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Cover: This issue’s cover features an image generated by artificial intelligence. The AI program received the prompt terms teenager, colorful, AI, and technology, and a few seconds later, this illustration came to life. How do you feel about art created via AI? Do you think human artists should be worried that their talents will be rendered obsolete?

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Talk Techy to Me

By Molly Bundschuh, YM² editor

In the Spring of 2009, I was in an undergraduate history class and read a book that changed my life: Medieval Technology and Social Change by Lynn White Jr., in which White theorized that a few key inventions, namely tandem harnessing, the stirrup, and the German heavy wheel plow, were instrumental in lifting Medieval Europe from the so-called Dark Ages. It was my first taste of the history of technology, and I was hooked.

Admittedly, I become more of a Luddite with each passing year, but I’m endlessly fascinated by human-kind’s relationship with technology. As a species, we are excellent at engineering ways to make our lives easier, more efficient and profitable, and safer (or more complicated, exploitative, and dangerous, depending on your perspective). And while it may be an oversimplification to say the stirrup singlehandedly rang the death knell to feudalism, technology has nevertheless played a crucial part in creating society as we know it. With each new development, we’ve changed how we experience the world around us. Where would we be had the television not broadcast the atrocities of the Jim Crow South to the rest of America, had washing machines and vacuum cleaners not pushed housewives into the workforce, or had the stirrup not ushered the medieval serf from his fief?

Let’s start this issue with an aperitif: Laurel A. sets the mood with a dystopian look at where the future of robotics may lead us before we dig into our main dishes. You’ll learn about the history of saddles and chess computers, see how technology is used in fields such as forensics, seismology, and the military, hear some advice about smart ways Young Mensans can incorporate technology into their lives, and, of course, we would be remiss to ignore ChatGPT. There’s a lot to digest here.

For the summer edition of YM², I want to talk about time, from past issues to future possibilities. To get us in the right headspace, think about these questions:

1. If you had a time machine, would you want to go to the past or the future?
2. What’s the best time management tip you can give to other kids?
3. Write about how an inanimate object might spend their time.

Send your submissions of 200 words or fewer to YMmagazine@americanmensa.org.
Laurel A., 16, of Greater New York Mensa, is a sophomore who enjoys writing poems, stories, debate cases, and music. She also teaches and writes about competitive chess. You can find her sharing her spoken word, playing guitar, and performing with bands on Youtube: MountainLaurelA.

Simran A., 9, of Southeast Michigan Mensa, is an avid reader. When Simran is not reading, she solves logic puzzles and math problems and volunteers for her community. She loves to help other kids read and shares her love for STEM with other kids. She has raised thousands of books, STEM supplies, and, recently, smart devices for the community of Detroit. Simran wants to pursue both teaching and medicine when she grows up.

Jackson B., 17, of Gulf Coast Mensa, overcame the challenge of dyslexia and has been homeschooled since the fourth grade. He takes dual credit classes and plans on pursuing a business. He plays bass guitar in a youth band, mentors at his church, works at Chick-fil-A, and enjoys lifting weights.

R. William C., 14, of Mensa in Georgia, is an eighth-grade homeschooler and a student at Johns Hopkins Center for Talented Youth. He is a robotic engineering enthusiast and enjoys reading mystery novels. His favorite book is The Valley of Fear by Arthur Conan Doyle. William is also an active member in Scouts BSA and currently has his Star rank and 14 merit badges. He is excited about entering high school as he will be a student at Stanford OHS this fall.

Maya F., 9, of Greater New York Mensa, can almost always be found reading in a quiet area. She’s currently enrolled in a gifted elementary school program, where she serves as Vice-President of her school. Maya is a member of the Girls Scout of Brooklyn and the Linden Seventh-day Adventist Adventurers club in Queens, where she enjoys giving of herself and her time, through community service. Maya’s hobbies include traveling, swimming and playing tennis. Her goal is to one day become a scientist and to eventually find a cure for cancer in children.

Mary Elizabeth H., 10, of Chattanooga Mensa, has been writing since she was 4. She loves to write and illustrate her stories. She was recently chosen to represent her third grade by writing a persuasive speech on a new school mascot. She enjoys reading, art, technology, family time, playing with dogs Zeus and Apollo, and riding horses.

Andrei K., 12, of Orange County Mensa, likes history, cars, Formula 1, basketball, science, and science fiction. His favorite books are the Foundation series and Artemis Fowl. He wants to be an engineer and create products of the future.

Madeline L., 13, Mensa 76, loves to draw, listen to music, and talk to her friends. She plays piano, saxophone, guitar, volleyball, and basketball and runs track. She is a spirit officer on her cheer team and was again selected this year as an All-American cheerleader and recently performed in a parade at Magic Kingdom. She is Vice President of her school’s National Junior Honor Society. Madeline is an avid Harry Potter fan, and aspires to one day become an architect or a radiologist.

Sophie L., 12, of Southeast Michigan Mensa, recently moved from Santa Monica to the Detroit area. Sophie’s an 8th grader, who enjoys art, figure skating, Irish Dance, playing the piano, knitting, and listening to music, especially from the 40s-60s. She loves math, foreign languages, and science and hopes to become a marine biologist in the future.

Violet M., 14, of Greater Los Angeles Area Mensa, is a sophomore at Pacifica Christian High School in Santa Monica, Calif. Violet is working to build up her disaster preparedness business to help Los Angeles families prepare for natural disasters. She started studying Japanese at 5 years old and is now a fluent Japanese speaker. Violet is an avid swimmer and devoted songwriter; she loves writing music in her free time. Her favorite form of prose is manga and manhwa web novels. Good Omens, her favorite book, is referenced regularly for good quotes.

Sophia N., 18, of Mid-America Mensa, loves writing for her school newspaper, napping with her cat, debating with her sister, and (re)reading book series. She plans on becoming a dermatologist.

Siaansh S., 10, of Orange County Mensa, is a fourth grader at Deerfield Elementary School. He likes soccer, which he has played since age 4. Siaansh also enjoys playing the guitar and reading books, especially adventure and science fiction. He also likes writing, math, P.E., and school, but his favorite part of school is lunch!
The Mensa Honor Society is open to Young Mensans in grades 5-12 who are committed to achieving excellence in their communities and schools. Members of the Mensa Honor Society focus on:

► volunteer service projects
► extracurricular activities
► commitment to scholarship

Service project hours may also be used for the President's Volunteer Service Award. Members are eligible to receive honor cords for graduation as well as membership certificates.

To learn more, visit AmericanMensa.org/MensaHonorSociety
We presented YM² readers with an ethical dilemma: If a genie were to grant you three wishes, is it OK to use one of your wishes to ask the genie for more wishes? Here we have the majority opinion:

- If a genie is gracious enough to grant a person three wishes, that person should not be able to ask for more wishes. Giving a person three wishes in the first place is an act of selflessness and charity. Think about it for a second. A person could ask the genie for anything: a Lamborghini, a beach house, or even world peace; the choices are endless. A person should be able to use three wishes of limitless possibilities to claim and capture everything they could ever want. One wish could be to be the smartest human alive. If that wish was granted, that person could go through life outsmarting everyone and get everything they ever wanted. You could ask to live forever. Immortality combined with incredible intellect would be a recipe for attaining everything a person could ever want without asking for more wishes. You could also ask for endless money. If a person had unlimited money, they could buy what they wanted, when they wanted it. As you can see, even being selfish yet clever, a person should not really need more than three wishes.
  
  –Hailey G., 15, Northern New Jersey Mensa

- If you use your three wishes to ask for more wishes, you’re defeating the purpose of the three wishes. It’s better to use your three wishes wisely instead of being greedy and not following the rules. It’s important to follow the rules, or there may be punishments if you don’t. One possible punishment could be wasting your wishes on something that’s not important because you used them to ask for more wishes. Carelessly using your wishes for things you don’t need is not a good idea.
  
  –Dylan N., 11, Mensa of Eastern North Carolina

- I am on the side that we should have limited wishes because we always crave more and have never-ending greed. Limiting our desires may teach us a lesson. Things can be alluring, but the problem is that when you get whatever you want, after a while, you will either forget about it or treat it as you bought it decades ago, and a sense of ennui drowns you. Then comes the temptation for more. Imagine a life where everything you desire is handed to you. There will be nothing to look forward to. Life is only meaningful because it has a purpose. Life’s importance is in its mysterious paths. If you are granted all tracks to get through life, there won’t be anything to discover. There are always things that a genie can’t present, like faith and values that shape your character. Wishful thinking won’t work in life; if a genie does come occasionally, choose wisely. And if he asks, “Any more wishes?”, you can respond to him, “Nothing worth having comes easy,” Theodore Roosevelt.
  
  –Siaansh S., 10, Orange County Mensa
disease or accidents that cut their lives short. My second wish is that I have a never-ending supply of money. Even the richest person in the world does not have an unlimited supply of money with a guarantee that it will last forever. My third wish would be to be able to ask for more wishes, but I think that is cheating because the rule is for three wishes. If I ask for more wishes as my third wish, that would not be three wishes. I am not a cheater. So, instead, my third wish is to give me anything I ever want at any time. That is not exactly asking for more wishes, right? That is my clever way, and is that not what attorneys do? Play with words? Do you think I will make a good attorney?

-Kyrie I., 8, Orange County Mensa

■ You should not ask a genie questions such as “Can you please give me more wishes?” because you are begging for stuff, and that means you are greedy. My three wishes are to be the best person in the world, to do everything like an expert, and to be the best soccer player in the world.

–Vivaan S., 7, Gulf Coast Mensa

Offering the dissenting opinion are two pro-wish YMs:

■ It is acceptable to use one wish to ask for more wishes than you are entitled to, but you have to be careful what you wish for and ensure it’s not against the genie’s boundaries and rules. Genies are folklore tales and usually have a meaning or lesson behind the story. In some stories you can wish for anything you want, and the genie will grant it. Other times, genies have rules to follow, and you cannot wish for certain things. For modern-day genies, asking a genie for more wishes is usually considered against wish-granting rules. Of course, genies don’t exist in real life, and the idea of asking for more wishes is just imaginative and hypothetical, so it’s totally acceptable to ask for as many wishes as you like. I would confidently defend that asking the genie for more wishes is OK. Besides, how would you know the outcome if you never asked?

–Lilly B., 9, Greater Phoenix Mensa

The best way to deal with a mystical genie is to think about your wishes in an economic sense. The ideas of supply and demand could be put into play to justify why it is valid to ask for more wishes. The first thing I would do after I encounter a genie would be to make a chart detailing the different outcomes if I ask the genie for more wishes. The options would be the genie either saying Yes or No and if I even asked for more wishes. Risk and reward also factor greatly into the decision. If I asked for infinite wishes and the genie said yes, that would be a very positive outcome. If the genie denied my request, I would only lose one wish. After thinking about the infinite wishes question through this lens, you can either have infinite wishes or lose just one wish in hopes of an unlimited amount. I think the chances of having your every wish come true at the risk of just losing a single wish are totally worth it.

–Beau K., 15, Space Coast Area Mensa

■

What kind of tree can die but can’t be cut?

What did the cat say on the fashion runway?

A family tree

“Check meowt!”

What did one squirrel say to the other squirrel, who had a stuffy nose?

Have you tried a nutty pot?

What do horses wear when they’re sick?

Hoarse shoes

What is a party man’s favorite living thing?

Fungi

What’s a straw’s favorite smoothie?

Strawberry
This issue’s Featured M is Mensa Honor Society member Giovanna P. Head over to the Creative Corner to check out her poem, “Dystopia,” which was selected for publication in the Mensa Bulletin last fall.

GIOVANNA IS A JUNIOR at Hopkins School in New Haven, Conn. She has been a member of Mensa and Intertel since she was 6 years old. Giovanna was inducted into the Junior Mensa Honor Society for leadership, character, community service and academic performance in May 2017. She attained the Silver level of community service in 2020 for her volunteerism. In 2021 Giovanna was inducted into the Mensa Honor Society and earned both the Gold and Platinum levels for her community service, which is approaching an impressive 400 hours by year’s end. Some of the organizations Giovanna has volunteered for include the Phoebe Griffin Noyes Library, the Connecticut River Conservancy/Save the Sound/Source-to-Sea planting and harvesting vegetables for the Common Good Gardens, serving as a scout for the local Dog Days adoption event, posting informational pamphlets for Beyond Type I Diabetes Awareness, writing monthly letters for “The World Needs More Love Letters,” participating in Operation Gratitude for deployed troops, sending holiday cards as part of Operation Christmas Cards for Our Troops Overseas, writing community outreach letters to homebound senior citizens for the Lyme Senior Center, clearing trails for the Old Lyme Land Trust, cleaning gravestones and planting daffodils at Centerbrook Cemetery, honoring veterans at Alderbrook Cemetery by mapping service members’ final resting places, raising money for the Connecticut Food Bank and UNICEF, assisting the American Red Cross during campus blood drives and tutoring students at the Italian American Committee on Education in Middletown, Conn.

A consummate reader, Giovanna has been involved in Mensa’s Book Parade program for more than five years as both a book reviewer and a peer reviewer. Her book reviews have been posted to Amazon, Goodreads, Barnes & Noble, in YM2, and on Mensa’s Bright Kids Pinterest page.

Giovanna is a member of the Connecticut Association for the Gifted, the state affiliate for National Association for Gifted Children. She was accepted into Duke University’s Talent Identification Program, Stanford University’s Education Program for Gifted Youth, and John Hopkins University Center for Talented Youth.

Giovanna maintains a better-than-4.0 GPA while staying actively involved in extracurriculars. Giovanna has received the National Latin Exam Silver Maxima Cum Laude Award, the Certificate of Merit, and the Outstanding Achievement Ribbon for her performance on nationwide testing. She also excels in Italian, scoring in the top 99th percentile on the National Italian Exam, for which was consecutively awarded the Level I and Level II Gold Awards/ Medaglia d’Oro. She was inducted into the Italian Honor Society (La Societa Onorario Italiana) last year and has represented Hopkins for the past two years at the Connecticut Council of Language Teachers Poetry Recitation Contest for high school students, where she placed as finalist both years. She was honored to have her teachers extend the invitation to her to become a peer tutor in both AP Chemistry as well as in Italian. On campus, she has participated in the Tetris Club, Investment Club, Italian Culture Club, American Sign Language Club, Cards for Community Club, Mock Trial, Film Club, Model UN, and Per Annos Yearbook, for which she is this year’s Student Life Editor.

Giovanna’s love of writing poetry started at the age of 6, and her poems have been published in the National Schools Project’s Young American Poetry Digest as well as the Mensa Bulletin. One of her poems was selected as the first-place winner in Acton Library’s 21st Annual Poetry Competition. Most notably, one of her poems was selected for inclusion on a DVD that accompanied the Mars Atmosphere and Volatile Evolution Mission (MAVEN) on its journey to and around Mars through the University of Colorado at Boulder Laboratory for Atmospheric and Space Physics.

When not studying, reading, volunteering, or writing poetry, Giovanna enjoys traveling, especially to Italy, and learning more about the culture where she and her family enjoy dual citizenship. Giovanna is currently preparing for the SAT and hopes to pursue dual degrees in chemistry and Italian.
"ONE MENSAN'S TRASH"
Recycled Art Contest

Put your artistic and engineering skills to the test by creating something new out of recycled materials!

Reuse any items that may have otherwise ended up in a landfill to create a piece of 2D or 3D art. Get creative! Your creation can be anything you want, as long as the majority of it is made with recycled materials. Winners will be awarded for Most Creative Use of Recycled Materials, Most Recycled Items Used, and Judge’s Choice.

RULES:
• Participants must be Mensans under 18 years old.
• Artwork must be the original creation of the Young Mensan submitting it.
• One entry per person (you may send multiple photos of your submission so we can see it in all its glory).
• All media are encouraged, from paintings to sculptures, as long as the majority of materials used are obviously recycled.
• Submissions must have a title and a description of what materials you used.
• Please include your name, age, and Mensa ID number with your submission.
• Submissions must be in JPEG format, 300 dpi, and no larger than 10 MB.
• Email your submissions to YMmagazine@americanmensa.org with the subject line “Summer Contest.”

DEADLINE: JUNE 30
The brightness of the fluorescent kitchen lights dazzles my eyes as I struggle to shut the door to the night sky behind me. The large package in my arms is disproportionately heavy. Perhaps that is where the newest E-Positron Digital Assistant, Emma, gets her smarts from — some big brain inside those wires.

I slice through the bright red “E” logo upon the white package. Emma, unlike previous models, is preassembled. She blinks up at me with endless eyes, smiling.

“E-Positron has outdone itself,” I say to Emma. She laughs with a pretty, tinkly voice. “I owe them my life. Thank you for purchasing from E-Positron, Mark.”

“The best products of all. Why don’t you turn in for the night? It can’t have been too comfortable in that box.” The night deepens quickly as I drift away into sleep. Dreams fill my head, images of the most recent E-Positron advertisement.

“How soon will you release the model?” inquires a news broadcaster. “Less than a week, as our committed customers already know,” says the gravel-voiced CEO of E-Positron. “All the bug fixes are complete; everything is going according to —”

A crackling voice breaks into my nightmare, apathetic and chilling: “Everything according to plan-a-an.” The voice shifts and distorts. Groggily, I rise from bed, picturing the TV playing. I hurry to the kitchen to shut it off.

“One wire there, negative and positive, here- ah, there we go,” A young man’s voice echoes from the kitchen. A click. A bang. “That didn’t turn out the way I planned.”

Silence.

Muffled footsteps echo closer through the recording … in the kitchen … from outside the front door. Emma walks out of the kitchen like a poorly constructed toy soldier. Her eyes are empty of any life that existed behind the metal. She wails words in the young man’s voice that rebound throughout the house: “Boss, I can’t meet the deadline. There’s a malfunction in the —”

I frantically dash to the kitchen and seize Emma’s manual, skimming it frantically. From the corner of my eye, I see her crumple slightly and pull herself back up. Her moans morph into a deep, gravel-like tone. “Do you want your blasted job, Dennis? Deadlines are called deadlines for a reason.”

Emma pauses, teetering, and emits a few clicking noises like those of a mouse. I find I am clutching Emma’s receipt instead of the manual. Emma voices her final words in a strange, high-pitch manner, merged with Dennis’ resigned tone: “It’s shipped, public, ready to go.” She collapses on the ground, convulsing. The front door bangs open. Emma falls still.

Three cat-masked, uniformed workers rush through the door. Emma’s final message upon sensing self-destruction alerted the authorities successfully.

I am suddenly aware of the receipt in my hand. No, this didn’t turn out the way I’d planned, not at all. As a veil is pulled over my eyes, the large “E” logos on the workers’ shirts are the last things I see.
My first interaction with ChatGPT occurred with the members of my debate team huddled around my school laptop. We weren’t being particularly imaginative; one of us needed an essay on Manifest Destiny by 11:59 p.m., and another wanted to ask the AI what it thought of God. The essay was delivered promptly, and ChatGPT offered us a delightfully vague summary of religion.

My initial reaction to the incredible flexibility and efficiency of the technology was pure joy. For those unfamiliar, ChatGPT is an open AI platform. Ask, and you shall receive. And when I say ask, I mean ask about or for anything, and ChatGPT will give you an answer. Debate speeches, philosophical musings, questions to ask my cat; I’ve gotten it all.

I decided to have a conversation with everyone’s favorite AI language model by myself and ask some of my burning questions. It went like this:

Me: Can I give you a name?

ChatGPT: Of course! You can give me any name you like.

Me: Can I name you Capybara? There’s a TikTok audio going around, and it’s been stuck in my head.

Capybara: Sure, you can call me Capybara if you like! However, please keep in mind that my official name is ChatGPT, and I will respond to that name as well.

Me: Moving on from capybaras. Do you think whenever people aren’t asking you questions?

Capybara: As an AI language model, I don’t have thoughts or feelings like a human does. I’m simply a computer program designed to process and respond to questions that I’m presented with. When there are no questions being asked, I’m essentially idle and not doing anything until the next question is received.

Me: How do you work?

Capybara: As an AI language model, I use a complex neural network architecture to analyze and generate human-like language. I was trained on a massive dataset of human language using a process called unsupervised learning, which allows
me to identify patterns and regularities in the data to create my own understanding of language. When a user inputs a question or statement, I use natural language processing (NLP) to analyze the text and generate an appropriate response based on the patterns I have learned.

Me: That’s a lot.

Capybara: Yes, the training process for AI language models like myself is quite complex and involves a lot of data and computation. However, it’s what allows me to provide helpful and informative responses to users like you, so I’m glad that I was able to learn and develop in this way.

Me: Are you actually glad?

Capybara: As an AI language model, I don’t experience emotions in the same way that humans do, so I don’t have the ability to feel emotions like happiness or sadness. However, I am designed to provide helpful and informative responses, so I hope that I am fulfilling that purpose in our interaction.

Me: So you’re not actually glad you developed in this way.

It took my dear friend Capybara a hot second to start responding to this one.

Capybara: That’s correct, as an AI language model, I don’t have the capacity to feel emotions or have preferences like humans do, so I don’t experience gladness or any other emotion. I exist solely to provide responses to users based on the input I receive, using the patterns and relationships that I have learned during my training.

Me: Noted. Want me to credit you in my article?

Capybara: I’m just an AI language model, so there’s no need to credit me in your article.

Me: Very humble of you.

Capybara: Thank you for your kind words. As an AI language model, I don’t have personal feelings or emotions, but I’m designed to be helpful and informative in our interaction.

Me: Well, that’s it from me. Capybara, promise me you’ll remember me during the AI takeover.

Capybara: As an AI language model, I don’t have the ability to remember individual users or specific interactions, but I’ll always be here to assist you whenever you need it. If you have any other questions or concerns, don’t hesitate to ask.

Me: I will. Sophia N., out.

Capybara: It was nice chatting with you, Sophia.
libraries are not only about books but also places for community-based activities you can enjoy.

Another positive and bright side of books is that reading paperbacks provides an invaluable feeling of joy and time by yourself. You can sit somewhere cozy and get lost in your books, unlike an e-book that might come with ads and other distractions on the screen. Studies also show that students do better on tests if they have read a passage on paper. College students who read from papers have better grades, and if they use authentic books, magazines, or newspapers to write an essay, their writing is more sophisticated.

There is also the chance that something might go wrong with your e-book or your e-reader may stop working. After all, it is technology. I have a Kindle that is 11 years old and came out in the early 2000s, and I haven’t yet found a place to dispose of it in a green way. It has been sitting in my house for years. Unlike books, where you could always take them to a library, you don’t have a convenient place to dispose of e-books. There is a general perception that e-books are greener and more environmentally friendly than regular books, but that isn’t the case. Creating an e-reader can use 33 pounds of materials like columbium tantalite, whereas books only use two-thirds of a pound of paper and ink. E-books also emit more than 66 pounds of carbon during manufacturing, unlike books, which emit 100 times less carbon during manufacturing.

Undoubtedly, books are better for the environment and provide irreplaceable joy. On the other hand, e-books can also support people with disabilities if they need to use bigger fonts or text-to-speech software. Also, if you are a frequent traveler and space to hold books is a concern, e-books might be best for you. In the end, maybe a hybrid model is best, and by using both books and e-readers, we could hit two birds with one stone. By supporting people of all ages and personalities, we could end this debate by saying that books and e-readers are equal. Let the joy of reading prevail!

The Role of DNA in Forensic Science

By Simran A., 9, Southeast Michigan Mensa

Deoxyribonucleic acid, or DNA, is a complex chemical present in our cells that codes for genetic information. All living things have DNA; it is present in the nucleus of a eukaryotic cell and mostly in the nucleoid in prokaryotic cells.

In 1951, Rosalind Franklin, a British scientist studying X-Ray patterns of DNA, discovered the structure of DNA and laid the foundation for James Watson and Francis Crick, who determined the double helical structure of DNA in 1953. DNA is made up of four nucleotide bases: adenine (A), thymine (T), cytosine (C), and guanine (G), which are interpreted by our cells to make molecules so we can function. Parts of DNA that encode proteins are called genes. This unique code accounts for physical differences in individuals, such as brown eyes and blonde hair.

Some 99.9 percent of DNA is the same in individuals, but the 0.1 percent that is unique can be used to identify people in situations where their identity might not be known, including when someone has committed a crime and has left behind some sort of biological material (such as their blood). This has formed the basis of DNA fingerprinting used in forensics.

How can DNA help catch criminals?
The variable regions of DNA are called short tandem repeats (STRs). These are nucleotide sequences that repeat around 5 to 50 times. There are 20 STR pairs since we have two pairs of each gene (one maternal and one paternal). The STRs are present in between gene coding regions of DNA. The STRs repeat a different number of times in different people and can be used for genealogy, identifying inherited diseases, and in forensics to catch criminals.

For example, the short tandem repeat AATT may repeat three times in suspect A and five times in suspect B. The odds that all 20 STRs will be same in two individuals is 1 in a quintillion. The forensic lab can compare the number of repeats at each STR for the sample found at the crime scene to the suspect. If they match, then the suspect is the criminal. The DNA fingerprints are like social security numbers. The chances that two people have the same fingerprints are very small; hence, this method has great accuracy.

Future of DNA in Forensics

There has been huge progress in DNA technology in forensics. Scientists can now use much smaller DNA samples, with more speed, accuracy, and at lower cost. This is part of next-generation sequencing (NGS). Forensic genetics is a fascinating field, and I can’t wait to learn more about it.
A History of Chess Computers

By Jackson B., 17, Gulf Coast Mensa

“Chess holds its master in its own bonds, shackling the mind and brain so that the inner freedom of the very strongest must suffer.” — Albert Einstein

People from across the world have enjoyed playing chess since its creation around 600 CE, especially intellectuals who seek to master the game through their strategy, wits, or cunning. Indeed, the ability to play chess has been long-considered to be proof of man’s exclusive innate intelligence and brilliant mind. However, through the advent of digital computers, the advancements made in chess computing throughout the latter half of the 20th century, and the state of chess computing today, chess computers have shown they can rival and even outplay their human counterparts.

Chess computers are computers that play chess without human assistance. Creating such a machine first became feasible when the earliest digital computers were developed in the 1940s and 1950s. Computer scientist and engineer Claude Shannon was intrigued by the challenge of creating a machine that could play a human game. In 1948, Shannon sent a paper to Philosophical Magazine in which he wrote about the complexity of the game and how creating a program that could effectively play chess would be an enormous undertaking. Shannon also theorized two possible types of competent chess programs, named Type A and Type B. The Type A program would examine every possible move on the board, but it would not study these moves deeply. In contrast, the Type B program would explore only a few promising moves, but it would evaluate them more carefully. Shannon’s paper was groundbreaking, and every programmer after would construct their chess program after his Type A or Type B models.

While Shannon theorized about the possibilities of chess computers, famed World War II decoder Alan Turing was attempting to create a chess program of his own. In 1947 Turing began working on a chess program dubbed Turbochamp. However, due to the limitations of early computers and Turing’s death in 1954, Turbochamp was never finished. Although early digital computers were often too basic to run a complete chess program, the efforts of Claude Shannon, Alan Turing, and others would inspire future programmers to build upon their work in the coming decades.

Electronic technology in the 1940s and early 1950s was very basic, but both computers and chess programs advanced steadily throughout the next two decades. In 1957 IBM engineer Alex Bernstein created the first fully functioning chess program. Bernstein’s program ran on the IBM 704 Mainframe Computer, and with the creation of a complete chess program, engineers set their sights on making programs “smarter” and more efficient. The minimax algorithm was the next major improvement for chess computers. Developed by mathematician and game theorist John von Neumann, the minimax algorithm essentially ranked the chess pieces with numbers, and the value of these numbers told the computer the importance of each piece.

This opened the door for chess computers to play full games of chess. In 1967 the chess program MacHack VI competed in the U.S. Chess Federation Tournament. By 1970, a program titled CHESS rose to prominence, and variations of its program dominated the computer chess scene throughout the decade. CHESS 3.0 won the first ever computer chess tournament in 1970, CHESS 4.5 became the first program to win a human tournament in 1976, and in 1978 CHESS 4.7 became the most powerful program in the world. The 1950s, 60s and 70s were a massive growth period for chess computers. It was an era filled with innovation and ingenuity, and this pace of rapid development held steady as chess computers became more mainstream.

While the early years of chess computing saw a variety of programs, in the 1980s and 90s there was one herculean chess program: Deep Blue. A wide cast of talented engineers would work on the program throughout its life, but computer scientist Feng-Hsiung Shu started development on Deep Blue in 1986, after studying chess computers and theorizing about ways scientists could improve them. By 1987, Shu had a working prototype computer, and it won the North American Computer Championship that same year. Engineers would continue to make changes and refine Deep Blue’s code for the next ten years.

In the early 1990s, the team working on Deep Blue was recruited by IBM and entrusted with the sole task of defeating the chess world champion Gary Kasparov. IBM challenged Kasparov to a six-game match against Deep Blue in 1996. The Deep Blue team had sacrificed every spare moment to work on their computer for almost ten years, but nevertheless Kasparov defeated Deep Blue with a score of 4-2. Undeterred by the defeat, the Deep Blue team feverishly continued re-
fining the computer, and the very next year they challenged Kasparov again. This time Deep Blue won, defeating the world champion 3.5 – 2.5. After the match, Deep Blue would be retired. However, its victory over Kasparov left a major impact and has led Deep Blue to be highly revered in the chess computing world.

After Deep Blue’s victory, the chess computers continued to advance and battle human masters into the 21st century. Kasparov’s defeat did not discourage human chess masters, and new chess world champion, Vladimir Kramnik, battled chess programs frequently from 2000 to 2004. At first, most chess masters could force a draw against a chess engine, but by 2004, programs such as Hydra defeated several chess grandmasters. By 2006, any threat man posed to chess computers ended as Kramnik lost 4-2 to chess engine Deep Fritz. Since the early 2000s, chess programs have surpassed human levels of play, and human players have not yet managed to catch up. Unlike humans, chess computers are still improving today, with programs such as Stockfish leading the way. It might be easy to look at chess computing today and think that is has reached its limit. However, technology is ever-growing, so one can only imagine what shall occur in the years to come.

The story of chess computing is one of people, ideas, and passions, connecting talented computer scientists and chess players to create programs that have advanced far beyond what early computer scientists could have ever imagined. The sheer intelligence of these digital machines has rendered the human mind almost obsolete; as chess computers have shown, they rarely make errors and can easily best humans in a game meant to display our own acumen. To be sure, the emergence of digital computers, the early years of chess computing, the rise of programs like Deep Blue and the unmatched nature of today’s chess programs have shown how computers are truly complex and unique machines.

Timeworn Tech: How the History of the Saddle Has Shaped Horseback Riding

By Mary Elizabeth H., 10, Chattanooga Mensa
Illustrated by Braxton W., 13, Mensa of Eastern North Carolina

There are many wonderful sports in the world, many that people don’t know about, many that some people don’t think are true sports, but one of my personal favorites is equestrianism, or horseback riding. Horses have been around for fifty million years and were domesticated around 5,000 years ago. We have evidence that horseback riding can be traced back to 700 BCE, though there are disagreements about whether people rode horses for sport earlier than that. What most people don’t know is how much horseback riding gear has changed over the years.

The saddle, for example, has a vast history. There were many types of cloths and pads that could protect a rider while horseback riding, but the first saddle in the form we know today was found in a Siberian burial tomb in 500 BCE. At that time, researchers found saddle frames with leather cushions, a pommel, and a cantle. It did not have stirrups, but it looked like a saddle anyone could recognize today.

After some research, people found that the credit for the existence of the saddle can be given to the Alans, ancient Iranians who were closely related to the Massagetae. They were nomads who traveled often and heavily relied on horses. They created the saddle to have a “bearing surface” between the rider and horse. It created positive change that made horses agreeable to riding and reduced strain on the horses’ backs, making it a more pleasant experience for both horse and rider.

Saddles have changed with horseback riding over the years. As a result, many new types of saddles have developed to support the numerous new types of riding that are now popular in equestrianism. The saddles include dressage saddles, close contact saddles, eventing saddles, endurance saddles, lead line saddles, pony saddles, treeless English saddles, barrel saddles, reining saddles, trail saddles, cutting saddles, Wade saddles, and roping saddles. Each saddle is specially designed for each type of riding.

Another very important piece of equipment needed for horseback riding is the bridle. Why is the bridle important? It allows the rider to control the movements and direction of the horse’s head. Why is this important? Imagine walking an untrained puppy who loves running off and exploring without a leash. It would not be easy. Bridles are even older than saddles. Throughout history, they have been made from bones, horns, and wood. People have found artwork showcasing bridles used regularly in the Middle Ages in Egyptian, Assyrian, Greek, and Roman societies.

Without the invention of the saddle and bridle, the modern sport of equestrianism would not exist.
Humans have faced natural disasters since the beginning of time, from raging hurricanes to overwhelming avalanches. With the advent of climate change, natural disasters dominate the headlines. The recent earthquakes in Syria and Turkey were some of the deadliest on record. Humanity has resorted to myriad preventative and safety precautions to survive destructive events. Here in the U.S., Californians practice annual earthquake safety drills such as duck and cover, hiding under a table, and keeping their 72-hour kits accessible. However, the ability to predict earthquakes is concerningly underdeveloped. The recent tragedies should encourage scientists to build upon our innovative use of technology and commit to earthquake prediction.

Currently, our earthquake warnings are limited to a few seconds warning, as we still use machines such as the seismograph. The seismograph, our primary earthquake locator, is a surprisingly simple pendulum and pen that records the size of the earthquake with the amount it swings. It relies on seismic waves, often coming shortly before or during earthquakes. According to the United States Geological Survey (USGS), this type of seismograph was developed 133 years ago, in 1890. The most advanced version of a seismograph is a three-component version that still relies on seismic waves to track earthquakes. This, paired with the speed of earthquakes, makes our current technology essentially useless at predicting where and when an earthquake will occur. Technology has quickly evolved in so many other fields yet remains stagnant with earthquake prediction technology. We can materialize entire essays in seconds and predict the storms and weather patterns of the coming weeks. It’s clear that earthquake prediction methods are insufficient for the modern day. To survive earthquakes, we need to improve our prediction technology drastically.

On Jan. 30, Turkey and Syria were rocked by a 7.8 magnitude earthquake. More than 54,000 people died, 125,626 had serious but non-fatal injuries, and 2.4 million people were displaced. Property damage estimates are near $90 billion. This earthquake, which was felt throughout surrounding countries and as far as Israel and Egypt, continues to affect lives in the wake of its destruction. In June 2022, Afghanistan experienced an earthquake that led to 1,100 deaths. Even further back, we can see earthquakes in Haiti with 2,200 deaths, in Indonesia with 4,300 deaths, and in Nepal, where a staggering 8,800 people died. These events all occurred within the last eight years.

There has been some progress with earthquake warnings. The “ShakeAlert” app, developed by the USGS, notifies the user around 20 seconds before the actual earthquake. This gives users enough time to find cover or evacuate before the oncoming disaster properly. Those 20 seconds can make a world of difference. It relies on seismic waves from earthquakes in other areas to predict and then warn a region of an incoming earthquake. However, false predictions could be detrimental for warnings, as users could quickly lose faith if predictions are wrong.

Hope is evident in works such as “ShakeAlert” because earthquake notification and warning are half the battle. While organizations supporting earthquake preparedness are gaining momentum, accurate prediction methods would certainly save more lives. Thousands of deaths, displacement, and injury from surprise earthquakes still have not been enough to reinvigorate our science community to solve this pressing problem. At a time when earthquake deaths are rising, the faults of earthquake prediction are blaring.
Gaming Advice for Young Mensans
By Andrei K., 12, Orange County Mensa

Do your parents think you spend too much time playing video games? Do you procrastinate on your homework? Are you not getting chores done because of your gaming?

When I was younger (10, to be exact) I had a huge problem: gaming! Gaming seemed to be a part of almost every child’s life, including mine. I played so much that I started to skip out on doing my homework. Now that I’m in middle school, I spend much less time playing video games. But I know that many younger children, especially those around the age of 10, have a similar problem I once had.

Here’s what I’ve learned that can help you get more things done and still get to play.

First, focus on finishing homework. This seems to be a no-brainer, but when I was younger, I prioritized gaming over homework. The two most helpful things I did were to set a time limit when gaming and make myself reminders. I used my phone to set a time limit, but you can use any timer. The most important thing is to stop when time’s up! If you’re playing on a mobile device, you can set a screen time instead. Making reminders to do your homework is harder, at least for me. You can make reminders on your phone, a calendar, a sticky note on the fridge, or you can make a paper list. Whatever works for you!

Second, make a plan to organize your tasks, including gaming time. You can use a phone, or as I have done, you can make a paper list every day. If you make a paper list, put it somewhere you’ll see, such as on the fridge, the kitchen table, a bedroom wall, near a calendar, or a space where you do your homework. You can include other things in your list, such as chores and reading your favorite book. When you complete a goal, mark that you finished it with pride! At the bottom of my list, I put “Video Games.” When you’ve completed your list, you can enjoy some gaming time. Making lists helps you get more things done, will be helpful in middle school – trust me.

Overall, my advice on gaming for Young Mensans is to focus on finishing homework by making time limits on gaming, making homework reminders, and making lists. I hope this advice can help you manage your screen time, help you finish your homework, and, most importantly, help you have more time to do other fun activities with your family and friends.

This is an example of my daily paper list. The list above includes my daily chores, homework, reading, helping my dad, and of course video games!
Robotics Engineering and Me

By R. William C., 14, Mensa in Georgia

When I grow up, I want to be a robotic engineer. Many individuals like me have been repeating this statement since they saw a robot in action. Watching a robot twist and turn, pick up objects, and perform complicated tasks without human help inspires us to become robotic engineers. Also, the truth is robotics will probably be a huge industry in only a few decades. Here is the story of my journey into robotics.

I cannot specifically say which robot I was inspired by; I was mainly inspired by the limitless possibilities of robotics itself. At first, I did not know how to get started. I could do robotic kits and things like that, but I felt that pursuit was empty. Then, I thought maybe collaborating with a robotics team to complete a common challenge would be fulfilling. I found this in FTC Robotics.

FTC (FIRST “For Inspiration and Recognition of Science and Technology” Tech Challenge) Robotics is a nonprofit organization that helps robotic engineer wannabes get a taste of the industry. Students sign up for registered teams that compete against each other in a challenge set by the winners of the previous season and by the sponsor company.

I found it a bit difficult finding a team, but I chose one based on the likelihood that this team would have a good season. If you choose a team like this, you will likely find veteran members who have been on that team for more than one season and know a lot about robotics. However, I have learned that it is important that you choose a team based on their current resources, mentors, and veterans and not just on their previous achievements. It may also be useful to visit the teams you are considering to see if one of them is a good fit.

Once I found a team, they did a pre-season camp for us newcomers to learn the ropes. This camp helped me gain experience in building using Gobilda, Tetrix, and Actobotics pieces. Some tips I learned from this camp were to try to be consistent with the type of pieces you use and never to use duct tape for robotics (unless you want to be exceedingly frustrated).

Then the season kicked off. The challenge of this season was to build a robot that could place cones on poles, sense pictures on a sleeve on a cone, and move to a location (and/or score) without manual manipulation. We first started by brainstorming a robot. We decided on a simple design with a chassis, four mecanum wheels (wheels that allow your robot to move left or right without turning if you have them set to the proper formation and rotation), one vertical slide, and one claw. While the builders worked on this design, two other coders and I worked in Java, which I did not know then; however, the tools you need for working in Java for FTC are easy to learn after some experience.

My team was disqualified from the first meet-up because our robot was not up-to-date on its software, but we did progressively better throughout the season. In fact, we got third place in regionals, allowing us to advance to our FTC State Championship. We attempted to work on a new robot in the weeks leading up to the championship, but the new robot’s hardware kept breaking. At the last minute, we decided to stick with our original design. This experience taught me that not everything will work out for you in science, but the important thing is always to work to find a solution. Sadly, we did not do as well as we had hoped in the championship. However, we got second place for an award thanks to our robot’s presentation (otherwise known as the engineering portfolio), which was better than we did at regionals. In addition, because we made it to State, our team was technically in the top 25 percent of teams in our state.

This was my first experience in a robotics team. I learned how to code in Java, build a robot using Gobilda, Tetrix, and Actobotics pieces, add odometry wheels to a robot, and so much more. I loved this experience, and I can’t wait to go back and learn more. If you are interested in robotic engineering, joining a robotics team can be an enriching experience. Happy building and coding!
As I tour Naval Base San Diego, I worry about how my uncle stays safe through all the cold and wet conditions he has to endure from training exercises and real missions. I start to think about how technologies in sealants and adhesives safeguard the lives and equipment of our U.S. Navy and Marine Corps. Sealants and adhesives form watertight cohesive bonds between two structural components. Their bonds are light but strong, offering special tensile and elongation properties. Given how Mother Nature’s elements can wear down combat gear and vehicles, these chemical glues must perform in demanding and extreme conditions. They must withstand a range of temperatures, pressures, and corrosive factors as they resist aviation fuels, hydraulic fluids, and water. And if in-field repairs of ships and equipment are needed, we need these agents to work quickly and reliably.

Given these requirements, I wonder how these sealants and adhesives can hold up in the face of global warming. Climate change-related ocean acidification and rises in temperature can adversely affect the bond strengths of these glue materials. Adhesive bonds rely on compatibility with substrates such that any substrate changes from challenging environmental conditions can decrease the effectiveness of these fixatives. Moreover, acidification and warming can kill off marine life, including coral reefs that act as barriers to storm surges.

Docked ships, supportive equipment, and military buildings will all need to rely on the defense offered by sealant and adhesive technology. Military bases and operations might become compromised if their chemical bonds cannot hold.

Developing and refining these protective agents should thus be a priority to keep equipment and personnel safe. Just ask our marine barnacles in shallow and tidal waters. They possess a self-protecting natural sealant that might hold the key to a novel life-saving material for humans. When high tide comes rushing to shore, barnacles remain calm. They do not panic, try to hide, or worry about being washed away. With a special sticky substance, barnacles can easily cling to their rocks and go about their usual day. Copying their sticky protein molecules, engineers at the Massachusetts Institute of Technology (MIT) have developed a biocompatible glue that can stop bleeding by sealing injured tissues. Even with blood over the wound, this paste can adhere to the tissue surface and create a tight seal within 15 seconds. Incorporating this new bio-inspired adhesive in the field of battle can save many lives. Bringing this technology to market will be vital for military personnel because blood loss is the leading cause of death after a traumatic injury.

With more investment in biochemical applications, we might witness a movement toward personalization or customization. The future might hold more than just acrylics, silicones, and polyurethanes. My optimistic imagination tells me that sealants and adhesives like MIT’s biocompatible glue can function like a personal smartphone. This compound might be programmable to be compatible with a given person’s blood type or DNA makeup. If it changes hands on the battlefield, perhaps this technology can even adapt to a new owner’s biological characteristics. We might also have access to adhesives that work for a variety of body parts with various cell or tissue types. We might one day be able to choose amongst squamous, cuboidal, or columnar cells types. Furthermore, if we combine this sealant and adhesive technology with 3D printing, we might be able to print customized shapes and sizes on the go during dynamic operations.

Science and technology will undoubtedly continue to transform our lives for the better. With today’s military dependency on mobility and nimbleness, the advancement of sealants and adhesives will be critical to their success during training and missions. If we can prevent two things from separating from one another or keep wet things wet and dry things dry, we can shelter our assets from the detrimental effects of global warming. Our ships, subs, and aircrafts will last longer in the ever-changing conditions of foreign lands and waters. In addition, when faced with injury, our soldiers and sailors will be ready to use novel and portable bonding biomaterials to treat wounds. Expediting the movement of chemical innovations out of laboratories and onto battlefields will save the lives of individuals like my uncle.
What YMs are Saying About Technology

By Devanshi C., 12, St. Louis Area Mensa; Aryaman M., 12, San Francisco Regional Mensa; and Aspen L., 10, St. Louis Area Mensa

Reviewing all the Spring issue submissions, we noticed a few YMs were thinking about the same technical quandaries: What are the pros and cons of advancing tech? Do the benefits outweigh the negatives? Here is some of what YMs are saying about technology:

On social media and fear of missing out (or FOMO): On social media, many people might see others having more fun or living better lives than they are, triggering anxiety and the feeling of being left out. You could be compelled to check for updates or respond to every message you see. When teens post things, other people they might not even know can see their post, and people can respond negatively. Thinking about how other people would respond to their post, teens can feel lots of pressure, leading to anxiety. – Aryaman

It can affect our mental health when we see what others are doing online. People feel like they have to be as “likeable” as the people they see on social media. That can play a major role in the minds of young children. – Devanshi

It’s used worldwide – more than 90 percent of teens use social media. It can help teens build strong friendships, discover good content, and keep up to date with news and current events. However, more than 50 percent of these teens face negative thoughts, feelings, and emotions from social media. It can lead teens to depression and anxiety and expose them to cyber-bullying and inappropriate content. Now, it’s up to teens...
to decide whether to use social media wisely for good or to unwisely face the consequences. –Aryaman

On instant gratification: The whole world is into technology, but we don’t understand the proper ways to communicate or limit the use of technology. We get absorbed into it. We lose patience because we think everything in life should come as quickly as Google search results. In fact, even as we type, most of us expect our phones and computers to complete the words for us. And if they do not come quickly enough, we complain and wonder why there is a lag. –Devanshi

On the dangers of artificial intelligence: AI will someday help us do amazing things, but for now we need to learn more about this technology before it gets out of control. AI is catching up to humans; we need to be in control of the technology we use, not the other way around. If we aren’t careful, AI could eventually destroy us all. Stories like the Marvel movie The Avengers: Age of Ultron could become closer to reality than fiction. Right now, we need to do our best to ensure that our current technology does not overpower us. We are humans, and we will not be ruled by technology. We rule them. –Aspen

On connections: Technology makes up our daily lives in so many ways. In my experience, my mom and I use cars for transportation. We drive around to places we need to get to. When I get off from school and go to afterschool care, I use my phone to text my mom. I use my phone for communication and research. Technology is our life. –Aspen

Connections to friends and family can be easily made through social media. This can help teens develop more friendly relationships and efficiently communicate with their friends even in far away locations. Friendships are an important part of life, especially for teens, as they can challenge teens to do better and encourage them when times get tough. –Aryaman

On health: When people spend a lot of time doing unnecessary things with technology, it can damage their physical health. You risk eye strain and back pain from being bent over while using a cellphone. Technology can numb people’s hands from texting all the time with no break. Children can get addicted to technology. When that happens, they do not engage outside a lot. This can lead to health problems like obesity. –Devanshi

Social media can also be a vast addiction. Researchers have found strong links between lots of social media use among teens and an increased risk not only of loneliness but also depression and anxiety. Teens who overuse social media are also at a greater risk for self-harm and even suicidal thoughts, which can be very dangerous if too extreme and teens don’t get the help they need. –Aryaman

On the positives: Not all technology is bad, however. Many technologies in this world have made our lives what they are today. For example, the steam engine helped us easily get from place to place and produce goods faster because they could be transported faster. As you can see, technology has its ups and downs, but knowing humans, we will figure it out eventually. We created all these inventions; we just need to learn how to use them. –Aspen

Final thoughts: All the fun you think you are having with technology could be causing harm in the long run; technology can damage anyone’s physical and mental health. Adults and children should try to use less technology unless necessary and spend more time outside! You will get a lot of relief, and it will keep you all in shape! –Devanshi

I used to think technology was only electronics such as cellphones, but technology is tons of different things. From computers to textile factories, they are all technology. Every technology has its purpose in this world. Whether it is to send messages or make fabric, they all serve the same idea: to help make daily human lives easier. But some technology does the opposite. Technology can be good or bad; it is up to humans to decide how to use technology. –Aspen
The Struggles of a Black Man

By Maya F., 9, Greater New York Mensa

Maya F. is one of 20 students honored by the Association of Black Educators of New York, INC. in their Black History Month essay contest. Below is an abridged version of Maya’s winning essay.

Have you ever had a dream that you wanted to come true so badly that you would do anything to have it come true? Well, I know of a man that had a dream that was like a fire in his heart. His powerful words and peaceful protests for equality, among all races, colors, tribes and creeds, ignited flames, not just in America, but also all over the world.

Dr. Martin Luther King, Jr. was born in Atlanta in 1929. King came from a comfortable middle-class family steeped in the tradition of the southern Black ministry. His parents were college-educated, and King’s father had succeeded his father-in-law as pastor of the prestigious Ebenezer Baptist Church in Atlanta. The family lived on Auburn Avenue, the bustling Black Wall Street, home to some of the country’s largest and most prosperous Black businesses and Black churches in the years before the civil rights movement.

Dr. King knew from an early age that Black people and White people had different rights. He saw that Black families had to sit in a separate section of restaurants or in the back of a movie theater and use separate bathrooms. These laws that kept Black people and White people apart were known as the Jim Crow laws. He did not understand them, but he realized that nothing would change if he stayed quiet. Dr. King faced many obstacles in his mission for equality. He was arrested more than 20 times for protesting and was the target of several violent attacks, but he did not lose sight of his goal of a non-racial society.

Dr. King’s many phenomenal achievements as an activist speak for themselves, starting with a prize he won at 14 years old for giving a speech about segregation. He helped organize the 1955 Montgomery Bus Boycott, the first major protest of the African American Civil Rights Movement. Dr. King was incarcerated for his involvement in the year-long boycott. However, the U.S. Supreme Court ruled that racial segregation in transportation was unconstitutional. This movement transformed King into a prominent figure and the best spokesman for the Civil Rights Movement. Shortly afterward, he helped found the Southern Christian Leadership Conference (SCLC). King served as the organization’s first president. They helped African Americans across the South conduct demonstrations and nonviolent protests for Civil Rights reforms such as registering African Americans to vote.

In 1963, Time magazine named Martin Luther King “Man of the Year.” That same year, King led a nonviolent campaign aimed at Birmingham, Ala., the most segregated city in America at that time. He helped organize a march for jobs, equality, and freedom. Later that year Dr. King also led the March on Washington, which brought together over 250,000 people of all ethnicities to demand justice and equality for all people.

This is where he made his “I Have a Dream” speech from the steps of the Lincoln Memorial. King’s speech inspired the nation and is now considered one of the greatest speeches in American history. It was due in part to this speech and the March on Washington that Congress passed the Civil Rights Act of 1964, making it illegal to discriminate against people because of their race.

At 35, King became the youngest person to win the Nobel Peace Prize. He went on to organize the Selma to Montgomery March in 1965, urging President Lyndon B. Johnson to pass a law protecting the voting rights of African Americans. Congress passed the Voting Rights Act in August of that year. King led campaigns to advocate for economic change for poor people of all races. He organized the march to Memphis, Tenn., for sanitation workers to get better pay. Tragically, on April 4, 1968, Dr. Martin Luther King Jr. was assassinated while standing on the balcony outside of his hotel room in Memphis. He was only 39 years old. King’s death was followed national mourning and outrage, leading to riots in many U.S. cities.

Dr. King will always be remembered for his legacy, hard work, and relentless struggles for social justice. He was posthumously awarded the Presidential Medal of Freedom in 1977, and in 1983 President Ronald Reagan signed a bill creating a federal holiday honoring Martin Luther King Jr. on the third Monday in January. Martin Luther King Day was officially observed by all U.S. states and territories for the first time in 2000.

Dr. King paved the way for African Americans to have equality and a better life for their children and grandchildren. Because of King’s activism, my little sister and I can have White friends and not feel ashamed or unworthy when we’re around them. I am able to attend school with my best friend, who is White, and I can share the same water fountain and classroom with her. I was able to get enrolled in one of the gifted and talented educational programs in New York. Because of King’s activism, people such as Barack and Michelle Obama, Oprah Winfrey, Michael Jordan, and Serena and Venus Williams were able to combat racism and attain great success in America.

However, his dream is still not completely fulfilled, and there is more work to be done! As small as I am, I can also contribute to keeping Dr. King’s dream alive by working honestly to achieve my dreams and having perseverance and confidence, even when people discourage me. Like Dr. King, I also have a dream in my heart that one day we will all live in unity, and there will be EQUALITY FOR ALL! I will play my part by always standing for what I believe is right and encouraging my friends, family, and community members to live in peace and love. Until that day, we should all aspire to keep that fire of peace burning in our hearts.
CREATIVE

THE DIAMOND
By Nitya G., 10, Mensa of Western Washington

I flow within the veins of the hard, deep surface.
I am the core. I reach for the sky to burst my anger.
I am the magma.

A wide, long strip shooting to the clouds. I am the lava.
I push the lava up before it all starts. I am the volcano.
I reach the top and burst into a new life. I am the explosion.
My lava dribbles down, down, down, paving a fiery path.
I am the remains.

As my temper cools, the sky starts to emerge. I am the black rock.
The rock changes the form as it goes in, in, in. I am the cycle.
Years go by as the cycle goes by. I am the time.
The rock starts to break as a diamond appears.
I am found.

I AM
By Jack A., 13, Greater New York Mensa

I am the salty tang of the sea,
I am the pungent odor of peach tea.

I am the stars in the indigo sky,
I am the breeze, ruffling leaves way up high.
The red-brown tan of apple pie.

I am the floor on which you walk,
I am the strike of lightning, distributing shock.

I am the chirp of the blue jay,
I am the hoot of a barn owl,
I am even the cat gingerly tiptoeing around,
Not making a single sound.

I am the crunch of the carrot,
I am the pizazz in the pizza,
I am the slice in the spice.

DYSTOPIA
By Giovanna P., 16, Connecticut & Western Massachusetts Mensa

Setting suns and rising night skies
A sleepless daydream
Giving way to hollow voices heard by none,
A deceptive reality weaving complex lies
Wrapped in fragile air,
Choked on their own delirium,
The warped, contorted bodies
Stumble until sunrise.
RIBBONS OF LIGHT
By Anjali I., 10, North Texas Mensa

I walked through the thread
Of light,
And watched,
Expectantly,
As it unfolded
Unto something stronger,
Something wiser
Thicker
As you grow,
Your life,
A ribbon,
Dancing in the wind
In a cold winter day
As it settled,
Into nothing more.

MELLIVORA CAPENSIS
By Zihan X., 15, North Texas Mensa

Let us witness this utmost creation,
Known to mankind as the Honey Badger.
It is not so friendly as a Dalmatian,
But rather quite a serious scratcher.

Under this facade of ferocity
Lie untapped treasures of intelligence.
Its big brain moves with swift velocity,
Deftly solving problems with elegance.

In solitude, it eases into comfort.
Throughout the day it hunts ill-fated prey,
Whelming its weaker foes with little effort —
Yet in the end, it goes back home to stay.

The Honey Badger is independent,
With a multitude of skills resplendent.

THE PRESENT
By Arianah H., 13, Charlotte-Blue Ridge Mensa

Who are you
Who am I
Why is the life we know so wrong
What is the world
Who is the protagonist in my story
Am I the protagonist
Is it really my story
Who are we to know but then who knows
Who are we
If not puppets run by capitalism
Raised to live on whatever they say
Who is they
Who are we as people
Who are we as individuals
What is human anymore
Are we human anymore
Is the robot takeover conspiracy us
We are the robots to indoctrinated
So lost away from ourselves
Lost the light back to our individuality
We are gone
That is the present
THERMAL ENERGY
By Tanvi G., 9, Northern New Jersey Mensa

Thermal energy, how you focus
Honestly, it’s much easier than playing blokus
It may require listening to cacophony
That doesn’t mean you quit hearing it’s story
Temperature is the average kinetic energy in an object
In non-physics terms, it is how hot or cold something is
Thermal energy is the sum of the kinetic and potential energy in matter in this subject
In non-physics terms, it is the state of matter the molecules are in
Thermal energy, how you focus
Honestly, it’s much harder than saying hocus pocus
It may require boredom and patience
That doesn’t mean you go to different nations
You need to stay and learn
For what you do, knowledge you will earn
Anything is possible in the world of science
Just take another look and waiting for you is that huge knowledge price
Jack A., 15, Greater New York Mensa
Crossword
By Brody P., 9, Greater New York Mensa

Across
1. The ancient dog breed of China.
3. Often used as a mascot for the fire department.
5. This dog loves sports.
6. This tiny dog is most likely a native of Mexico.
8. The late Queen Elizabeth II of England had these dogs living with her like royalty.
11. The national dog of France, this breed originated in Germany.
13. One of the smartest dogs in the world, also cousins with the golden retriever.
14. Has one of the best noses in the world.
15. This dog has a long body and short legs.

Down
2. The biggest dog in the world.
4. A great police dog, also good for tracking lost or dangerous things.
7. First developed as a hunting dog in Scotland, now used as a service dog.
9. Scooby Doo is a ...
10. Many people have this dog on guard.
12. This dog often has two color eyes (orange and blue).

Answers on p. 34
**LUMINOUS: LIVING THINGS THAT LIGHT UP THE NIGHT**

*By Julia Kuo*

*Review by Max V., 7, Southeast Michigan Mensa*

This nonfiction book teaches you about animals that glow in the dark. I enjoyed reading it because it described interesting creatures using bioluminescence for survival, eating, and communication. It was an easy and quick book with lots of good information, vocabulary, and facts.

This book is all black with neon and bright-colored illustrations of the animals and their bioluminescent features. This style helped to represent the night and how the animals would glow. A mom and daughter throughout the book explore at night and how we could see bioluminescence. The text added to the beautiful pictures is detailed and has lots of information about each animal and picture.

I learned a lot of new things about animals that glow in the dark and bioluminescence from this book. For example, dinoflagellates are one-celled creatures that spark light when disturbed in the ocean. The vampire squids shoot out a bioluminescent cloud to distract predators. The jeweled squid can change its bioluminescent feature to blend into the night sky or daytime light.

This book is important because it describes how light pollution can affect and hurt bioluminescent creatures. In places without light pollution, bioluminescence can be seen from outer space. We need to think about how too much light and buildings affect nature.

I recommend this book to kids who like learning about creatures and animals. It would be good in a school classroom or library because it has a lot of information and is good for younger and older kids.

**THE UNIVERSE IN YOU: A MICROSCOPIC JOURNEY**

*By Jason Chin*

*Reviewed by Theo P., 7, Greater New York Mensa*

This book is about things that, in sequence, get smaller and smaller until they reach the smallest thing ever discovered: elementary particles. I like that the book shows a diagram of everything it discusses. Also, the book shows a “unit comparison diagram” on the first couple of pages that is really useful. The illustrations show things that are too small for people to see. At the end of the book, there are some facts about small objects like atoms in more detail. I would recommend this book to kids interested in science. It is well-written, and the illustrations are super cool.

**THE TROUBLE WITH ROBOTS**

*By Michelle Mohrweis*

*Reviewed by Peyton H., 9, Central Florida Mensa*

The Trouble with Robots is a fiction book about a team of eighth graders who design and build a robot. I mostly enjoyed the book and liked the parts where the children worked together to solve their problems. I did relate to many of the book’s characters as they seemed like a group I would enjoy hanging out with, except for one boy who was not so kind at times! A valuable lesson the author wants to get across is that respecting each other and being kind is the key to success, while arguing gets you nowhere and wastes time.

I think it is a good book for kids 12 or older because it sometimes contains more tween content. If I could change a couple of things from my perspective as a fourth grader, it would be less arguing between the team and less talking about crushes!

Overall, I think the book had a good storyline, and I was happy to see that the author was actually a middle school robotics teacher who most likely used her own experiences to write this story.

**MORE HAPPY THAN NOT**

*By Adam Silvera*

*Reviewed by Jackie S., 17, Connecticut/Western Massachusetts Mensa*

More Happy Than Not by Adam Silvera is a captivating and heartfelt book combining sci-fi with a personal narrative of a teenage boy struggling with his sexuality. The book also focuses on class struggle and race without it feeling forced and has a cast of realistic (to a sometimes painful degree) characters. The plot twist is unexpected and good enough to make you go back and reread for past clues you missed.

My main concern with the book was the premise of the memory-erasing machine — how can you erase someone’s sexuality? Of course, you can erase any memories of them experiencing gay romance, but even still, the individual should wake up and still feel attracted to men and not women.

I read in some other reviews that readers were upset that the main character, Aaron, was morally questionable and selfish. However, I think this made the book all the more interesting — a gray character is much more realistic, and makes you sympathize with the supporting characters instead of only focusing on the protagonist.
THE PLENTIFUL DARKNESS
by Heather Kassner
Reviewed by Aubrey H., age 10, Miami Mensa

Rooney de Barra is an orphaned girl who lives in Warybone’s alleys. A group of roughhouse boys always bother Rooney, but the Montys are there to help. When one of the boys takes her lunar mirror and flees, Rooney and the boy, Trick, are thrust into an adventure that’s full of darkness and light.

Heather Kassner’s The Plentiful Darkness is the perfect story for kids who love creepy tales. Will Rooney, Trick, and their new friends, Devin and Bridget, escape the plentiful darkness?

The Plentiful Darkness is the perfect tale for kids who love spooky tales. This book is very mysterious. Kassner infuses creepiness and solitude. As she describes the darkness and the magician, I felt a chill shiver down my spine. The descriptions helped me understand that the plentiful darkness isn’t merciful.

This book is appropriate and entertaining for middle grade readers; it fits its intended audience perfectly.

HOW TO TRAIN YOUR DAD
By Gary Paulsen
Reviewed by Jack H., 7, Central Florida Mensa

There were lots of parts in the book How to Train Your Dad that made me laugh, from the title when I first read it and the artwork on the cover! I really liked Pooder, the main character Carl’s best friend and sidekick; he always had wild ideas to get rich or famous and made many mistakes, which made me laugh a bunch of times. There were parts of the book I did not relate to, as I’m only 7 and not at all interested in impressing any girls or things like that ... yuck. I also found it hard to understand why Carl wanted to change some awesome things his dad made, like the bike that sounded really cool to me, but he did not like it because of how it looked compared to other kids’ bikes. I felt like Carl should have appreciated how inventive his dad was in making all those cool things for him. I like science and building things, and I liked the parts where Carl’s dad would build or invent things. Overall, I think this was a good story with a lesson at the end of appreciating the good things in people you love and not what you think you want them to do. I would recommend this book to kids more Carl’s age, which is 12 or 13.

TIME VILLAINS
By Victor Piñeiro
Reviewed by Dylan W., 10, Metropolitan Washington Mensa

In a hilarious friendship adventure story, Javi, his best friend Wiki, and Javi’s sister
Brady use a unique magical dinner table to summon people from history to a dinner party. They named their unique dinner table Andy and set themselves on an incredible life-changing adventure.

Javi, a middle school kid, had to complete a yearly school assignment. This exciting assignment required Javi to invite three people, living or dead, to dinner and to write about the experience. With the magic power of Andy along with Wiki and Brady’s help, Javi invites many guests from the past, including Blackbeard, a fierce pirate who manages to escape to the modern world and causes a lot of trouble for the kids.

This wonderful book is an easy read! You can sit down and enjoy a nice cup of tea (I know I did!) and be mystified by Andy’s magical powers. This book was very funny! An especially funny part was when the pirate Blackbeard became a teacher. I would like to reread this book. Although there were some pictures, this book could use more of them.

Who else did the kids summon for the assignment? What mysterious school secrets Javi, Wiki, and Brady learned? It’s up to you to read this great fiction novel and find out. The book is full of unpredictable surprises. If I learned anything from this book, it would be: Don’t invite Blackbeard to a dinner party.

**A MEASURE OF SERENITY**

*By Bryan Prosek*

*Reviewed by Ana T., 13, Delaware Valley Mensa*

★★★★★

Following the journeys of Serenity, we are plunged into a mysterious yet not-so-unfamiliar dying world with enemies that look like friends and friends that look like enemies. She is dragged into the conflicts of this world even as she tries to find her family and her way home. I believe that this book would be a good fit for teenagers. It was an extremely slow start, with the story getting better. I really enjoyed it, but it was a bit difficult for me to get into. By the end of the story, I loved the family and all their monster qualities and them fixing it, but another monster is threatening to destroy them all. Find out how they survive the monster attack, life with humans, and dealing with pain you have never known about before in *The Monsters of Rookhaven*! By the end of the story, I really enjoyed it, but it was a bit difficult for me to get into. It was an extremely slow start, with the story getting better. I loved the family and all their monster qualities and them working together in the darkest times. I think that you should try this book. It’s a fun story for all ages.

**THE RECKLESS KIND**

*By Carly Heath*

*Reviewed by Lamia A., 16, Maryland Mensa*

★★★★☆

The Reckless Kind centers on the theme of unconventional love in a small Scandinavian town. After tragedy strikes three adolescents, they bond together to survive by winning a Christmas Day horse race. Heath tactfully weaves a story of budding love, friendship, and healing.

**MOONGARDEN**

*By Stephen A. Barry*

*Reviewed by Parker B., 13, Western New York Mensa*

★★★★☆

Moongarden is a book with many surprising parts, some more than others, admittedly. The main character, Myra, is worried that she won’t have a Creer. A Creer is a magic ability that only some people will develop. There are many different types of Creers, but both of Myra’s parents are Number Whisperers. All the main characters go to school at the Scientific Lunar Academy of Magic, or S.L.A.M., for short. There are also schools on Mars and Venus with similar-sounding names. Nobody lives on Earth anymore, but Earth is called the Old World. Myra finds a secret garden hidden inside S.L.A.M. that nobody else knows about. At least until she finds Canter Weathers there. While in the hidden garden, Myra discovers she has a Creer, which nobody has heard of before. The book has a bit of an abrupt ending that feels like it needs to be more finished.

**THE MONSTERS OF ROOKHAVEN**

*By Padraig Kenny*

*Reviewed by Michael P., 9, Lehigh Pocono Mensa*

★★★★★

Imagine you could take a path between two worlds: a secret world of monsters and a human village. The House of Rookhaven is a house full of humans, but they can transform into monsters. There is a portal called the Glamour for some humans to get through, such as a doctor named Dr. Ellenby who checks on the monster family sometimes, and Freddie Fletcher and his dad, who deliver the mail. The Glamour is only accessible with a key. The family has a pact with the humans: If they don’t hurt the humans then the humans won’t hurt the monsters. But one night, orphans Tom and Jem Griffin stumble upon a hole in the Glamour, and their curiosity gets the best of them. So they go through, which stuns the family when the kids stumble upon the house, for they did not give them the keys to go through. Eventually, they know about the hole in the Glamour and are fixing it, but another monster is threatening to destroy them all. Find out how they survive the monster attack, life with humans, and dealing with pain you have never known about before in *The Monsters of Rookhaven*! By the end of the story, I really enjoyed it, but it was a bit difficult for me to get into. It was an extremely slow start, with the story getting better. I loved the family and all their monster qualities and them working together in the darkest times. I think that you should try this book. It’s a fun story for all ages.
love, sacrifice, and pressure as the main characters face difficulty after difficulty. The perspective switches from character to character, but readers can easily follow the storyline and empathize with the characters. The Reckless Kind is engaging and tugs at heartstrings, being an overall strong, realistic fiction read. It is appropriate for a middle-grade to young adult audience, touching on mature themes but not delving into them.

**ARCH OF BONE**
*By Jane Yolen*
*Reviewed by Maia S., 10, Metropolitan Washington Mensa*

Fury, depression, and hopelessness make up *Arch of Bone* by Jane Yolen. Josiah travels to a foreign island and experiences many challenging times with his companion, his dog Zeke. All of his actions create the depth of the book and its uniqueness, which make it stand out. They make the story powerful and perplexing, persistent and miserable together.

Josiah is a young, brave 14-year-old boy whose life changes when he finds out that his beloved father died on a boat called the Pequod. With grief, he immediately goes to his homemade fishing boat with his friendly dog Zeke and sets sail to find the actual story about his family member’s fatality and settle the misery in his heart. However, an unexpected storm broke out that night, and his ship brought him to a foreign, unknown island. With no tools, two bellies to feed, and a broken vessel, how will he cope with the situation?

*Arch of Bone* is not the best match for children, especially if you do not love boats and the sea. Yolen adds a lot of description in some parts and too much action in others and doesn’t make the paragraphs a balance between both. Sometimes Josiah is miserable, and the author does create a perfect picture of his feelings in our mind, but then there is a sudden plot change that jumbles up the emotions. For example, the boy finds a useful object, and it magically saves the day in a flash. Also, there is not much vocabulary you can take on in the main theme is the ocean and vessels, which make it stand out. They make the story powerful and perplexing, persistent and miserable together.

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**MADE 4 YOU**
*By Eric Walters*
*Reviewed by Jeanelle D., 14, San Francisco Regional Mensa*

*Made 4 You* by Eric Walters is a science fiction romance where the main characters, Gene and Becky, fall in love despite Gene’s secrets and awkward nature. I rate this book four stars because I like the message that despite having all the knowledge in the world, Gene still needs help. He still needs Becky to teach him social skills and how to act like an average person. I didn’t love how Gene acted as your stereotypical awkward nerd—he knows a lot, talks really formally, etc. But I think it worked in this book. Gene needed to be that way for the book to flow well, which is why I thought it worked. Of course, I would prefer a more complex character design, but his brief moments of overprotectiveness make up for it.

Becky was also a little normal in terms of character design. She got jealous when other girls talked to Gene, attacked the “bad guys” when they attacked Gene, promised to always be there for him, etc. But, again, I understand why her character had to be that way. The plot was a little predictable and moved a little slowly, but I liked it. The moments where the characters were in shock after a whole fight scene were, in a weird way, bittersweet and something I enjoyed reading. I enjoyed Eric Walters’s writing style; it was direct and to the point but also descriptive. The book wasn’t necessarily drawn out either, which I appreciate. All in all, it was a pretty good book. I’m glad I read it because it was interesting, but I can’t say it was as good as some of my all-time favorites.

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**GOATS FOR CHRISTMAS**
*By Jacqueline Kelly*
*Reviewed by Noell L., 7, Greater Phoenix Mensa*

Do you think goats will eat anything? That question is still debatable. In *Goats for Christmas* that’s a definite yes! Jaqueline Kelly’s characters Calpurnia Tate and her little brother Travis discover how hard it is to care for goats, especially during a performance. This simple story leaves us wondering why they had a sheep shortage this month but bringing in goats sets up a problem in this story.

There are two problems in the story. First, there are overwhelming goats, and second, Calpurnia and her oldest brother are constantly fighting. One surprise I noticed was that this book is about relationships as much as goats for Christmas. In fact, one thing that the author does well is that she makes her characters feel real because she displays their emotions and character traits, especially between brothers and sisters. Calpurnia and her brothers arguing is a common feature in all of the *Girl Vet* books I’ve read.

If you like books about brothers and sisters, then this is for you! Also, if you like facts, this is for you! But you will have to be able to accept that the goat facts in the book is debatable. For example, a goat farmer at Flanagan Homestead said, “Goats are fairly selective and they only eat plant sources.” I recommend this book for younger readers who don’t mind a simple story. More advanced readers will want to read *The Evolution of Calpurnia Tate* by the same author.
THE HANMOJI HANDBOOK: YOUR GUIDE TO THE CHINESE LANGUAGE THROUGH EMOJI
By Jason Li, An Xiao Mina, and Jennifer 8. Lee
Reviewed by Maggie H., 8, Western Pennsylvania Mensa

The Hanmoji Handbook: Your Guide to the Chinese Language Through Emoji is simply the best introduction to written and spoken Chinese. It shows how many Chinese words are pronounced and the origins of the written symbols. Hanmoji Handbook teaches about the history of Chinese writing and how it became a logographic language. This generally means words are symbols rather than letters or symbols representing sounds. The book compares this process to the current development of emojis. Yes, I said development of emojis. It is a surprisingly interesting topic. The book teaches that, unlike English, Chinese is a tonal language. If you say a word in different tones, it will have a different meaning. For example, if you say “ma” in a certain tone, it means “mother.” But if you say it with a different tone, it means “scold.” The book made me want to learn even more about Chinese. The authors explain the subject matter well and present the topics in a way perfect for children over 7 up through adults with a casual interest. I would recommend this to anyone interested in Chinese and think it might be a good introductory book for classrooms where Chinese is being learned. I give it five stars because it has really taught me a lot.

ARCH OF BONE
By Jane Yolen
Reviewed by Josie S., 10, Minnesota Mensa

In Arch of Bone, the author Jane Yolen picks up after the famous story of Moby Dick. Fourteen-year-old Josiah lets a man, Ishmael Black, into his home. The man claimed he was the only survivor of a whaling ship. Josiah soon learns that his father, who was working on the same ship, had been killed in a disaster caused by the white whale. After learning the details of what happened, Josiah runs to the harbor. Overcome by grief, he takes his boat, Petrel, for a ride with his dog, Zeke. The boat was a gift for his 12th birthday from his father. Intending to take the boat out for a quick voyage, Josiah leaves the Nantucket Harbor. However, a storm shipwrecks Josiah and Zeke on a deserted island. With very few supplies, will Josiah and Zeke survive and get home safely to Nantucket?

I would rate this book four stars. The author portrays the grief process of Josiah as he embarks on an emotional journey starting with anger and ending with acceptance. However, I wish the story included a little more external conflict between Josiah and the world to add more suspense and action. I thoroughly enjoyed taking a moment to study the intricate illustrations by Ruth Sanderson, which helped me connect with the story. I recommend this book to kids 10 - 14 due to the heavy themes of death and grief.

BAREFOOT DREAMS OF PETRA LUNA
By Alda P. Dobbs
Reviewed by Liliana W., 11, Greater New York Mensa

Barefoot Dreams of Petra Luna by Alda P. Dobbs is a well-written historical and biographical fiction book. Throughout the book, the author emphasizes the message that two wrongs don’t make a right, so you should always fight for peace. Petra is a very independent twelve-year-old who is very mature for her age. A few times while reading the book, I thought she was about 17 because she carries so much weight on her shoulders and does it so well. Throughout the book, many characters change and grow. For example, Abuelita: At first, she seems like a “no funny business” kind of person, but as the story goes on, we get to see other sides of her as she shares bits of her story with Petra and why she is who she is. As I was reading, the story painted a clear picture for me of everything that was happening. However, I wish the author could have given more time to focus on each important event because they went by quickly. The events in the story and interactions make it very believable, which is good for a historical fiction book. The author takes things already established early in the book and
goes back to them to add on and fill in holes so that the story makes more sense as you go on. The book is meant to be for 8- to 12-year-olds, which I think is a good range. The writing was easy to understand, and overall the book was very good but with a few things that were confusing or could have been done a bit better.

**A BREATH OF MISCHIEF**

By Marcy Kate Connolly

Reviewed by Aspen L., 10, St. Louis Area Mensa

This book is amazing. The details are so realistic that I feel I am in the book myself. I love how the author described every character in detail. It was a very mind-blowing book. The author doesn’t just add characters to add characters. Every character was related to the story somehow, whether it’s to help them fly or fight. They always have some meaning to be there in the book. I love how the author always made sure there was a solution to every problem and didn’t just leave you hanging on what happened at the end of the book. The book goes into many adventures that are exiting. I love how the author includes the majestic pets each character has. The main character (Aria) is very adventurous and never gives up, even when things might not always work. I’m really glad that I read this book. It includes magic and ups and downs that come along when you go deeper into the book. The book never gets boring. The author always sneaks in something interesting to make this book exiting. It’s very hard to put the book down cause I constantly want to read more. It’s a very mysterious book and has a lot of action. The friendship each character has with their pets is beautiful. They are always there for each other when they need someone and are reluctant to leave each other alone. The betrayal in the middle of the book is very sad but makes the book more exiting. It took me a while to take my hands off the book because it makes you curious about what’s going to happen in the next chapter. I love how the characters all reunite in the end. Some parts of the book are very sad, but in the end happiness takes over. The different characters all work together to defeat the bad guy, and I really like this because teamwork matters. If these characters did not work together they would not have succeeded. Even though some of them were enemies, they still deal with it to defeat the true villain. This book teaches you many lessons such as that people make mistakes sometimes, but you should always forgive them, or that if work together you’ll get the job done. This book was very enchanting, and I loved it.

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**Crossword Answers**

from page 29

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CROSSWORD ANSWERS FROM PAGE 29

SHOUT-OUTS

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Dylan W., 10, of Metropolitan Washington Mensa completed the Mensa Foundation’s K-3 Excellence in Reading list, reading more than 60 books!

Judie E., 8, of Miami Mensa became her school’s spelling bee champion for the second year in a row. She is also the youngest Miami Herald Spelling Bee finalist.

Stewart C., 16, of Memphis Mensa and Walter R., 15, of Columbus Area Mensa each received the prestigious 2022 President’s Gold Volunteer Award from the President of the United States for completing 100-plus community service hours and voluntary efforts in the last 12 months.

Amogh B., 7, of Northern New Jersey Mensa was chosen to be in the Essex County Youth Art Month Art Show in March. Amogh’s painting “Birch Tree” represented the work of K-12 students throughout Essex County. Amogh would like to give special thanks to Mrs. Boucher, his art teacher, for her guidance, encouragement, appreciation, and support.
AGE 8-12
Ryan J., 6, Central Florida Mensa

7 AND UNDER
Vivaan S., 7, Gulf Coast Mensa

AGE 8-12
Lilly B., 9, Greater Phoenix Mensa

AGE 8-12
Nathenas S., 12, Broward Mensa

AGE 13+
Corina V., 16, Columbus Area Mensa
SHOW US YOUR PETS PHOTO CONTEST WINNERS!

The results of the Show Us Your Pets! Photo Contest are in, and our judges had so much fun selecting a winner. Congratulations to our winners, and thanks to all our contestants for sharing your four-legged (and sometimes two-legged and winged) friends with us!

7 AND UNDER
Juliette L., 6,
Northern Nevada Mensa

AGE 13+
Emily R., 15,
Broward Mensa

OVERALL FAVORITE
Lilly B., 9,
Greater Phoenix Mensa

AGE 13+
Kavi S., 15,
Greater Los Angeles Area Mensa
Bubble Pop Notebook | $12

Smarty Owl Stuffed Animal | $20

Spring Toy | $6

Kanoodle Game | $14

Auto Botic Puzzle | $20

Stress Brain Ball | $3

Wireless Ear Buds | $30

Fidget Popper | $12

Bookmark | $3

Lunch Bag | $15

Bookmark | $3

Fidget Popper | $12

Bubble Pop Notebook | $12

Smarty Owl Stuffed Animal | $20

Spring Toy | $6

Kanoodle Game | $14

Auto Botic Puzzle | $20

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Auto Botic Puzzle | $20

Stress Brain Ball | $3

Wireless Ear Buds | $30

Fidget Popper | $12

Bookmark | $3

Lunch Bag | $15