult. Illegal construction even on protected historical sites sometimes happens without proper oversight. The United Nations had declared the ruins a UNESCO World Heritage site. Teotihuacán, with its pyramids dedicated to the Sun and Moon, is Mexico’s most visited archaeological site. More than 2.6 million people visit each year.

BRAZIL: Water Treatment Business Goes Private

Government officials in Brazil’s Rio de Janeiro state are selling the state’s water and sewage utility into private hands. The move comes after years of broken promises to improve the area’s sewage treatment and clean up the state’s horribly polluted Guanabara Bay. Guanabara is the world’s deepest natural bay. It boasts dozens of islands, celebrated beaches, and the giant “Christ the Redeemer” statue atop Corcovado Mountain. Researchers say only 65% of the city of Rio’s sewage gets properly treated. The other 35% gets dumped into nearby streams and rivers. The government has promised since 1992 to improve sanitation around the bay. The city renewed its pledge to clean up its act for hosting the 2016 Olympics. But Rio failed again to deliver. The solution: Hand the problem to those who have financial incentive to do the job well. The new owners hope to treat 90% of Rio’s sewage by 2033.
PAKISTAN: Holding Firm to Harsh Blasphemy Laws

The European Parliament (EP) declared in May that Pakistan’s blasphemy laws weren’t compatible with the trade benefits the Muslim nation enjoys. The governing body demanded that Islamabad, Pakistan’s capital, allow freedom for religious minorities or lose its preferential trade status. The EP appealed to Pakistan to free a Christian couple—Shagufta Kausar and her husband Shafqat Emmanuel. They had been on death row since 2014, convicted of blasphemy for insulting Islam’s prophet Muhammad in a text. Under Pakistan’s blasphemy laws, anyone convicted of insulting Islam can be sentenced to death. A mere accusation of blasphemy can spur riots and violence. The EP also expressed concern for increasing attacks on journalists and human rights activists. It directed Pakistan to take steps to ensure their safety. Under that pressure, Pakistan acquitted the Christian couple on June 3. But the nation has not agreed to alter its laws. Radical Islamists are expected to turn violent if needed to keep the blasphemy laws in place.

FRANCE: Marie Curie’s House for Sale

Prime Minister Mateusz Morawiecki wants Poland to buy the disused French house where famed Polish scientist Marie Curie spent her holiday weekends. Curie (born Maria Sklodowska) studied metals for endless hours in a leaky old shed in Paris, France. She and her husband discovered the element radium. Curie won a Nobel Prize for the find. The house Morawiecki has his eye on lies outside the city. Did the Curies experiment there? No evidence indicates that. Should the government fork over 950,000 taxpayer dollars to buy the vacation house? Some Poles say, “No! Curie didn’t even spend much time there!”

RUSSIA: Military Reach into the Arctic

Russia’s northernmost military base bristles with missiles and radar. Once only a tiny runway and weather station, the site today boasts an extended runway that can handle all types of aircraft, including nuclear-capable bombers. The location projects Moscow’s power and influence across the Arctic amid international competition for that region’s vast resources. Russia is going up against the United States, Canada, Denmark, and Norway for access to wide areas of the Arctic. Russian President Vladimir Putin cites estimates putting the value of Arctic mineral riches at $30 trillion. That’s a motherlode of God-given resources. Russia says it sees the Northern Sea Route through the Arctic Ocean as its “historically developed national transport corridor.” That means Moscow believes it has the right to authorize foreign vessels before they may navigate that route. The U.S. dismisses Russia’s claims of jurisdiction over the area—land or sea.
What results when video gamers, computer whizzes, and pro ballers mash up? The biggest thing in collectibles since Beanie Babies. NBA Top Shot is transforming the trading card industry with digital versions of collectible cards.

Folks over 45 probably remember the thrill of opening a pack of powdery, stale bubblegum in order to search for a desirable athlete’s trading card. Card-crazy kids opened many packs to find an important one—Mickey Mantle! Chipper Jones!—on a good day.

Canadian tech startup Dapper Labs has worked to re-create the rush of discovery with crypto sports cards, dubbed “moments.” The company’s NBA Top Shot platform allows sports buffs to buy, sell, and trade limited versions of officially licensed video highlights—which exist only as digital video bytes called “non-fungible tokens.”

Purchased highlights enter a secure highlight wallet for permanent (until sold) bragging rights.

A collector buys multiple moments in “packs” just like real life. Clicking on each moment in a pack allows the buyer to see which events he or she scored. Most packs cost around $20, but some are below $10. The individual moments in the pack sell for anywhere from $2 each to hundreds or even thousands. The rarer a moment is, the more expensive it’s likely to be. The lower the card number is in a series, the more it could fetch on the market. And if a serial number happens to match the jersey number of the player featured? Ka-ching! Of course, the biggest moments—a LeBron James dunk recently went for $210,000—get the most attention.

Moments appear on screen as spinning, floating digital cubes. Each one features a video highlight of an NBA player—such as a dunk or an assist—shown from multiple camera angles. A sidebar onscreen gives the athlete’s stats and a brief bio.

Despite some early tech hiccups, response to Top Shot from fans has been overwhelming. Collectors bombard the website every time new packs drop. Fans worldwide set their alarms in the middle of the night to purchase. Videos of the flashy pack openings log tens of thousands of views on YouTube.

NBA players are getting in on the action too. “I’m not going to lie, it makes me feel like I’m a kid again,” Orlando Magic guard Terrence Ross says. “At lunch, at school trading NBA cards—it’s fun.”

A 1953 Mickey Mantle card is worth thousands of dollars.
“This takes the traditional collectible into a modern, global era,” says Dapper Labs CEO Roham Gharegozlou. “No longer do you have to wait for a card to be graded [evaluated for quality], or delivered, or fear of forgeries.” And your expensive, rare moments never get dog-eared, water damaged, or tossed during spring cleaning.

After a year of playing games to empty arenas amid the pandemic, the NBA is ecstatic about the frenzy over Top Shot. NBA Commissioner Adam Silver says, “I think we’re just scratching the surface on what the potential is for blockchain to completely transform the digital collectibles industry.”

**How Does It Work?**

Cryptocurrency technology called blockchain (see The City That Blockchain Built at teen.wng.org/node/6746) makes the collectible crypto-cards possible. A blockchain is a digital ledger used to record data (often money transactions) in virtual “blocks.” Blockchain makes hacking difficult or even impossible. It also allows for permanent, undeletable, ownership records that cannot be copied.

**What Are Non-Fungible Tokens?**

Maybe you’ve heard of cryptocurrency like Bitcoin and Ethereum. Those currencies are all digital. They exist only as bits of data in a blockchain ledger. They can be traded in exchange for goods or services. That makes them “fungible,” or interchangeable.

Non-fungible tokens (NFTs) are bits of data that are stored in a blockchain ledger too. But they cannot be used as currency. The NBA crypto-cards, certain digital pieces of artwork, or other purely digital commodities are being sold through the internet and stored in digital wallets or galleries for the pure enjoyment or status of owning them. Essentially, when one purchases an NFT, one is investing currency into the ownership of a bit of information.

Unlike an actual sports card or a framed painting, you’ll never hold your NFT in your hand or hang it on your wall. This seemingly futuristic way of collecting is rapidly growing in popularity. What do you think is the perceived value? Will the “coolness factor” wear off in time? Will anything ever fully replace the concrete, tangible possessions humanity has crafted and enjoyed for all of history?

Isaiah 55:2 asks, “Why do you spend your money for that which is not bread, and your labor for that which does not satisfy?” It goes on to offer a full relationship with God as the only thing that will ever satiate human longing.

Would you invest in NFTs? Why or why not? In this digital age, do you see value in information or creations that exist only online or in a blockchain system?
Think of animated films and California’s Disney/Pixar studios or Japan’s anime creators usually jump to mind. But in Ireland’s medieval town of Kilkenny, Cartoon Saloon has carved out a factory of hand-drawn artistry that flourishes despite being far from the high-tech communities of today’s other studios. Cartoon Saloon is headquartered among cathedral spires and castle parapets rather than metal-and-glass office buildings with open concept work stations.

Kilkenny lies in southeast Ireland. The region is rich in local folklore and myth, interwoven inextricably with Catholic tradition and biblical truth. The village makes an unlikely setting for a repeat Oscar (Academy Award) contender. Yet the brainchild of Tomm Moore and Ross Stewart thrives there.

The founding pair met as kids in Kilkenny. Both set out as animators. They believed success would be found in the typical entertainment centers like New York, Los Angeles, or London. So they decided to stay in Kilkenny and work together on just one film.

The duo collected a staff of 12, who set up shop in an old orphanage. There they crafted the 2009 Oscar-nominated, full-length animated film, *The Secret of Kells*. The film uses spare, geometricized, full-color art in the woodcut style. It tells a fanciful story of Brendan, a boy apprentice in the monastery where his uncle oversees the creation of the famous illuminated manuscript, the *Book of Kells*. Brendan is sent on a mission deep into the woods. His goal is to retrieve the legendary “gall nuts,” needed to produce ink vital to the manuscript’s ornate design. The story unfolds with adventure, mystery, magic, and a friendship with an other-worldly woodland fairy girl.

Twelve years after that initial film, Cartoon Saloon remains in Kilkenny. Nearly 400 people work for the company and its sister project, Lighthouse Studios. The Lighthouse offices are housed in the secondary school that Moore and Stewart once attended. The directors recall the school as sports-centric, not art-friendly.

“Our teenage selves would be glowing with pride,” says Stewart. “Revenge of the nerds, I’ve always said,” adds Moore.

*Wolfwalkers*, the final film in the Irish folklore trilogy that began with *The Secret of Kells*, was nominated this year for Best Animated Feature Film, right alongside Disney’s *Soul*. It’s the studio’s fifth Oscar nod.

What do Moore and Stewart credit for their unlikely success? They say it is authenticity. Contrary to film industry standards, Cartoon Saloon is doing everything it isn’t supposed to: making uncompromising, authentically Irish, hand-drawn animation right in the founders’ own hometown.

No one is more surprised than they about how it’s all turned out.
Two years ago, Tanitoluwa “Tani” Emmanuel Adewumi was homeless. This spring, he reached a milestone: National Chess Master. “I really love that I finally got it,” he says of his newly minted title. “Finally” . . . at 10 years old.

In 2017, Tani’s family fled religious persecution from an Islamist militant group in Nigeria. Boko Haram terrorists threatened the Christian family because Tani’s father refused to work for them. Tani started playing chess with his older brother, Austin, before coming to the United States. Austin made paper pieces, and the two “moved illegal moves everywhere,” Tani told an interviewer, waving his hands.

In New York, the Adewumis lived in a Manhattan homeless shelter. Eager for big wins, Tani played chess at school, online, and anywhere he could. But early on, his mother told him success takes “patience and prayer.” Tani didn’t have to wait long.

In 2019, with his bold, risky style, Tani won the New York State Tournament at eight years old. (See Nigerian Chess Strategy at teen.wng.org/node/5957.) When asked how he plays, Tani smiles. “Aggressive,” he admits. Tani practices for hours every day. He believes practice allows him to think ahead—“up to 20 moves [in advance].” He calls such visualization a skill that “when you master, it just keeps coming back.”

Even when he doesn’t win, Tani enjoys chess. “I say to myself that I never lose, that I only learn,” he says, according to an interview at churchleaders.com. “When you lose, you have to make a mistake to lose that game. So you learn from that mistake, and so you learn [overall]. So losing is the way of winning for yourself.”

In May, Tani won an important tournament. That gave him enough points to earn the ranking of National Chess Master. Tani’s story is now a book called My Name Is Tani . . . and I Believe in Miracles. There are plans for a movie too.

But Tani isn’t finished. He aims to become the world’s youngest Grandmaster. The current record holder earned his rank at 12 years, seven months. That gives Tani about 22 months to reach his goal.

“Chess is a game of opportunity,” Tani says. He understands his unusual talent opens doors. No one knows that better than the Adewumis. Funds from a GoFundMe set up by Tani’s chess coaches helped them find housing, give back to their church, and assist other Africans seeking refuge. “I thank God for everything that he’s done for our family,” Tani says. Bold, patient, thankful: Tani has made some brilliant opening moves.
Montana lawmakers complain about skirt length rules. And an Iowa state representative questions a ban on casual clothes. Some legislatures are confronting longstanding dress codes.

Last November, voters elected more women, people of color, and young folks to offices. Many of these newbies see the dress codes of their statehouses as racist, sexist—or just plain outdated.

Jonathon Acosta is a 31-year-old state senator from Rhode Island. He purposefully donned a collarless Caribbean shirt for a clothing discussion in his state legislature.

“These rules make it OK for us to judge people based on the way they dress or how they look, and I just feel that’s super problematic,” says Acosta. “I assure you that what I wear does not influence the quality of the work I produce.”

Fashion writer Vanessa Friedman says there’s more to the debate than quality of work. She recognizes that younger people generally dress for comfort or self-expression. But as people age, she believes they “should aim for another

Senator Louis DiPalma chairs the committee that examined RI’s code. “It’s not about judging how anyone looks,” he says. “A dress code and decorum are about respecting an institution that is 200-plus years old.”

Senator Cynthia Mendes questioned the timing of the new rules: after the election of more women and people of color. “[They] need to remind everyone who is in power,” she suggests, referring to the lawmakers long established in their roles.

Senator Gordon Rogers supported the attire rules but admitted it was difficult to trade in his beloved Chippewa boots for dress shoes. “It’s not about [alienating] anybody,” the businessman and farmer says. “Sometimes you have to force respect.”

Discussions about dress can make some folks hot under the collar. But as Molly St. Louis of Inc. magazine says, “Like it or not, your clothes and presentation communicate volumes about you as a person.”
It seems God kept Tiehm’s buckwheat a secret for centuries. If humans knew about the desert bloom before the mid-1980s, no one had bothered to name it. Now the rare plant is locked in a battle of mine versus wildflower.

Tiehm’s buckwheat looks like something from a Dr. Seuss illustration. The Creator gave it multiple orange-tinged white blooms that form a bon-bon-sized sphere. Each wispy orb rests on a spindly stalk rising from a bed of thick, fuzzy leaves resembling gray-green bunny ears. The quirky plant thrives in the rugged, lithium-rich soil of Esmerelda County, Nevada—and only there.

The flower was first discovered at Rhyolite Ridge in the Silver Peak Range in 1983. It grows on just 21 acres there. Scientists recognized Tiehm’s buckwheat as a new species in 1985.

Now the plant’s habitat is at the center of a fight over a proposed lithium mine about 200 miles northwest of Las Vegas. Lithium is a valuable resource. It is used in batteries for electric vehicles and for clean energy storage. The United States imports almost all its lithium from other countries including China, Chile, and Australia. But activities to mine it domestically—digging, drilling, scraping—would destroy Tiehm’s buckwheat’s only habitat.

Two years ago, conservationists filed a petition to list Tiehm’s buckwheat as an endangered species. They wanted the Bureau of Land Management (BLM) to create a mile-wide buffer around the flower’s habitat.

Last July, officers of the U.S. Fish and Wildlife Service began a 12-month review of the area. They are considering formal protection of the plant’s habitat under the Endangered Species Act. Their decision is due this summer.

But documents show Tiehm’s buckwheat has been on the government’s radar for decades. In 1994, the scientist the plant is named after—Arnold Tiehm, pronounced like a sports “team”—suggested Rhyolite Ridge be declared a special botanical area. That title would have made it off-limits to mining.

“Aggressive measures are needed to prevent its extinction,” James Moreland, supervisory botanist for Nevada’s Division of Natural Heritage, wrote in 1995. Back then, the Bureau of Land Management (BLM) considered labeling the buckwheat’s turf an “Area of Critical Environmental Concern.” But the agency decided not to.

This fact angers conservationists. “BLM recognized that the habitat of Tiehm’s buckwheat needed to be protected . . . years ago,” says Naomi Fraga of the California Botanic Garden.

Today, the Nevada site remains the only place on Earth the plant is known to exist. Fraga says, “Tiehm’s buckwheat is staring down the barrel of extinction.”
Posh Manhattan Beach sits on the south shore of California’s sparkling Santa Monica Bay. Today, it is prime beachfront land . . . with a tragic history. Now Los Angeles County leaders plan to return a slice of the pricey property to the descendants of those they took it from a century ago.

The acreage in question encompasses two parcels purchased in 1912 by Willa and Charles Bruce. At that time, segregation barred black people from many businesses, including public beaches. On their land, the Bruces built the first West Coast resort for black people. The property included a lodge, café, dance hall, and dressing tents with bathing suits for rent.

“Bruce’s Beach became a place where black families traveled from far and wide to be able to enjoy the simple pleasure of a day at the beach,” Los Angeles County District 4 Supervisor Janice Hahn says. The enjoyment didn’t last long. White neighbors harassed the Bruces and their customers. The Ku Klux Klan, a white supremacist hate group, attempted to burn the Bruces’ buildings down. Someone placed fake 10-minute parking signs along the road near the beach.

In the 1920s, the Manhattan Beach City Council used eminent domain (see Eminent Domain: Progress or Abuse of Power? at teen.wng.org/node/4588) to take the land from the Bruces. The council said it wanted to turn it into a park.

“The Bruces had their California dream stolen from them,” says Hahn. “This was an injustice inflicted not just upon Willa and Charles Bruce but generations of their descendants.” She notes that those descendant “almost certainly would have been millionaires” if they had not lost the property and business.

The city council transferred Bruce’s Beach to the state of California in 1948. Later, city officials—who hadn’t actually built a park—fretted that Bruce family members might sue to reclaim their land. So the city finally created a small non-oceanfront park in the area. The park changed names several times before 2006, when the City Council voted to name it after the Bruces.

Today, Manhattan Beach includes some of the most coveted coastline in Southern California. With its scenic pier, luxury homes, and oceanfront walk, the real estate is among the most expensive in America.

The current City Council has condemned city leaders’ displacement of the Bruces and other black families in the 1920s. But state law limits the sale or transfer of the state-owned property.

Thanks to state Senator Steven Bradford, legislation is in the works to change the law. He says, “After so many years we will right this injustice.”

Whatever you wish that others would do to you, do also to them. —Matthew 7:12

LA BEACH REPARATIONS

A monument marks Bruce’s Beach.

Leaders plan to return beachfront property to descendants of the Bruces.
Michael Jones of Goldsboro, North Carolina, started a side job shooting drone photos and videos for realtors. Before long, he realized that his clients wanted more: Images with property lines on them, to better understand where their fences should be placed. But after two years of steady business, Jones was slapped by the state of North Carolina with an order that grounded his drone. It even threatened criminal prosecution for surveying without a license. He’s not the only drone pilot coming into conflict with regulations designed to protect surveying professionals.

Jones had added a careful disclaimer to his work: His maps weren’t meant to replace the proper surveys that are often needed for legalities such as mortgages, title insurance, and land use applications. He sued last month, accusing the board of violating his First Amendment rights. “I would just like to have the right back to fly,” he says. “I myself don’t feel like I’m offering any surveying, and more or less, I’m telling people this is not accurate mapping. This is only for visual, and all of my clients understood it.” Jones has abandoned drone mapping—for now.

Dividing parcels of land is as old as ancient history. In the Old Testament book of Ezekiel, land is carefully divided for the tribes of Israel. Ezekiel 48:29 says, “This is the land that you shall allot as an inheritance among the tribes of Israel, and these are their portions, declares the Lord God.”

Licensed surveyors have their “boots on the ground” when it comes to land mapping. Drones, on the other hand, are “eyes in the sky,” capturing data much faster than surveyors can on foot. Drones make it possible to complete more jobs in less time. Clients expect property surveys to be accurate, fast, and affordable, regardless of how the survey is completed.

For now, surveyors need Federal Aviation Administration (FAA) approval to professionally fly drones themselves. And drone operators need to pass state licensing exams to produce legal surveys. But Kurt Carraway, executive director of the Applied Aviation Research Center at Kansas State University, says licensing boards should do more to embrace partnerships between surveyors and drone operators.

Walter Lappert founded two drone-manufacturing companies. He understands the board’s desire to protect an industry that has consistently been undercut by unlicensed drone operators. As a compromise, Lappert partners as a sub-contractor with engineering firms or surveying companies.

Ground surveyors use theodolites to obtain angular measurements for triangulation. (Trigonometry, anyone?)

A theodolite has a telescope that can swivel to measure horizontal and vertical angles between landmarks. The angle measurements form a series of triangles, which can be used to calculate other distances.

Most modern theodolites are digital and have an electronic readout screen.
Cybersecurity is a hot topic—and a hot career option these days. That’s because a new form of piracy has emerged from the fallen hearts of mankind. Ransomware gangs hack into computer systems and networks. They steal or lock down critical data and hold it for ransom—stopping organizations in their tracks. In very recent months, ransomware criminals have become bolder and more aggressive. They target industries that are critical to society’s infrastructures. These include law enforcement, healthcare, government, and energy sectors.

They do it from a love for money above all else. Christians are called to use money, but to do so wisely. While useful, money is not where true life is found. 1 Timothy 6:18-19 says Christ-followers are “to be rich in good works, to be generous and ready to share, thus storing up treasure for themselves as a good foundation for the future, so that they may take hold of that which is truly life.” True wealth and security can be found only in the Lord. (Colossians 2)

The malicious acts enacted by ransomware thieves are motivated by a desire for “unjust gain.” (Proverbs 1:19) By hacking industries and demanding money in return, people and communities are harmed. Ransomware gangsters serve their love for money, and it rules over them.

A police department in Roxana, Illinois, experienced an attack in which hackers demanded $6,000 of Bitcoin cryptocurrency. The small police department isn’t the only one targeted in this way. Big and small groups have been plagued for years by foreign hackers breaking into networks and causing varying levels of mischief, from disabling email systems to more serious problems like knocking 911 centers offline. Even life-saving health procedures in hospitals have been delayed when hackers held computer systems for ransom.

In May, Russian hackers calling themselves DarkSide shut down a U.S. fuel pipeline for several days, demanding $5 million in ransom. Gasoline shortages temporarily followed, but Colonial Pipeline paid the ransom to release its production line from the attack. (See Cyberattack on US Pipeline at teen.wng.org/node/6817.)

In Washington, D.C., a ransomware syndicate called Babuk hacked the city’s police department network and threatened to leak the identities of confidential informants unless an unspecified ransom was paid. A few days later, the gang tried to spur payment by leaking some department documents.

The ability to access private and confidential information poses a national security threat, according to U.S. Homeland Security Secretary Alejandro Mayorkas. So do attacks on nations’ infrastructures. The challenging goal is to prevent the hacks from happening in the first place. That requires reducing opportunities for hackers with better security and tracking.
Meanwhile, back on Earth, Ford’s big bet is that fans of its F-150 pickup truck are ready to go electric. The F-150 Lightning looks like its popular predecessor. But the resemblance stops at the exterior. The Lightning carries a huge lithium-ion battery that could power a house in an outage. It can travel up to 300 miles per battery charge—about the same as a full tank of gasoline provides.

And the F-150 Lightning is fast as . . . well, not quite lightning. But it can go from zero to 60 miles per hour in just 4.5 seconds.

Ford plans to price its electric powerhouse competitively. The Lightning will start out around $40,000. (The base price for a 2022 F-150 standard pickup is about $42,000.) A $7,500 federal tax credit essentially lowers the cost to about $32,500.

Ford won’t stop building gas-powered trucks for years to come—even if the Lightning sparks sales. F-Series pickups generate $42 billion in annual U.S. revenue. Initially Ford thinks Lightning will appeal to higher-income urban and suburban customers who don’t do much hauling. But in time, Ford CEO Jim Farley expects sales to be balanced between “vanity” users and hard-working commercial buyers.

That second group presents the challenge. They need trucks that deliver power and performance—characteristics they enjoy in big gas engines.

“I like my V-8,” says plumber Anthony Lane from the driver’s seat of his gleaming Chevrolet Silverado. “I’m not a Ford guy,” he continues, echoing the ages-old rivalry.

When told that Chevrolet is also tinkering with an EV Silverado to compete with the Lightning, Lane replies, “I’ll probably stick with the gas. But if they ever fully switch over to electric, I’ll probably get the Chevy one.”

It’s Ford versus General Motors. No, this isn’t the classic showdown between the famous Ford Mustang and the covetable Chevy Camaro. This time, the two companies are squaring off over their share of the electric vehicle (EV) market. And while Ford is staying down on the farm, GM is shooting for the Moon.

General Motors is teaming up with Lockheed Martin, maker of aerospace and defense technologies, to produce the ultimate off-road, self-driving, electric vehicles. Where will these high-tech wonders spin their wheels? On the surface of the Moon.

The GM project goal is to design light, rugged EVs that will travel farther and faster than the lunar rovers used by NASA’s Apollo astronauts in the early 1970s. GM also helped design the earlier rovers. But those vehicles could venture no more than 4.5 miles from the lander. NASA plans to return astronauts to the Moon by 2024, a goal set by former President Trump’s administration.

“Mobility is really going to open up the Moon for us,” says Kirk Shireman, former NASA manager—now Lockheed Martin’s vice president for lunar exploration.

General Motors and Lockheed Martin are building an EV for NASA.
A team of women fans out across the rugged fields of Basra province, Iraq. They are wrapped in thick, light-blue body armor, heavy helmets, and clear protective face shields. They sweep heavy metal detectors over rocky soil. Then, kneeling, they carefully and precisely scrape sharp tools through the dirt. These women are ridding their province of dangerous explosives—landmines. They are the first all-female demining team in Basra.

A local mine-clearing company formed the team of 14 Iraqi women. Over a period of 40 days, the women learned how to find and safely clear different types of mines.

Iraq is the world’s most land mine-contaminated country. Many of the explosives are left over from the 1980-1998 Iraq-Iran war and the 1991 Gulf War with the United States. And since those wars, the Islamic State planted many additional land mines to defend its territory.

Since the 1980s, mines and other exploding weapons have killed and injured thousands of Iraqis. Many people have lost arms or legs. These victims include children. Unaware of the danger, some played with mines or other weapons they found. In Basra, there are thousands of miles of land area still peppered with mines.

The difficult task of demining explosives was not the women’s only obstacle. Facing their community’s disapproval of women taking up such tasks is also difficult. Families worried.

Motives for being on the team vary. Some women are looking for job opportunities. Some want to help bring safety to the region. Still others took the mission as a personal challenge, Walid al-Fares says. He is CEO of AlBarq, the demining company.

Huda Khalid says learning about the mines was like learning a new language. She felt she should know how to deal with mines because she faces their danger in her everyday life.

“"The main reason why I joined the team is a humanitarian one. The province of Basra has a lot of mines within vast areas of land, people have been deprived from living in these lands,” another team member, Hind Ali, says.

The work of removing mines is perilous. But it saves lives. People who do dangerous work to help others can remind us of Jesus giving up His life for His soul-saving work.

Greater love has no one than this, that someone lay down his life for his friends. — John 15:13
In the dense jungle of southern Colombia, police and soldiers leap from helicopters. They attack and subdue those below. These officers of the law aren’t combating wild animals or even foreign enemies: They’re fighting gold miners.

Illegal mines are common in Colombia and across much of Latin America. The mines require massive tree-clearing along the country’s rivers. Miners use mercury to separate gold from the soil. The extraction process pollutes water and poisons wildlife.

“Just one gram of mercury can contaminate 500,000 liters of water,” General Jesús Alejandro Barrera Peña of the national police says. The resulting biohazard can last for generations.

Enforcing laws in remote areas where criminals set up shop can be difficult.

In a raid this spring, the whirl of choppers sends miners below fleeing into the foliage. A few stay behind to confront the helicopters’ law enforcement crew. But authorities quickly overpower those on the ground with tear gas and begin destroying the extraction equipment.

The raided mine is in Magui Payan, a remote zone of southern Colombia. The area has no piped water, and communications links are feeble. The rate of extreme poverty there tops 80%, according to Mayor Alejandro Juvenal Quiñones.

“We are surviving by work and the grace of the Holy Spirit,” the mayor says. He’s right, of course. (Acts 17:28)

Mines are the main income source in Magui Payan. But crime gangs—often drug lords or various rebel organizations—control most of the valuable deposits. They force local miners to work for them and extort gold from small legal mining operations.

Police officer Pedro Pablo Astaiza says armed groups demand a 10% cut of everything produced by each excavating machine. That amounts to about 13 pounds of gold per month per machine.

Raids harm the criminals temporarily. But in six months, they can set up again.

Experts estimate that two-thirds of the gold produced in Colombia in 2019 was illegally extracted. Criminals profit directly from illegal gold sales. But they also use the gold trade to hide drug trafficking money.

Since the start of 2019, the government has raided 9,235 illegal mines. Police have arrested 3,300 people and destroyed or disabled 450 dredging machines.

Illegal gold mining is a major income loss for the Colombian government, which needs resources after decades of conflict with guerrillas, gangs, and corruption.

The loss is felt on a local level too. During a recent raid, one woman shouts: “If the state doesn’t let small miners work, I can’t feed my children because the state gives me nothing.”
The Colosseum is one of ancient Rome’s greatest symbols. Each year, 6,000,000 tourists traipse through the massive stone-and-concrete arena and peer into its underground passages. Historians are lauding an upcoming restoration of this architectural marvel. But few recognize the Colosseum’s grim history of death and Christian persecution.

**COLOSSAL COLOSSEUM**

The Emperor Vespasian authorized building a magnificent amphitheater (“theater in the round”) around A.D. 72. Tens of thousands of slaves worked eight years to complete what is still the world’s largest amphitheater. The structure, known as the Flavian Amphitheater, could seat over 50,000 people.

Some historians believe the building’s name became “Colosseum” because of a statue of the infamous Roman Emperor Nero. The figure, called “The Colossus of Nero,” was supposed to stand near the new amphitheater built on the site of his former palace. Vandals likely stole the enormous piece. But the name associated with the statue stuck.

**SPORT, ENTERTAINMENT … AND EVIL**

From its beginning, the Colosseum held battle recreations, exotic animal showings, and gladiator fights. Roman emperors used such activities to gain popularity with their unruly citizens. Some events at the arena even included free admission and food. (See note “Bread and Circuses.”)

However, Colosseum activities often had an extremely dark side. Most were bloody and brutal—for both humans and beasts. During certain so-called “games,” gladiators fought beasts to the death of one or both contestants. Emperors ordered as many as 10,000 animals killed in a single day.

**CHRISTIANS: TRAITORS OR MARTYRS?**

The frequent Colosseum spectacles also included appalling executions of people who dared defy Roman laws. These laws often involved paying tribute—money and honor—to a ruler. The executions were meant to teach a lesson to those who worshipped apart from Roman custom.

Remarkably, Roman officials respected Judaism as an ancient—if strange—religion. That meant Jews were generally exempt from joining in the common pagan practices of the Roman Empire.

The same did not apply to Christians. Romans viewed the “new” religion of Christianity as treasonous. Most Christians would not bow to the emperor or refer to him as “God.” Their talk of a “King Jesus” and His “kingdom” sounded like mutiny to Roman ears. Believers were labeled troublemakers and lawbreakers.

The Romans’ violent persecution of Christians is well known. Historical documents and artifacts bear witness to beheadings, crucifixions, and burnings of Christians.

Especially horrific was the punishment of facing beasts in the Colosseum. Rulers sent Christians and others into the arena and forced them to fight wild animals, including boars, elephants, leopards, lions, and tigers.
Ruthless Roman rulers believed every natural event reflected either the favor or the wrath of the gods. Tertullian, an early church father wrote, “If the Tiber overflows or the Nile doesn’t, if there is a drought or an earthquake, a famine or a pestilence, at once the cry goes up, ‘The Christians to the lion.’”

Sadly, Roman citizens who witnessed such atrocities found them entertaining—and fair according to Roman law. Spectators clapped and cheered as animals attacked their neighbors, humans made in God’s image.

During 500 years of near-constant use, some historians estimate that a parade of Roman emperors slaughtered half a million people and a million animals for sport and entertainment.

**RESTORING A LANDMARK**
This spring, Italy’s Minister of Culture, Dario Franceschini, announced the restoration of a lightweight stage floor inside the ancient Colosseum. He says parts of the original arena existed until the 1800s when archaeologists removed it for research on the underground levels.

The new high-tech system will involve hundreds of rotating slats. Moving the boards can allow light and air into the underground passages or keep rain out. The system could be removed if plans for the Colosseum change in the future.

According to Franceschini, arena restoration will allow visitors “to see the majesty of the monument.” Visitors will be able to stand centerstage and view the Colosseum’s vaulted walls as they would have been seen by gladiators and persecuted Christians.

In 2014, Franceschini tweeted about the daunting project: “All that is needed is a bit of courage”—a strange choice of words, given the Colosseum’s history of persecution and terror.

“Be strong and courageous. Do not be afraid or terrified because of them, for the Lord your God goes with you; He will never leave you nor forsake you.” —Deuteronomy 31:6

**COLOSSEUM FACTS:**
- A retractable canvas awning could be pulled over the top of the Colosseum’s seating area to provide shade for spectators.
- Underground rooms held animals and humans before they entered the arena.
- The arena contained 36 trap doors for surprise entrances and exits.
- Two-thirds of the Colosseum has been destroyed over time—mostly the result of vandalism, earthquakes, and fires.
- The Roman poet Juvenal coined the phrase “bread and circuses.” It refers to how rulers in ancient Rome attempted to distract from their own bad actions by satisfying the basic desires of their citizens: food and entertainment. How do world leaders today offer “bread and circuses” instead of sound policies?
Under the bright lights of the rodeo arena, fast, athletic horses lope in choreographed patterns, their hooves pounding to the beat of music. Skilled rider Addison Wright holds Brandy’s reins in one hand and a giant flag in the other. Elly Rainey on her mount named Cactus follows behind, in step. Ridin’ on Faith is an equestrian drill team that uses horses to share the gospel.

Lisa Searcy has learned a lot since founding Ridin’ on Faith Ministries in 2011. She has learned to depend on God when He asks you to do what seems impossible. “I can’t put into words what the team means to me,” she says. “It’s God’s purpose for me.”

Over the past 10 years, Searcy says God has “opened the arena gate” by bringing leadership, riders, volunteers, and exciting event opportunities to the team.

“Even if she didn’t ride a horse, Elly would want to be on the team,” says mom Lacey Rainey. Three years ago, Elly was crushed by bullying. That’s when she saw the Ridin’ on Faith team perform at a rodeo and decided to join. “I said, ‘Mom, that’s what I want to do,’” remembers Elly.

Since her audition, Elly’s parents have watched their daughter grow to be happy and confident. She no longer struggles for acceptance. Teammates remind Elly of her value and purpose as a child of God, gently reassuring her of Jesus’ great love for her. Elly’s parents say, “Ridin’ on Faith has changed our lives.” The program helps bring the light of redemption to brokenness.

When Anita Pace lost her first husband in 2012, their daughter Lauren Thomas—who loved horses just like her daddy—felt she had lost a piece of herself. Ashley Oliver was Lauren’s dad’s nurse before he died. She loves Jesus, horses, and the family. Oliver invited Lauren to join the Ridin’ on Faith team, with the hope that God would use it to rescue the teen. That is exactly what He did! God took Lauren’s love for horses and surrounded her with a team that would help her heart heal. “God truly transformed our family, through Ridin’ on Faith,” says Pace.

God continues to use the team to bless its riders and their families, as well as audiences across the southeast United States. “It doesn’t matter if there are 10 people or 1,000,” says Searcy. “We reach people that may not ever go to church. We have a simple message. It is the gospel of Jesus Christ.”
Charlie von Maur-Newcomb is reporter, editor, and publisher of an up-and-coming newspaper in Kelly, Wyoming. He worries about deadlines, print runs, and photo credits. Managing a publication is a lot—especially for an 11-year-old.

Ecclesiastes 9:10 says: “Whatever your hand finds to do, do it with your might.” That give-it-all-you’ve-got attitude is evident in Charlie. *Kelly Out Loud!* was his brainchild from the beginning.

The paper—available in hard copy and digital—covers both local and world news. It discusses how China has “upped its game on lunar exploration,” features important obituaries, explores technology, and even includes Charlie’s own drone photos.

Parents Allison von Maur and Mark Newcomb say Charlie produces the paper with little help from them. “I edit for grammatical errors and . . . redundancies, but I do not edit his voice,” von Maur says. “It’s clearly the voice of an 11-year-old. Maybe not every 11-year-old, but an 11-year-old.”

Story ideas come from listening to radio news and other sources. Beyond that, “I think about who lives in Kelly and what they might be interested in,” Charlie says.

Charlie’s parents are proud of his son’s work ethic. “It is really exciting, as a parent, to see your child be self-motivated,” von Maur says. “It was solely his interest, and that is really a special thing, to see that inner drive coming forth.”

She admits Charlie “gets stressed when he doesn’t get his paper out on time.” The deadlines are set by Charlie himself, but “he’s very conscientious.”

The Kelly community and beyond have been cheerleading Charlie’s venture. Jackson Hole News & Guide photographer Ryan Dorgan has been especially supportive. “He really thinks it’s great that I’m interacting with this kind of stuff and that I’m sharing my thoughts about the world,” Charlie says.

Von Maur thinks timing has added to people’s enjoyment of *Kelly Out Loud!*

“Especially in this past year, when people have felt so isolated and disconnected from other people, I think it has given the people of the town of Kelly a positive feeling about community,” she says.

Charlie hasn’t yet settled on a future career path. His interests include skiing, singing, teaching, coaching, and filming. But he isn’t ruling journalism out.

He started his newspaper because he realized journalists “get to tell people important information about the world.” He says, “I thought that was really cool, and I wanted to do that.”
Giant kelp can grow more than a foot per day. The slimy seaweed doesn’t require land, fresh water, or fertilizer like other energy-producing crops (think corn, for one). Now scientists are testing a way to grow kelp on a large scale for use as a biofuel.

Kelp, a subgroup of seaweed, is the world’s largest species of marine algae. This algae type can grow up to 175 feet tall. Kelp features long stems, called “stipes,” and flowy, wide blades or leaves.

People have harvested kelp for food for thousands of years. Rich in vitamins, minerals, and antioxidants, this dark leafy green gets labeled a “superfood.” Today, it shows up in products from shampoo to ice cream.

From the 1940s to 1990s, researchers experimented off and on with algae-based fuels. But the low cost of oil always won out over the expense of making fuel from seaweed.

However, rising oil prices have spurred renewed interest in algae as an energy source. Biologists, oceanographers, and engineers work with scuba divers, research technicians, and students to study seaweed.

Kelp usually grows in shallow zones near a coastline—where sunlight and nutrients are plentiful. However, that location poses a problem for boats, beachgoers, fishers, and others.

The area needed to grow enough kelp to replace other fuels would need to be 100 times the size of Utah according to Cindy Wilcox. She is co-founder and president of Marine BioEnergy, a seaweed farm company. Thankfully, God has provided an underwater lab many times larger than that. Researchers figure that producing enough kelp to power all U.S. transportation would use only a fraction of the U.S. coastline.

BioEnergy hopes to utilize submarine drones to cultivate seaweed in the ocean depths. That’s because the top layer of the open ocean has much sunlight but few nutrients. Deeper layers have abundant nutrients but no sunlight.

Future kelp farms would contain rows of seaweed with floats attached. Underwater solar-powered drones would raise a whole farm up on a structure called a “kelp elevator.” The kelp would soak up sunlight in the day and then submerge at night for nutrients. Drones could also drag a farm out of the path of a storm or passing ships. At yield time, drones would pull the farm to a harvesting location.

The BioEnergy team tested kelp’s response to the up-and-down lifestyle. The elevator kelp grew better than kelp kept at one depth.

Ocean plants could someday lessen the need for biofuel crops such as corn and soybeans. Those use up farmland and fresh water. Kelp’s future as a biofuel may burn bright.

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**FUN FACTS ABOUT KELP:**

- Extracts from kelp (called hydrocolloids) are used to thicken products like ice cream, yogurt, and toothpaste.
- Fish, seals, sea otters, and lots of other animals take shelter in kelp forests during storms or to hide from predators.
- To stay afloat, kelp has bladders (called pneumatocysts).
Take a road trip along America’s historic Route 66 and you’ll see candy-colored beacons attracting tourists to shops, motels, and roadside attractions. Neon signs still stand as flashy examples of American folk art that hit the height of their popularity in the 1940s. Today, a New York City company calling itself Let There Be Neon keeps the spotlight on neon.

At its 3,500-square-foot shop in lower Manhattan, the sign shop uses art and chemistry in conjunction with detailed craftsmanship and a sense of whimsy to create one-of-a-kind, handmade neon signs. The company has been glowing strong since its founding in 1972 by artist Rudi Stern.

“Neon is a luminous tube that when electricity is energizing the tube, the tube lights up,” says Let There Be Neon owner Jeff Friedman. “Red is the pure color of neon. But we also use argon, which is blue, and by combining the different gases with different glass colors or phosphorus inside the tube, that’s how we get all the different colors. Neon is pure, it’s made by hand, it’s made by glass, it’s recyclable.” Sound simple? Not quite.

It’s not just artistry that lights up a neon sign. It’s science—specifically chemistry. In 1898, Sir William Ramsay, a Scottish chemist, and Morris M. Travers, an English chemist discovered a rare gas in dry air. They named it “neon,” a derivative of the Greek word for “new.” The colorless, odorless gas conducts electricity.

At Let There Be Neon, artists bend glass tubes into different letters, shapes, and designs. An electrode is applied at each tip of the tube. The electrode is made of lead glass with a little metal shell and two wires. The tubes don’t have air in them—only gas. An electrical current enters the tube through the electrode, sending electrons flowing through the gas. The gas atoms glow with color.

Lately, LED signs have been replacing some neon counterparts. LED lights are cheaper to make and cost less to operate than neon ones. They are energy efficient, shatter resistant, and lightweight—unlike neon signs. But neon signs are built to last. Many keep glowing for up to 50 years! And they’re recyclable. They don’t clutter landfills like their plastic competition does.

“Live Life Illuminated,” says the homepage of Let There Be Neon’s website. The company’s slogan is also the bold message of Matthew 5:16. “In the same way, let your light shine before others, so that they may see your good works and give glory to your Father who is in heaven.”
Sweet Berry Farm: Come to pick fruit. Leave with pirate coins. Wait, what? Let’s start at the beginning . . .

Once upon a time—on September 7, 1695, to be exact—an English pirate named Henry Every robbed a vessel carrying Muslim pilgrims home to India from Mecca. Captain Every’s crew tortured and killed the people onboard. The brigands also stole tens of millions of dollars’ worth of gold and silver before escaping to the Bahamas.

Government officials sought to bring the criminals to justice, but to no avail. No one ever found the elusive Captain Every. The case went cold . . . and then warmed up again more than 300 years later when amateur historian Jim Bailey took his metal detector to Sweet Berry Farm in Middletown, Rhode Island. With it, he found a dime-sized coin. Peering closer, he spotted Arabic text. The coin was from the 17th century—the oldest pocket change ever found in North America.

Research proved that the coin was minted in 1693 in the Middle Eastern country of Yemen. There’s no evidence that American colonists traveled to the Middle East to trade until decades later. So who left the coins? Maybe pirates. Maybe Every.

Since then, others have unearthed 15 more Arabian coins in New England from the same era. Another was found in North Carolina. Some of Captain Every’s men first came ashore there. Bailey says the coins show that the pirate made his way to the American colonies. There, Every and his crew spent the stolen treasure

while on the run. Every hid in plain sight by posing as a slave trader.

Most people get their ideas about pirates from movies and books. But who were these swashbuckling sea looters, really? Were they actually peg-legged buccaneers decked with eyepatches and perched upon by parrots? Maybe. The dangerous pirates’ life could easily have led to the loss of a limb, and evidence shows that some pirates kept parrots. It’s also possible that some pirates wore eyepatches to help their eyes adjust to the dim light below deck.

But Every’s story reminds us that piracy is hardly the romantic occupation we read about in fiction or watch in film. His crimes were similar to those of present-day pirates. Pirates still exist—though they’re more tech-savvy than they used to be, stealing from ships and holding them for ransom using sophisticated weapons and location tech. Real piracy, then as now, is nothing to be laughed at. It’s a violent, dangerous, and dishonest business.

And what about Bailey? He says he’s going to keep digging.

There is a future for the man of peace. — Psalm 37:37
Kristie Keleshian was a shy middle schooler. She signed up for Write on Sports because that’s what her brother had done. Now an accomplished journalist, Keleshian credits the program for giving her confidence—and for jump-starting her career.

Write on Sports (WoS) began in 2005. The program is the brainchild of Byron Yake, a former Associated Press sports editor. His idea was to combine his passions for sports, journalism, and education.

“Inspiring students to write by writing about sports” is the group’s mission according to the nonprofit’s website. Now in its 16th year, WoS helps students develop the writing skills and self-confidence that can lead to future success. Journalist-instructors use journalism tools and the sports hook to encourage students to put their thoughts into words.

Christians know that writing is important: God refers to Himself as “the Word.” (John 1:1) He uses the divinely inspired writing of the Bible to deliver the gospel of salvation to the world.

“Just make sure that you’re interested in your topic,” advises intern Sequoia Hightower. “Because if it’s not interesting to you, then . . . the topic isn’t going to grow as much as you want it to.”

Yake found that using sports to motivate middle schoolers to write offered “a sound, workable, and replicable model.” The writing program has served more than 2,000 students with its after-school and summer sessions. Many come from at-risk communities.

NBC’s sports reporter Peter King recognizes WoS’s importance. “Write on Sports has helped a lot of such kids . . . in part because of excellent instruction,” he says. In part, he says it’s because kids find sports to be fun.

For Keleshian, WoS was life changing. Writing and interacting with others about her work “got me out of my comfort zone,” she says. “Having that skill set from middle school put me head and shoulders above others in high school”—and made college courses “easy.”

As a freelance reporter, Keleshian is now one of dozens of WoS graduates who are professional journalists. She calls WoS “probably the best decision I had ever made.”

Andy Beutel, WoS assistant director, believes the program’s approach is key to creating interest in and care for the written and spoken word. “One of the best parts is seeing the students work for hours on writing or a visual piece,” he says. “It doesn’t feel like work to them.”

Keleshian agrees. “Write on Sports gave me a chance with a topic that motivated me to write even more as a kid,” she says. “That’s something so priceless.”
Look out below! Earth’s solar system is strewn with flying objects. Rocks, ice, comets, and asteroids plunge through the cosmos, sometimes passing close to—or even striking—Earth. A new asteroid detection system based on a bug’s eye could offer protection.

Scientists have recorded more than 900,000 asteroids in the Solar System. About 25,000 of them have orbits that bring them quite close to Earth. The European Space Agency (ESA) keeps a “risk list” of more than 1,000 such objects. Researchers from NASA also keep close tabs on NEOs, or Near-Earth Objects. Scientists worldwide track NEOs that pose even the remotest risk of colliding with Earth.

In 2013, a large meteor exploded over Chelyabinsk, Russia. Some 7,200 buildings in six cities sustained damage from the explosion’s violent shock wave. About 1,500 people received serious injuries, mostly due to flying glass and splinters.

Such massive asteroid events are rare. Nevertheless, scientists say tens of thousands of NEOs are hurtling through space at all times. Many haven’t yet been detected. But each could cause major damage if it struck a populated area.

Until now, astronomers have used telescopes that see only narrow slices of the vast sky. But ESA has begun developing telescopes with multiple lenses. God made the humble housefly with the ability to see nearly 360 degrees, almost a full circle! Scientists used the insect’s eye—specifically how it splits an image into smaller images—as a model for their newest telescopes. The scopes divide the sky into 16 smaller images. Doing so enlarges the field of view, similar to God’s technique in the fly’s compound eye.

The European Southern Observatory and the ESA new telescope network is even called Flyeye. The four telescopes of Flyeye will be fully robotic. They will scan the night sky for fast-moving objects. Computers will flag any that could become a threat.

As a forerunner for the Flyeye network, two other telescopes are monitoring NEOs. The first is the Test-Bed Telescope 1 (TBT1) in Spain. It has been operating since 2015. TBT2 is a 22-inch telescope in Chile. TBT2 captured its first images this spring. The twin scopes will test whether two devices can detect and track the same object in space.

The first Flyeye telescope will be installed in Italy next year. “To calculate the risk of NEOs...we first need a census of these objects,” La Silla Observatory (Spain) Director Ivo Saviane explains. “The TBT project is an important step in that direction.”
New York fragrance expert Sue Phillips is neither doctor nor scientist. Nevertheless, she’s been helping folks regain their olfactory (smell) senses during COVID-19 recovery. Her “fragrance journeys” are teaching brains to smell again.


Today, Phillips owns her own company, Scenterprises. Customers—including celebrities—visit her Manhattan shop to create custom perfumes. But this spring, Phillips found a novel use for her skills: smell coach.

“When smell is out of reach, it affects many realms of life, including eating and taste,” Phillips says. “It’s devastating.”


Phillips sent Karen home with a custom-blended fragrance using pomegranate, berry, honeydew, and strawberry notes to smell every day.

For those who can’t visit Phillips in person, she recommends smelling citrus fruits, first with eyes opened and then closed.

Scientists are still studying the long-term effects of COVID-19 on the brain and body. But some doctors are open to Phillips’ therapy. Yosef Krespi, an ear, nose, and throat specialist, says, “It’s like training or rehabilitation of . . . the nerves located at the roof of the nose.”

Neuroscientist Venky Murthy also believes Phillips may be onto something. “By trying various different fragrances, . . . you hit upon one or two things that the leftover sense of smell is able to perceive.”

Karen isn’t worried about the science. “You don’t realize how important smell is until you don’t have it anymore,” she says. “I can walk outside now and smell the spring flowers.” For her, that’s the sweet aroma of victory.

For Karen, her at-home practice also involved real lemons. “I associate [them] with going to a lemon farm . . . in southern Italy where I had a lemonade and limoncello tasting.”

She knows nose: Sue Phillips

For Karen, her at-home practice also involved real lemons. “I associate [them] with going to a lemon farm . . . in southern Italy where I had a lemonade and limoncello tasting.”

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"Thanks be to God, who in Christ . . . and through us spreads the fragrance of the knowledge of Him everywhere. — 2 Corinthians 2:14"
MALI’S MIRACULOUS NINE  Children are a reward from the Lord (Psalm 127:3). A couple from Mali must be exceedingly blessed. Halima Cissé gave birth to nonuplets—five girls and four boys—in May. Cissé was transported to Morocco for the delivery. Morocco’s healthcare system was better prepared than Mali’s for the high-risk birth. At the time, doctors, as well as Cissé and her husband Kader Arby, were expecting seven babies. But when the caesarean section (surgical birth) was underway, the medical team realized there were actually nine babies. The babies were delivered at 30 weeks. That’s about 10 weeks premature. All “have deficiencies,” said pediatric neonatologist Khalil Msaif. They need more time to grow. So the nine siblings have weeks ahead in the hospital. But weeks in, all nine were still living and considered “stable.” That sets a world record. Only two other sets of nonuplets have been recorded. In those sad cases, none of the babies lived beyond a few days.

GOODWILL: STOP DONATING TRASH!  Thrift stores like Goodwill and the Salvation Army have a message: Please stop donating trash. People spent much of their COVID quarantine clearing out basements and closets. Now they’re donating in droves. Problem is, many items are defective, worn-out, or worse. Some stores report an influx of hazardous donations, including lead acid batteries. Such donations aren’t just a hassle to dispose of. They also increase garbage-disposal costs, require more staff to process, and divert money from services the agencies could provide. Thrift stores insist they welcome most contributions and say most items are perfectly acceptable. But the stores do want to slow a flood of unwanted—and unusable—“gifts.”

FOILED BY CHEESE  A drug dealer in England’s Liverpool thought he was the big cheese. But his love of a good creamy Stilton gave police all the evidence they needed to arrest him. Carl Stewart, 39, was sentenced to 13 years, six months in prison for conspiracy to supply several illegal drugs. How did detectives zero in on the crook? They matched his fingerprints to prints on file for the dealer they sought. The criminal may have been a glutton for punishment as well as dairy! He shared on what he thought was an encrypted messaging service a photo of himself holding a block of cheese. European police monitoring the service lifted his prints from the photo. The police had their man! Merseyside Police of north-side England has arrested more than 60 people in its crackdown. A law enforcement spokesperson says the agency will “leave no stone unturned in our pursuit of those people who think they are above the law.”

GOD-GIVEN GPS FOR SHARKS  For years, scientists have wondered how sharks migrate over long distances. They travel the open ocean with few landmarks to guide them. But they return to the same places. Why don’t they get lost? Scientists from Florida State University now believe that sharks use the Earth’s magnetic field as a sort of GPS that orients them and tells them where to go. These researchers studied bonnethead sharks. The small hammerheads return to the same coastal inlets every year. The scientists exposed the sharks to magnetic conditions like they would experience in the ocean. They noticed that the sharks swam north when the magnetic cues made them think they were south of where they should be. More studies are needed. The scientists don’t yet grasp how the sharks detect the magnetic field, but the evidence suggests they, like birds and other migrating animals, sense direction as if possessing a built-in compass.
“The real shock was that you don’t expect certain things from certain organizations.”

Street artist Alessia Babrow, who is suing the Vatican’s communications office for reproducing on a postage stamp an image she created and glued to a public bridge in Rome. Street art was once considered vandalism in Rome. It is now legal and such work remains an artist’s intellectual property.

BOUNDARY DEBACLE

Maybe a Belgian farmer didn’t feel the way the Psalmist did about where his boundary lines fell. (See Psalm 16:6.) He thought a stone marker was inconveniently placed. It was difficult to navigate his tractor around. So he moved it, only to find out that was a big “no-no.” The stone marked the official border between France and Belgium. Both countries had something to say about the farmer’s decision to move the modest rock. “You can’t just at will move boundary markers,” says the mayor of Belgium’s Erquelinnes village. “If it belongs to us, it belongs to us,” says a French resident. The boundary stone was promptly put back in its original location. But until that happened, Belgium was briefly about 10,700 square feet—or a quarter acre—bigger than before.

THE NY Mets’ Hubie Brooks is not happy about being called out by Joe West in a 1984 game.

BASEBALL UMPIRE STATS RECORD

Joe West set a new baseball record this season—for umpires. The 68-year-old is perhaps the most famous umpire in major league history. He has umped in the majors since 1976. West’s first home-plate job witnessed Hall of Fame knuckleballer Phil Niekro throwing to young Braves catcher Dale Murphy. West has worked the World Series six times and had 193 career ejections. At times, West himself has run afoul of MLB rules. Some notable run-ins include body-slamming a pitcher, bad-mouthing a third baseman, and ejecting a general manager from an upstairs suite for yelling and complaining. This spring, West broke a tie with Hall of Fame Bill Klem by calling his 5,376th regular-season game. He plans to decide at the end of the season whether he wants to keep working as an umpire.

What do you think the cartoonist is trying to say in this illustration? Consider recent news about government benefits during the pandemic and businesses seeking to hire employees. Send your response to WORLDteeneditor@wng.org.

QUIZ MY READING

1. a, 2. a, 3. b, 4. b,

WORDS TO BANK

1. b, 2. a, 3. c, 4. b, 5. a, 6. b,

MIND STIR

Answers will vary but responses may include: 1. Yes, Christians should learn about the past in order to prevent repeating it; or No, Christians shouldn’t participate in anything that glorifies a horrific, sinful past. 2. Some social programs may incentivize staying out of work or not taking personal responsibility and allow citizens resources to live and play without contributing to the greater good. Leaders may support such policies to win votes or to make citizens more dependent on them and citizens may enjoy the benefits without contributing labor.

VIZ QUIZ

BASEBALL UMPIRE STATS RECORD: Joe West set a new baseball record this season—for umpires. The 68-year-old is perhaps the most famous umpire in major league history. He has umped in the majors since 1976. West’s first home-plate job witnessed Hall of Fame knuckleballer Phil Niekro throwing to young Braves catcher Dale Murphy. West has worked the World Series six times and had 193 career ejections. At times, West himself has run afoul of MLB rules. Some notable run-ins include body-slamming a pitcher, bad-mouthing a third baseman, and ejecting a general manager from an upstairs suite for yelling and complaining. This spring, West broke a tie with Hall of Fame Bill Klem by calling his 5,376th regular-season game. He plans to decide at the end of the season whether he wants to keep working as an umpire.

What do you think the cartoonist is trying to say in this illustration? Consider recent news about government benefits during the pandemic and businesses seeking to hire employees. Send your response to WORLDteeneditor@wng.org.
**Quiz My Reading**

1. In the Iraqi province of Basra, a team of women is ________.
   a) removing landmines  
   b) teaching others how to build protective gear

2. Illegal gold mines harm Colombia by ________.
   a) polluting rivers and draining the government of needed income  
   b) driving up the price of precious metals so that no one can afford gold

3. Many horrific events, including the deaths of Christians, went on at the Roman Colosseum in ancient times. What is being planned for the site?
   a) a stirring dedication ceremony that will honor those who died there for their faith  
   b) a new moveable floor that will allow visitors to stand in the center of the arena

4. What is meant by giving the people “bread and circuses”?
   a) encouraging all people to work hard for their needs and to take vacation to relax  
   b) satisfying basic desires with food and entertainment

**Words to Bank**

1. lauding
   a) criticizing  
   b) praising  
   c) lowering

2. atrocities
   a) gruesome events  
   b) planned gatherings  
   c) celebrations

3. deprived
   a) removed  
   b) persuaded  
   c) cut off

4. perilous
   a) fruitful  
   b) dangerous  
   c) necessary

5. extort
   a) obtain by force  
   b) obtain by bartering  
   c) obtain by sale

6. guerrillas
   a) giant apes  
   b) unconventional warriors  
   c) military commanders

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**Quiz**

**Can you sweep for mines like the team in Basra?** The cells with numbers tell you how many of the surrounding cells contain a mine. Mines can be horizontally, vertically, or diagonally.

Some cells have a 0 in them. This means that there are no mines surrounding that cell. Cells with an 8 means there are mines in every surrounding cell. (Hint: Those two are great cells to start with!)

Mark cells with mines with • and cells with no mines with X.

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**Mind Stir**

1. Do you think Christians should study and visit the Colosseum in Rome? Why or why not?

2. In today’s political environment, how do you see governments in America and around the world offering citizens “bread and circuses”? Why do you think leaders use this practice, and why do citizens accept it?

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**Quiz Answers on Page 29**
Scan (right) to check out our “Farm News” page.

Have an ordinary kitchen blender? Sarah shows you how to turn raw wheat berries into pancakes in a short video.

Watch us harvest wheat from the field and transform it into pancakes, all in 5½ minutes.

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Hard Red Winter Turkey Wheat
Pennsylvania Dutch Butter Flavored Popcorn
Soft Red Winter Pastry Wheat
Hulless Oats
Hard Red Spring Bread Wheat
Buckwheat

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