



# The Tiger Chronicle

College Preparatory  
Middle School

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## Welcome Back, Tigers!

It sure is great to be back! That is the feeling among staff and students alike here at College Prep this quarter. After a long year that combined remote learning with a hybrid in-person arrangement, having everyone back under one roof has certainly been great for rebuilding that concept of community that we all know College Prep is known for.



Speaking on behalf of the staff, it sure does feel great to be once again interacting face-to-face with colleagues and with students.

The teaching staff certainly appreciates all the support we have received from our Tiger families so far this year. Please remember to reach out to us whenever we can help.

As hard as it is to believe, the end of the First Quarter is already upon us. The pages of this Tiger Chronicle are filled to the brim with just interesting articles about life at school, and about the world at large. Please enjoy reading what our students have created, and keep up that Tiger Pride!

## Earn Your Stripes!

**Prepared-Respectful-Engaged-Professional**

# New-tons of Teachers

Donte B. & Trent B.

Did you know that about 3.2 million teachers are teaching in American public schools as of 2019, with 210,000 of them being science teachers? In California alone, there are a total of 47,000 teachers teaching at middle schools or junior highs. Keep in mind, the total population of California is 39.5 million, which makes the chance of a new middle school science teacher even rarer - about 0.00118% of Californians! Knowing this makes it even cooler that we have two new amazing science teachers this year joining us here at CPMS! Their names are Ms. Mammana and Ms. Jordan. Ms. Mammana, who has been teaching for five years, teaches 5th-grade science; and Ms. Jordan, who has four years of teaching experience, teaches 6th-grade science. Now first, let us *teach* you about Ms. Mammana.

Ms. Mammana is originally from Arizona and has been in San Diego for about one year. She has two pets, a dog named Lily and a cat named Kitty. She obtained her Bachelor's degree at the University of Arizona and her Master's degree at California State University, which resulted in her passionate teaching career. When we asked her what she would like to be if she wasn't a science teacher, she responded by saying that she would want to be a marine biologist, cancer researcher, or a brain surgeon - which we think are amazing careers.



One of the reasons that Ms. Mammana chooses to work as a teacher above everything else is because of her love of building connections with her fantastic students and getting to know them. She also reminded us that “having summers off is great too.” In her free time, Ms. Mammana loves to read, hike, and take care of her beautiful plants. Before College Prep, she taught at a high school where she taught Intro to Science, second-year Intro to Science, and Marine Biology. She also enjoys teaching here at College Prep because she loves the school motto: “Take Care of Yourselves, Each other, and this Place” because this motto “helps build such a strong, welcoming, and supportive community.”

Now, let us introduce the outstanding lizard-loving Ms. Jordan! Ms. Jordan has two pets, a dog named Crush and a leopard gecko named Eggo. Under her belt, she has a Bachelor of Science in Microbiology and a Master of Education from UCSD. If she was not a teacher, Ms. Jordan would love to work as an immunologist, because she is “fascinated by how the immune system works, vaccine development/technology, allergy research, and so much more!”

One of the reasons that Ms. Jordan chooses to work as a teacher is because she loves inspiring students to think of science as a way of thinking about our world and encouraging students to be curious every day. She loves science herself, so she runs a lot of labs in class. Her students tell us that the labs are a lot of fun.

When she's not teaching, Ms. Jordan is cooking (probably tacos, which is her favorite food), gardening, binge-watching TV shows, or at the beach. Before she came to College Prep, she taught 7th and 8th-grade general science, AP Environmental, Biology, and a science class for TK-5th graders at an elementary school, and now she is extremely excited to teach here!

We asked Ms. Spencer, our awesome 8th-grade science teacher and the Department Chair of Science in the school, what Ms. Mammana and Ms. Jordan have added to our CPMS community in this short amount of time. She responded by saying, "Ms. Mammana brings organization, focus, and confidence to our 5th-grade science students. Her great scientific knowledge will help our youngest students learn science through a skill set that will place a wonderfully firm foundation for their four years here at CPMS," which we can all agree with. Ms. Spencer also has great respect for Ms. Jordan, telling us that she "guides our 6th-grade students through structure, knowledge, and responsibility. As she nurtures the understanding of science in her classroom through labs and class activities, her students' scientific knowledge will grow by leaps and bounds, preparing them for the upper grades in middle school and beyond."



Mr. Mitch, our Director of School Operations, made sure we knew his initial impressions of both teachers during their interviews. What stood out to Mr. Mitch during these interviews was the wealth of experience and knowledge that they each have in their field, as well as their passion for teaching. Other things that stood out to him were their positive attitudes, as well as the way both teachers have already shown true caring for students. Mr. Mitch was sure that they would be great additions to College Prep, which is turning out to be very true!

We asked some 5th and 6th-grade students about Ms. Mammana and Ms. Jordan. Almost half of the 5th-grade responses highlighted how Ms. Mammana is "kind" and "nice." Almost a third of replies referred to how "funny" they think she is. For 18% of the students, "fun" is the word that came to mind first. Tara A. (5th grade) stated that "She is an amazing teacher" and Shae C. (5th grade) said Ms. Mammana "is the best science teacher that I have ever had and that she is very kind (and) I love that whenever we are very giggly she will let us get our giggles out." Abdallah S. (5th grade) put it perfectly: "She is funny, but not too funny."

The 6th students had similarly enthusiastic responses to our questions about Ms. Jordan. For over half of the students surveyed, the first idea that came to mind about her was that she is "very nice." Andrew M. (6th grade), specifically said that they think Ms. Jordan is a "really good teacher". Some other quotes from the responses are "My favorite thing about Ms. Jordan is how sweet she is and how supportive she is (Iliana A.)," and that, "She is doing a great job teaching us this year (Tara B.)." Daniella M. summed up the way 6th graders feel with: "We all love Ms. Jordan" which a lot of students seem to agree with.

We hope that Ms. Mammana and Ms. Jordan stay and enjoy their time teaching here at College Prep!

# Retro or Realism?

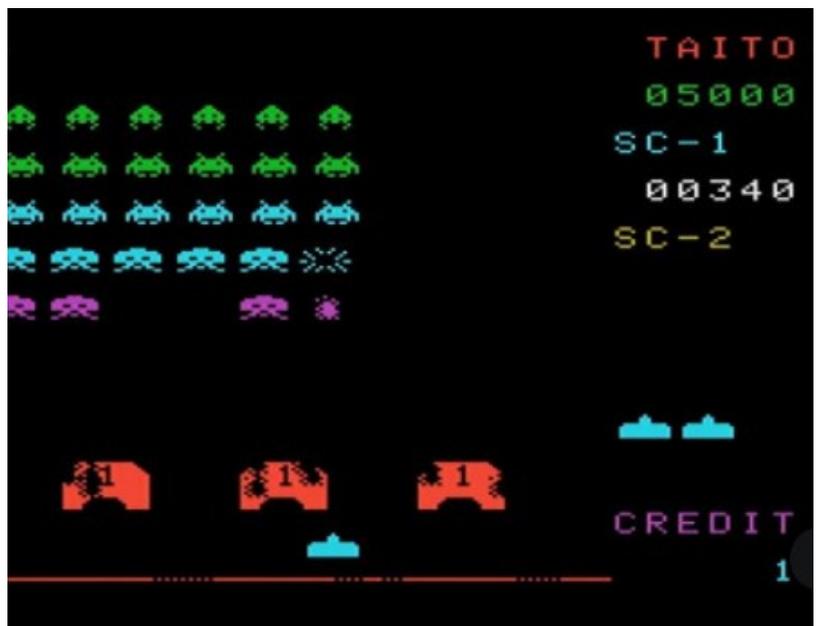
Charlotte B.

Imagine this: You're sitting on your couch, curled up with a blanket and snacks, the light of your screen shining on you. You maneuver your controls expertly, dodging each obstacle to achieve your goal: victory. Once you finally see the ending scene, you smile, proud of yourself and the happiness of winning filling you with warmth. You have just beaten a video game! The type of game can range, whether it was made recently or dating back to the 1990s, each game is different—but that joy is the same. A quick definition of different games: Games made in the 1980s-1990s are considered “retro”. Some retro games would be “Sonic,” “Tetris,” the first “Legend of Zelda,” and “Super Mario Bros.” Video games from the mid to late 2010s to present time are considered “new”, while games from twenty or more years are considered “old.” Different genres also have different names: FPS is an abbreviation for First-Person Shooter, MMO stands for Massively Multiplayer Online Game, and RPG meaning Role-Playing Game. Without further ado, let's dive into the past!

Almost everyone is familiar with at least one retro game, such as the ever-popular Super Mario Bros franchise, or the Legend of Zelda games. First things first: we will begin by trying to understand what makes retro games so enjoyable.

WIRED, a website that mainly discusses technology and how it affects us as a whole, states that, “...people can gravitate towards retro gaming as they are seeking a known trigger for a positive emotional response.” This can explain why retro games are so highly enjoyed.

I surveyed people's thoughts and opinions on why they prefer the old-time classics rather than the new-day age of video games. A retro games fan, Aiyana F. (8th grade) says, “Retro games don't have the high-level complexity that newer games do, and I'd rather play retro games with my family.” An example of a simple retro game would be “Pong,” created by Atari Games. “Pong” ended up selling 150,000 copies, released in 1972. “Pong” is a game that is fairly simple to understand and play. It is a single player game in which you move a ball around with paddles without letting it fall.



While 8-Bit graphics may cause some people to dislike retro games, that doesn't stop statistics from showing just how huge retro games are. An example is the first of the "Legend of Zelda" franchise, selling 6.5 million copies. For those who do not know, "Legend of Zelda" is an adventure game where the main character is a hero named Link who defends the land of Hyrule and battles fantasy-like creatures along his journey.

Another one of Nintendo's top-sellers is "Super Mario Bros." This is a game in which gamers play as an Italian plumber named Mario, where he jumps through pipes and battles fictional creatures. This game alone has sold about 40.24 million copies. Sega's "Sonic the Hedgehog" is another part of the retro game craze with over 140 million copies sold. In this game, users play as a hedgehog with superspeed trying to avoid certain obstacles in races. Both Mario and Sonic are referred to as a "platform" video game. Another popular retro game is "Tetris," a puzzle-based game where users line up blocks with each other in order to finish levels, where it sold 70 million copies. Although these titles date back to the 1990s, they remain popular to this day.

Many older franchises and games also consisted of many different genres, such as fighter, puzzle, or even action-adventure. A popular fighter game would be "Street Fighter," in which a player battles their opponents using moves from Japanese martial arts. Fighter games are similar to boxing, in a way. Two opponents battling (typically in the 3rd person) using attacks, defenses, and combos.

A few or so years after 2000, however, was the turn from retro to realism. The age of different games was upon us, and every gamer jumped to play it. But obviously, new games cannot be played on an older console. One

of the first of this new generation of consoles was the Sony PlayStation, releasing in early December of 1994. However, much of the newer FPS did not run well on the first PlayStation, so Sony upgraded the device and released the PlayStation 2 in 2000. That's when its counterpart came into play: Xbox. Microsoft's Xbox was released November 15, 2001.



In the early 2000s, many new games popped up. They were "Halo: Combat Evolved," "Call of Duty," "Wolfenstein," "Counter-Strike," and "Doom III" - just to name a few. Something can be noticed about all of these games: they are all from the FPS genre, which spiked in popularity shortly after these games were released. What happened next is interesting.

I'm sure many readers are aware of what the domino effect is, where one chain of events leads to the next. This very thing happened to the video game industry, after FPS skyrocketed. FPS is an abbreviation for First-Person Shooter, in which the player can feel as if they are in the game due to the first-person perspective. Many companies wanted money, so the smartest decision for them would be to create First-Person Shooters. However, you could be wondering what exactly caused FPS to grow so much, wondering what happened to beloved retro games. Luckily, there is an answer.

According to the New Yorker, author Maria Konnikova explains why FPS is so beloved in the gaming community. "... first person shooters combine a first-person perspective, three dimensionality, violence, and the escape: a virtual environment that maximizes a player's potential to attain a certain state." A psychologist named Mihaly Csikszentmihalyi, from Claremont Graduate University's Distinguished Professor of Psychology and Management, explains a reason why FPS is loved, which he calls 'flow'. Flow, according to Dr. Csikszentmihalyi, is a condition of absolute presence and happiness. "Flow is the kind of feeling after one nostalgically says, 'that was fun,' or 'that was enjoyable'."



Flow can occur virtually anywhere, with or without gaming being involved. "Attaining flow requires a good match between someone's skills and the challenges that they face, an environment where personal identity becomes subsumed in the game and the player attains a strong feeling of control." Konnikova writes. "Flow eventually becomes self-reinforcing: the feeling itself inspires you to keep returning to the activity that caused it. As it turns out, first-person shooters create precisely this type of absorbing experience."

Video games in general are about making decisions, and FPS simply speeds up each choice you make. “What might be a very simple decision if you have all the time in the world becomes much more attractive and complex when you have to do it in a split second.” Lennart Nacke, the director of the Games and Media Entertainment Research Laboratory at the University of Ontario Institute of Technology says.” Another large reason why FPS is loved is in the name: It’s a type of shooter. “‘This deviation from our regular life, the visceral situations we don’t normally have.’ Says Nacke.” This means FPS provides a new type of entertainment, almost as if it is bringing the player into another world as they play the game.

However a new game with blocky graphics, released by Mojang Studios in 2011, changed everything. As is the case with most games, this new game did not start out as much. In fact, until 2012, “Minecraft” was nowhere near the game it is today. Originally, players could only build out of cobblestone, and the player would be on an seemingly endless plain of green grass, with a dancing character called Steve.



Shortly afterwards, Mojang put the game ‘under construction’ so they could redesign it. They took away the dancing character, and added in different types of materials, or, blocks to build more with. They added trees and a landscape. A year after “Minecraft” was released, and it became more balanced, is when it got popular. In fact, it remained popular until 2016-2017, when FPS games began climbing back to the top once more.

This claim can be proven by the website BlackShell Media, which states, “The top 10 grossing games of 2016 were either FPS, RPG, Fighter, or Sports... there’s no mention of MMO, Puzzle-Platforming, Strategy, etc.” Many of these games do not end up becoming popular, but there are a few exceptions, namely, “World of Warcraft” and “Breath of the Wild.”

Minecraft's popularity had died down by 2016, and many brand-new games, such as "Overwatch" and "Pokemon GO," took its place. "Overwatch" is a FPS game where two groups of six players choose from thirty-two different characters (referred to as heroes), and battle the enemy. "Pokemon GO," on the other hand, is an app that has fictional creatures (typically inspired by



real animals) or Pokemon, that show up on the user's device (usually a phone), and then must be battled in the real world. This game required gamers to use GPS to physically travel to real-world locations. Different Pokemon appeared in different areas, which made people keep coming back to find their next creature.



Due to games such as these two, retro was left in the dust, while the craze of FPS reigned supreme. Platform games in particular were left behind, but never truly forgotten. Retro games can make it seem like the world is back in the late 1990s, carried away with 8-bit or 16-bit graphics and soundtracks. These games will forever be a part of video game history, always remembered.

Back in the 1980s and 1990s, while puzzle-based and platform games were dominant in popularity, it definitely doesn't mean that other games couldn't rise either. Some game franchises that began way back then include "Wolfenstein," "Doom," and "Street Fighter."

When research is further expanded on by going to the statistics of the games with the most copies sold, it is not a retro game that takes the crown. Mojang's "Minecraft" has risen to the top with about 238,000,000 currently sold, with Rockstar Games' "Grand Theft Auto V" (an action-adventure game) in second place with 150,000,000 copies sold and Electronic Arts's "Tetris" (puzzle based game) in third with 100,000,000 copies to its name. It's safe to say that newer games seemed to have dominated the gaming category.

Newer games also have the advantage of being able to reach more people all at once, rather than seeing many different ads on the TV until one would catch your attention. All someone needs to do now is simply post a tweet, or upload a YouTube video. It's much easier nowadays to spread information than it was back then, and many games will use that to their advantage. As soon as people see a video, they may share it, and the process would end up continuously repeating.

Retro games tend to be popular because of their nostalgia. In fact, after conducting research, many people simply do prefer retro games because of their nostalgia. In my student surveys, one player responded to my question about whether retro games are better than newer games with, "In most cases, they aren't. Video games have evolved and various 'best practices' have been standardized, making modern video games significantly better."

So now that we have gathered information about each type of game, explaining genres, and providing examples ranging from game to game, it is time. What is truly better? Is it retro games, filled with nostalgia and 8-bit? Or, are you a fan of realism, preferring games that are newer? Well, it is safe to say that there is no true answer. So, I leave the choice up to you: retro, or realism?





# SPORTS: WHAT WE GAIN



by Aidan D.

What do we gain from playing soccer, baseball, and bowling - and sports in general? In order to answer this question, first let's cover some basic information about these sports. In soccer, a player has to score a goal on the other team using only their legs, chest, and head. When a player plays baseball, they have to hit a baseball with a bat and run to the bases in order to attempt to get to homebase. Lastly, when a player plays bowling, the player has to roll a bowling ball down a slick lane in the bowling alley to try to knock down all the pins that are at the end of the lane. Mr Delgado, one of the PE teachers here at College Prep, "One of the CPMS PE teachers, Mr. Delgado, thinks that "all of these sports provide uniquely different health benefits. " Now that you know some of the basics of how to play them, let's get into what a player can gain from those sports.



When a player plays soccer, there are pros and cons, with the pros being that a player gains experience and the exercise they get from playing, and the cons being the same as pretty much any sport: the risk of injuries and pain a player can suffer. Some health benefits of soccer stated by Better Health Channel (developed by the state of Victoria, Australia) and Daily

Health Body (a blog that posts about health) are that soccer increases aerobic capacity and cardiovascular health, lowers body fat, improves muscle tone, builds strength, flexibility and endurance. Some other health benefits of playing soccer are that soccer increases muscle and bone strength, improves cardiovascular health due to shifts between walking, running and sprinting. Mr Delgado know that "playing soccer can lead to improved cardiovascular endurance and heart health... I would consider soccer the most beneficial sport, of these three, for people's health. It works on muscular and cardiovascular endurance, which not only strengthens the body, but also the mind. It also helps in reducing the chances for developing cardiovascular disease, and can be a part of living a healthy lifestyle." As a soccer player myself, I think that this is true since playing this sport has kept me in shape, and it is fun.



While this is all true, soccer is like so many sports, in that there are still risks of playing. A player can twist an ankle, break a bone, get a concussion, or any number of other injuries. But that doesn't mean they should stop playing, there are still ways a player can prevent this. The best way to do this is to wear the proper gear, like headgear, shin guards, and cleats. Also, receiving proper coaching at a young age helps players learn ways to minimize risk on the field. If players go to the right lengths to protect themselves, they don't have to stop playing due to fear of injuries. So focus on the positives of a sport and keep going!



Baseball exercises the arms, eye-coordination, and legs because a player has to keep their eyes on the ball to be able to swing and hit the ball. After that the player has to drop the bat and run to each individual base, but if the ball is caught by the other team that batter is out. If the other team doesn't catch the ball then the player can run to the bases, if the other team gets the ball, after

the ball lands, and get to the base the player is going for first, then the player is out. Also, if the ball is thrown to the pitcher, the runner, the player going for the bases, has to stop at the base he is at. Some health benefits of baseball that I learned from Rocky Mountain Health Plans (a business that provides health plans) and Ogden Clinic (run by Kevin Porter) are that baseball helps a player with cardiovascular training, it helps the player gain strong arms and strong legs, helps the player improve hand-eye coordination, and burns calories. Players can gain lots of vitamin D during a baseball game, or any outside sport, because the body naturally produces vitamin D when exposed to sunlight. Baseball can also help improve the mind since players have to concentrate to hit the ball and baseball refreshes the mind from distractions. While completing the survey on sports, Mr. Delgado wanted to make sure that everyone knows that “playing baseball can improve reaction time, hand eye coordination, and recruitment of fast-twitch muscle fibers.”



Bowling exercises the arms, and hand eye-coordination because the player has to lift the heavy bowling ball and use his/her hand eye-coordination to try and control where the ball goes so that the bowling ball can knock all the pins down. Some health benefits of bowling that Health Fitness Revolution (a blog about health) and Spare Times Bowling (a bowling center located in Hampton, VA) state are that bowling helps improve muscle toning and strengthening, the player with weight loss, improves the player's social life, helps with stress relief, improves hand-eye coordination, and helps with balance and flexibility. Mr. Delgado added that “bowling can improve range of motion in

### More Flexibility



particular joints, as well as efficient recruitment of muscle groups for the action of bowling the ball.” Mr. Delgado said that each of these sports had individual gains, but all the sports allowed him to gain one specific thing: “The things that I have gained from these sports is self discipline. It's not about being better than the person next to you, or the person you're playing against, but better than yourself. By staying disciplined in what you're supposed to be doing, you are able to make improvements and perform at a higher level. Also by being self disciplined, you are able to enjoy the time and company of the people that you are playing these sports with.”

Now that we have explored the many benefits of playing sports, you now know the answer to my initial question. Use that knowledge, and try a new sport!

# \$ I'M RICH AND YOU'RE NOT \$

Aiyana F. & Maya L. & Alana Z.

Perhaps you have watched a movie starring Leonardo DiCaprio or Tyler Perry? Maybe you have used something made by Jeff Bezos or Elon Musk? You may have even watched Lionel Messi and Conor McGregor competing in their sports? Each of these people are tremendously wealthy - have you ever wondered what they do and how they became so rich? Well look no more - you're right where you want to be. Tyler Perry and Leonardo DiCaprio are actors. Jeff Bezos and Elon Musk are inventors (Jeff Bezos is the inventor of Amazon, an online shopping source, while Elon Musk is the inventor of Tesla, founder of SpaceX, and inventor of Paypal). Conor McGregor is a mixed martial artist who used to be in the UFC, while Lionel Messi plays soccer (until recently, for Barcelona). Let's start off by discussing the one and only Leonardo DiCaprio.

Leonardo made many educational films and commercials early on. His career started in 1991 in a sitcom named "Growing Pains" when he was 16 years old. He played a homeless boy who was adopted. In the mid-'90s Leonardo began to use a wider audience with more films; at the age of



nineteen he even received an Academy Award nomination for the Best Supporting Actor. DiCaprio became huge when he was the star of the movie "Titanic" in 1997. This movie was an action movie that involved romance. DiCaprio starred as Jack, a young male who is an excellent artist that was able to board the Titanic. DiCaprio worked with Kate Winslet playing Rose, a young woman who is in an unhappy relationship with her fiancé. After the Titanic was released he earned over \$2 million with just that film. DiCaprio has now starred in many action/drama movies, as well as romance

movies. Leo's most popular movie is "The Departed" - which was an Oscar-winning film released in 2006. It is an action movie and a thriller, and according to Britannica.com, it was known as the best film of the 21st century. In this film, DiCaprio plays Billy Costigan, a Boston Police trainee who goes undercover to penetrate the city's reigning gangland kingpin and his crime family. Another popular movie that Leonardo starred in is "Inception." DiCaprio played Dom Cobb - a thief able to enter people's dreams stealing their secrets, with the advantages this ability has it cost Dom Cobb many things. Cobb was offered a chance of redemption by completing a difficult task while an enemy predicted Cobb's every move. DiCaprio is truly a great actor and has starred in many movies. College Prep students had some thoughts on Leonardo DiCaprio. Many students we surveyed know who he is. Judi I. (8th grade) thinks that, "He is a very great actor, especially in the Titanic." Isabella R. feels Leo "is a fantastic actor." We can't argue with that.



Tyler Perry was born on September 13, 1969, in New Orleans, Louisiana. When Tyler was a child, he faced physical abuse from his father. Perry's mother, being his only comfort, would take him to church every Sunday. At the age of 16, he changed his name from Emmitt Perry Jr to Tyler Perry to keep distance from his father. Tyler dropped out of high school and later earned a General Education Development (GED) degree. When Tyler Perry was financially unstable, he staged the musical, "I Know I've Been Changed" in 1992 and worked many other jobs. Once this musical became popular, he acted in many other plays and musicals like, "I Can Do Bad All By Myself" in 1999, and "Diary of a Mad Black Woman" in 2001. Both received positive reviews. Tyler Perry saved up \$12,000 to produce, direct, and star in a musical in the Atlantic theater. The musical only lasted the weekend with around 30 people attending it. In 2006, he filmed "Madea's Family Reunion" - a comedy-drama film talking about independence and self-respect. Tyler Perry played three characters in the film: Madea, Joe Simmons (the uncle), and Brian Simmons. After this film skyrocketed, he bought a studio in Atlanta worth \$30 million. Then he starred, played, and produced many other films and plays that helped him reach where he is today. The most recent play Tyler Perry has done is "Madea's Farewell Play." Tyler Perry's current net worth is \$1 billion USD. We asked CPMS students about their thoughts on Tyler Perry, here is what some students recognize him for. Kaila S. (8th grade) says, "He is very funny and knows how to act as different characters." Sarai T. (8th grade) said, "He is one of my favorite actors."



Yes, Tyler Perry can be a very interesting actor, but someone who is also great is the athlete known as Conor McGregor - who is also extremely fascinating. Conor McGregor was born on July 14, 1988, in Crumlin, Dublin. When Conner was 12, he started training at the Crumlin Boxing Club because he wanted to stand up to his bullies at school and defend himself. During this, he developed a passion for boxing. At the age of 18, he and his family moved out to Lucan, Dublin where he attended an Irish-speaking school and met UFC fighter, Tom Egan, where they both started training at MMA. Conor's first fight was on February 17, 2007, where he fought and defeated Keeran Campbell and because of this, Conor made his debut in MMA. In March of 2008, he fought his first professional MMA fight and won against Gary Morris. Now, Conor McGregor is guaranteed 3 million dollars for every fight. In 2018, McGregor co-founded an Irish whiskey brand called "Prop No. Twelve" with his business partners Audie Attar and Ken Austin. He has made most of his money from this whiskey brand, with 600 million dollars from the company by selling the majority of this Irish Whiskey brand to Proximo Spirits. Conor McGregor's net worth for the year 2021, is at \$200 million. We asked students to give us their opinions on Conor McGregor, here is some data that we were able to collect. Many students know McGregor for boxing. Chloe T. (8th grade) knows that "He's a UFC (Ultimate Fighting Championship) fighter." Jackson H. said, "I think that it is crazy that he made 100 million off of one boxing match." We agree that Conor's paycheck of \$130 for fighting Floyd Mayweather Jr is hard to believe!





Lionel Andres Messi was born in Rosario, Argentina on June 24, 1987. Lionel started playing soccer as a little boy. In 1995 he joined an advanced youth team named Newell's Old Boys. After playing with the Old Boys, clubs from Atlanta wanted him. At age 13 he and his family decided to move to Barcelona. He began playing for FC Barcelona's under-14 teams. In his junior team, he scored 21 goals in 14 games. He quickly graduated through the higher-level teams at age 16 and was given an informal debut with the FC Barcelona friendly match quickly after. Between 2004-2005 Messi became the youngest player ever to score a goal in the Spanish La Liga. He was known for being strong, well-balanced, and flexible on the field. In 2005 Messi was granted Spanish citizenship, and the year after Messi and Barcelona won the

championship league title (the European club championship). Messi continued playing with Barcelona and improving as years went by. In 2008 he was one of the most dominant players in the world. Messi earned a \$161 million annual salary from Barcelona. After 21 years with the club, he left Barcelona in 2021 and broke down at his last press conference: "We had everything agreed, but



at the last minute, it couldn't happen. This year

I wanted to stay and I couldn't. Last year I didn't want to stay, and I said it," Messi mentioned. Messi signed a lifelong contract with Adidas in 2017. This earned an extra 25 million dollars annually for him. He is the first soccer player to release a sub-brand of Adidas boots. Since Nike and Adidas are shoe brand rivals and Cristiano Ronaldo is sponsored by Nike, and Messi is sponsored by Adidas, this added to their rivalry. Messi's net worth as of 2021 is estimated to be \$400 million. Messi is a good soccer player and this is what students know him for. Jackson H. (8th grade) said, "He's a good soccer player." Riley M. (8th grade) stated, "I know that he is a famous soccer player."





Enough about Messi; let's talk about the iconic Jeff Bezos! Jeff Bezos was born on January 12, 1964, in Albuquerque, New Mexico. Jeff Bezos has always had a love for electronics even when he was a child. When Bezos was in college he studied computer science and electrical engineering at Princeton, he graduated in 1986. Soon after Bezos graduated he worked at an investment firm which is where he became senior vice president. Bezos quit this job in 1994 to plan out Amazon. As we all know, Amazon.com became one of the world's most popular online retail stores, but it was not always like that. Amazon was released to the public in

1997, it was first a large website with a variety of books. One year later, in 1998, Amazon started selling video games and CDs. As Amazon continued to grow, they began selling a vast variety of products, all the way from toys to electronics. In the beginning of Amazon.com, the yearly sales were \$510,000 but by 2020 it had increased to \$21.33 billion. That is almost a \$22 billion dollar difference between the start of Amazon and now! Now let's talk about his other achievements. Washington Post is an American newspaper that is updated daily. The Washington Post has a huge audience. According to Britannica.com, the Washington Post is often considered "one of the greatest newspapers in the country." Jeff Bezos is also the founder

of Blue Origin. Blue Origin is a private space flight company that was founded in Kent, Washington. This space flight company became more popular after they successfully launched and landed a reusable rocket. This was the first time this was done! Jeff Bezos is a remarkable man that has founded and created some of the most important inventions. Bezos' net worth is \$193.3 billion. We asked students to give us their opinions on Jeff



Bezos. Fatima K. (8th grade) thinks of him as "the richest person ever." That is no surprise. One of Bezos's greatest accomplishments is Amazon.com. Trent B. (8th grade) thinks that "he is a genius for making Amazon." Judi I. (8th grade) recognizes Bezos for being intelligent, saying, "Jeff is a smart individual and created one of the best businesses in the world."



Now, let us introduce Elon Musk! Musk was born on June 28, 1971, in South Africa. As a kid, Musk loved inventions and was always zoning out by thinking of them. His parents even had to take Musk to the doctors to check his hearing. At the age of 10, Musk's parents divorced, and

Musk took an interest in computers to create a distraction for himself. At age 17, Musk moved to Canada and attended Queen's University. Musk soon left Canada to study business and physics at the University of Pennsylvania, where he graduated with an undergraduate degree in Economics. When he graduated, he relocated to Stanford to study physics. Musk dropped out two days after attending Stanford to launch his first company called Zip2 Corporation in 1995. According to Britannica.com the company Zip2 "provided a searchable business directory..." that became very popular. Musk is a man of many successes, X.com is one of them. Elon Musk found X.com in 1999. X.com was an online bank that joined with Confinity Inc. in March of 2000. This company renamed themselves to PayPal. Musk also founded SpaceX in 2002. SpaceX is an aerospace company that is trying to make spacecraft affordable and reusable. SpaceX made a rocket called Falcon 1, this liquid-fueled vehicle was launched to orbit the Earth, sending satellites into orbit. In 2003, Elon Musk founded Tesla Motors, which manufactures electric



cars. This was revolutionary, decreasing the amount of gas

emissions from vehicles. Musk released the first car in 2008 named the Roadster. The Roadster can run for 245 miles on a single charge. Now Tesla Motors has released many electric cars. Elon Musk is an astounding man that has had many triumphs and now has a net worth of \$219.9 billion. Students

who gave thoughts on Elon Musk include Savina J. (8th grade), who said, "I think that Elon Musk is neat because of his work in space travel and how he's trying to make it affordable by creating SpaceX. I also like how he created Tesla so more cars can be electric (good for the environment) and more futuristic." Sofia A. (8th grade) noticed Musk for being, "A very smart guy and a businessman." We can't disagree with what they have to say!

# GOOGLE VS. MICROSOFT: RIVALS OF THE INTERNET

Jackson H. & Riley M.

Microsoft. Google. You're on your way to get a new computer because it turns out that your other computer could not fly like you thought it would. You have now made enough money from your part-time job at McDonald's to afford a new computer. But which company to choose? And what web browser will you install on that new computer? Over the years, electronics companies have only grown. Two of the most notable companies are Microsoft and



Google. While Microsoft has been around for twice as long, in this article we will strive to find out if Google can compete with Microsoft, or if Microsoft will remain the ruler of the electronic domain. Let's take a "byte" into this competition!

Before we get into the numbers and analytics, let's learn a few things about the companies' backgrounds.

Microsoft was created 46 years ago and has won multiple awards in the past two years. Google was created 23 years ago and has also won many awards in the past two years. Now that you have some background info, let's get into our research! We researched the number of monthly users of both of the companies' web browsers, and as it turns out, Google Chrome is the most popular with almost 4 billion active monthly users, and Microsoft Edge only has 250 million monthly users. While the numbers may already prove that Google is superior in monthly users, we want to find out what the people around us thought, so we surveyed some of the teachers in the school and found that the teachers prefer Google's browser and search engine. With 18 responses, we can confirm that 100% of the teachers surveyed agree that Google is the search engine of choice. While the browsers might be separate from the search engines, the results were similar. Only 5.6% of teachers preferred Microsoft Edge. The other 94.4% of teachers agree that Google Chrome is the browser of choice. When CPMS students were surveyed, the results were similar to teachers' responses. Once again, Google remains dominant with 90% of students using both Google Chrome and the Google search engine, while only 10% chose Microsoft Edge and Bing. So we can take from this information that when it comes to searching things on the internet, Google is everyone's preferred company, but how do the prices compare?

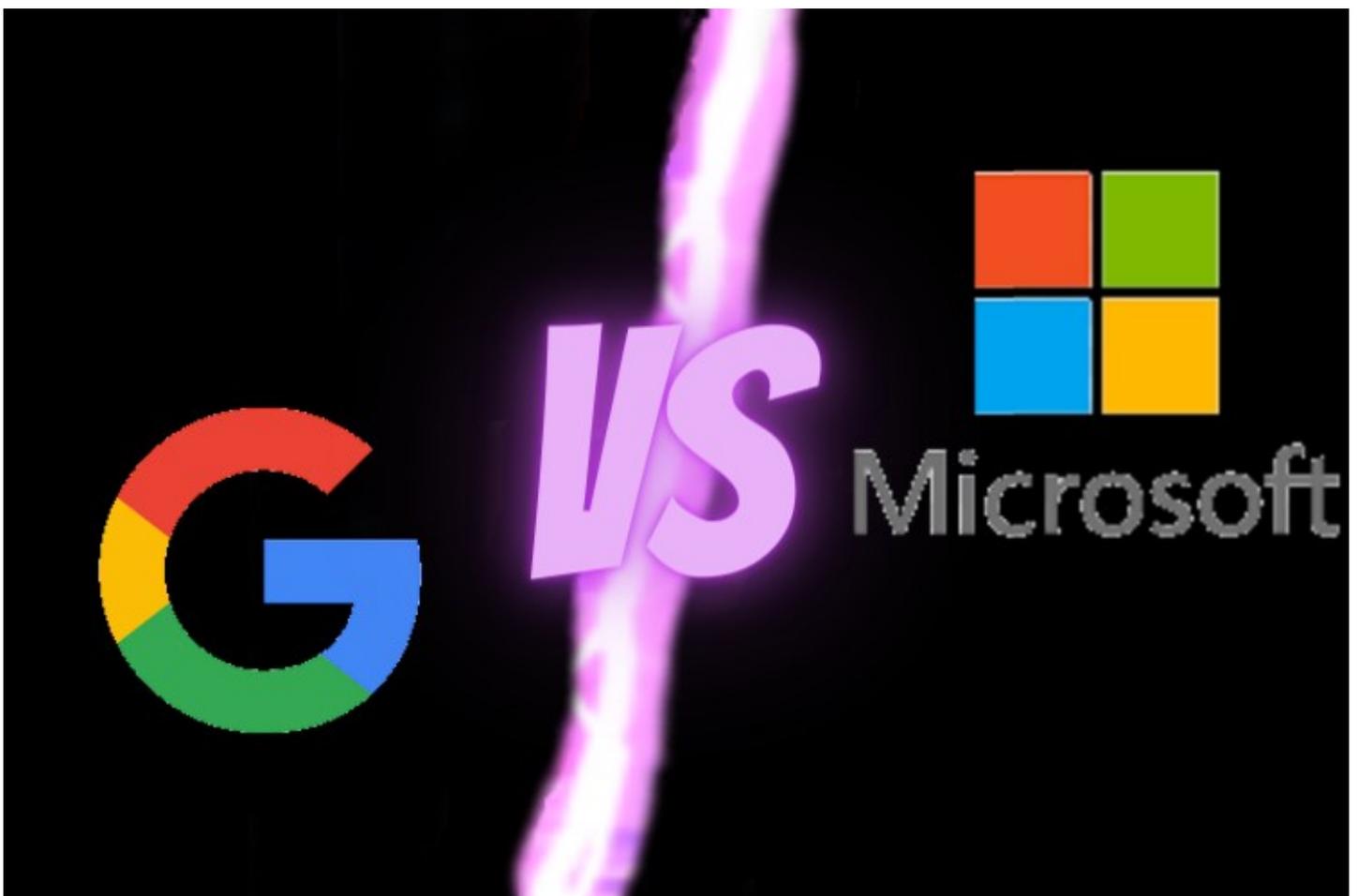
First of all, we have to find out which products from either of the companies are the cheapest, and also the most expensive. The cheapest computer from Microsoft is the Microsoft Surface Go, which will only set you back about \$550. However, the most expensive Microsoft computer would be the Microsoft Surface Studio, which costs over \$3,500 - a big difference! Now let's look at Google. Google's cheapest computer would be \$650, (\$100 more than Microsoft) while the most expensive computer is \$1,400. Microsoft has been around for longer, and therefore has more experience with computers. It appears they have used that experience to produce a much more powerful computer than Google can create. But this doesn't answer the question of which company makes more money. In 2021, Microsoft grossed a profit of about \$61.27 billion, while Google grossed about \$44.28 billion in profit. The majority of Google's profit comes from "Search and other properties". This means that Google makes most of its money from paid advertisements on different sites, especially through the search engine. Google made 71% of its profits this way. Microsoft makes most of its profit from its intelligent cloud system, which refers to Microsoft's attempt at developing A.I. such as Siri, but for Microsoft Computers. This also happens to be the fastest-growing segment of the company. This evidence shows that Microsoft has the upper hand in the money-making area, but who is superior in the area of computer quality?



When it comes to computers, the area of expertise varies in each company. While Google focuses on laptops, Microsoft is known for its desktops. The first thing we need to do is compare the prices of each company's cheapest and most expensive computer. When we looked at the range of prices, Google's computers can be anywhere from \$650 to \$1400, which will get you a measly 16 gigabytes of storage, up to a much more helpful 256 gigabytes. The price range for Microsoft computers varies more than Google's computers with the gap from lowest to highest price at Microsoft being larger than \$3000. Microsoft's cheapest computer has 16 gigabytes, but with the most storage, Microsoft's most expensive desktop has a storage of 2 terabytes which is (one terabyte is 1,000 gigabytes). To put that into perspective, the Google Pixel 5 had 128 gigabytes of storage. This means that the Surface Studio has around 14 times the storage of the newest Google Pixel. Impressive numbers for Microsoft, but what do people think about these computers?

For this question, we went and surveyed people to see what they thought about each computer. First, the teachers were surveyed, and they believed that the Microsoft desktops were better with 83.3% of teachers surveyed agreeing. With students, the answers vary. 68% of students agreed that Microsoft's desktops were better while only 32% chose Google computers.

You may want to know how Google and Microsoft are going to level up over the years, so we are going to find out what each company's plans are for the future. To start, phones will have searchers using the built-in cameras to search visually, using Google Lens. This will allow people to take pictures of objects with their phones, and search for similar items on the internet. For Bing, Microsoft plans to create an extension for Google Chrome, and add it to the Chrome Web store. This extension will make Bing the default search engine, contrary to Google. This will be available across most Google computers. Onto our conclusion!



While the Google versus Microsoft battle may never end, we all want a winner in the meantime. So to find this out we looked at who had the advantage of each subtopic in this article, and it comes down to... Microsoft. While Microsoft may have won, we are sure Google has plans to rise above Microsoft in the future.

# High Steaks

Leo N. & Gavin N.

If you've seen a cow going up an escalator, then you've seen the steaks being raised. All jokes aside, steak is a mouth-watering food that has many varieties, and this article will explore the breeds of cattle used, the cuts (the parts of the steak that the consumer is eating), the grading that defines how luxurious the steak is, and finally how to actually cook the steak. So hold on to your chef hats because we have a runaway cow to catch!



Even though the world of steak might appear shallow, there are actually an extensive number of varieties of steak. Variations can include the breed of cow, the different cuts of steak, the grade of the steak - not to mention how it is cooked. The breed of cow is important because it can affect the tenderness of the steak cuts, and the overall size of the cattle. To start, the



tenderness of the cattle is affected by the breed as it impacts the amount of fat in the cow. The Journal of Agricultural Research (Vol. 19, 1976) shows that the Black Angus has an average of 11mm of fat on the 12th rib, while in comparison, the Friesian cattle had an average of 4.46mm of fat on the 12th and 13th ribs. This shows that the breed of cattle directly impacts the tenderness of the beef. Also, some cows grow into larger cattle than others, like the Hereford breed (which can weigh up to 1800

pounds) compared to the most popular breed of cow in the United States, the Black Angus, which only weighs 1200 pounds.

Steak is a food that is widely known throughout the world, the average American consumes around 144 pounds of beef every year. Compared to some other countries, this is a lot. India only consumes only 8.8 pounds of beef a year per person, mostly because their religion holds many laws against the slaughter of cows. The production of beef in the U.S alone added up to 27.5 billion pounds in 2020 and 2021, and the consumption was 27.3 billion pounds. This adds up to around 298,799,160 cows killed a year. Countries like Burundi don't eat as much beef as countries like America and Japan due to lack of resources.



Research has been done on the performance of 6 different breeds of cattle and how they performed in producing the best quality of meat. According to data collected in the Journal of Agricultural Research (Vol. 19, 1976), it is apparent that the breed will affect the quality of the steak. One reason is the amount of fat on the ribs of each breed. Also, the breed of cattle will affect the size of the cut because some cows have larger parts on their bodies. The results show that the Angus beef was the best out of all of them. Angus beef comes from a native breed of cattle from Scotland. And according to all this research, the Angus beef came out on top.

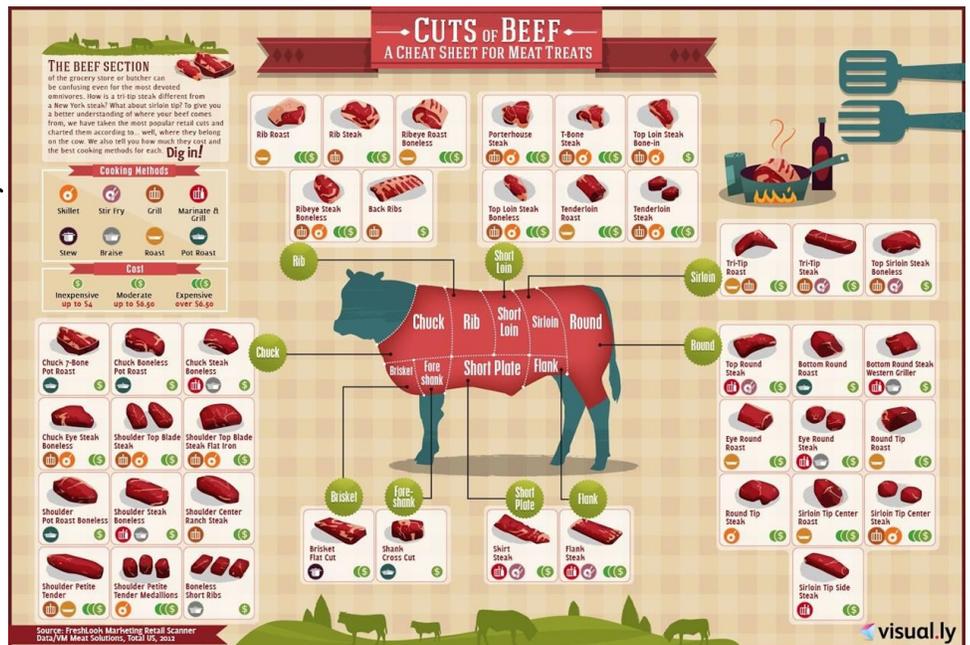
The breed of a cow is important, but another major factor is the cut of a steak. The cut of a steak depends on

which part of the cow the meat is taken from. The different cuts taken from the cow will affect the taste and tenderness of a steak. The chart above shows the different cuts of steak on Angus beef, the breed of cow that excelled in the tenderness chart. The chart explains the cuts of meat and where they are. Some cuts have more fat than others, much like the top sirloin cap which has a lot of fat, and the ribs which are used to measure the tenderness of the meat based on the amount of fat on the 12th and 13th ribs. Some cuts will taste better than others based on the eater's preferences for how lean or tender they like their steak.

The most popular cut in America is the filet mignon, which translates from French into the tender, delicate or fine filet. According to the results of our survey of CPMS teachers on their steak preferences, the filet mignon is the most popular among our staff. The filet mignon is a steak cut on the higher pricing of the spectrum, and with good reason.



Prices of different cuts vary greatly because they impact how the consumer can use the meat. The cut of steaks requires to be cooked differently because of how tender or fatty they get when cooked. Most steak cuts can be grilled or fried on a skillet, while others have to be roasted in a pot or cooked into a stew. The cut of steak will determine how much meat, the consumer will be getting and what certain type of taste and texture the consumer will get after eating the meat.



Steak cuts are very important when it comes to picking out the perfect steak for a barbeque with friends and family, but the type of steak is not the only factor when looking for a steak. There are different grades or qualities of a steak, based on certain qualifications that the steak meets. For example, a cut of steak given the best American grade, prime, would likely be super tender and to have heavy marbling. Marbling is the specks of fat inside the cut of steak, and it is separated from the largest strip of fat on some cuts of steak. America also uses other grades like choice and select. Choice steak would be a standard grocery store steak, which has less marbling and tenderness but is still of decent quality. Select steak has almost no marbling and less flavor, not the best choice but still edible.

Yield Grade	A	A1	A2	A3	A4	A5 (Best)						
	B	B1	B2	B3	B4	B5						
	C	C1	C2	C3	C4	C5						
Meat Quality Grade	1	2	3	4	5							
BMS	1	2	3	4	5	6	7	8	9	10	11	12

Not all places have the same grading system. Japan, for example, has a more complicated grading system that is divided into two sections. These two sections are yield grade and BMS. Yield grade is the amount of meat on the carcass. The Yield grade is described as A, B, and C. A being the best and C being the worst, and a below standard Yield is the worst amount of meat. The other part of the Japanese grading system is the BMS, also known as the beef marbling score, the BMS describes the amount of marbling on the steak. The BMS is described through 1 and 12: 1 being no marbling, and 12 being an absolute extreme delicacy.

Steak is delicious, but there is not only one way to cook it, but there are also hundreds of ways, some known better than others. A popular way of preparing steak is not even cooking it at all, then by cutting a piece of meat into strips and seasoning it, before dehydrating it. Once the meat has dried, this makes one of the most known kinds of snack food: beef jerky. Beef jerky is a kind of dried meat that is easy to make and requires almost no materials.

Another popular way to make steak is to just cook it on a grill, some grill recipes may vary depending on the cut, but one of the most popular cuts, top sirloin cap, is cooked by switching the sides at which the steak is being cooked on whenever a crust is made, the temperature for this is 400 to 500 Fahrenheit and slightly above. Cooking on a high heat gas grill can give a delicious steak a nice crust and a steak cooked this way can be made as rare or as well-done as anyone wants it.

Lastly, a way to make a mouth-watering steak that pulls so easily, of course, I'm talking about cooking steak in a slow cooker. Cooking a steak this way will leave the steak easy to pull apart and very delicious. The steak will have a lot of flavor in it and the steak will be easy to chew. Now, these are only some of the many ways to cook up a delicious steak, there is still a lot more knowledge to be found and we hope we were to be a good source of enlightenment for knowledge about the wonderful world of steak.



# Encryption and Decryption: The Heart of Privacy

Joseph L.

You're sitting on your couch, it's 9:23 a.m., and you're drinking your coffee ready to pay your bills... you realize your bank account is locked! There is no way to access it. Why is this you ask? It's a criminal, not any criminal but a cybercriminal. You have been hacked. Once you have paid an expert to fix the problem, you ask yourself, "How can I stop this from happening next time?" Learning about encryption might be your best option.

## What is Encryption and Decryption?

Leo N. (8th grade) provided this overview of encryption: "Encryption of data is a way of sending data between

sources without letting any outside sources access the information." Encryption changes the configuration, or structure of a file, message, or different types of data, so that the person and only that person who created this encrypted file can come and decrypt it to relook at the file, or fix things. However, anyone who doesn't have access to the file may not access the

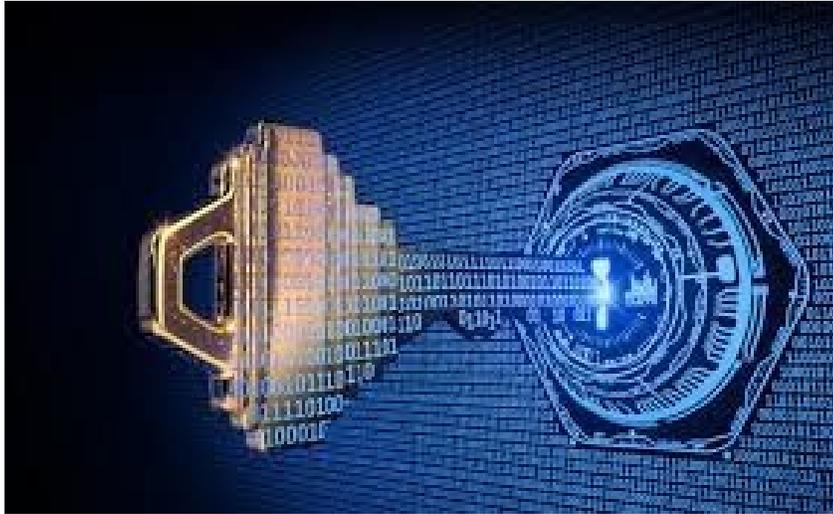


file, message, or data unless they decrypt it. Whoever is seeing the encrypted data it only shows numbers, symbols, and gibberish such as 83j@hg&jdk. The opposite of encryption is decryption. What is decryption? Well, decryption reverses the encryption process, so as criminals see the gibberish on your screen, when decrypted the gibberish is then turned back into the original information. This is the process of decryption, which is used regularly for important things such as government work. Cybercriminals use decryption as a way to steal information from a particular account or a general computer to profit out of it, such as stealing money or stealing valuable assets on computers. Have you ever come across encryption or decryption in your time?

## Why We Need Encryption and Decryption

Encryption guarantees that no one can read messages or access data except the legitimate recipient or data owner. Many industries and government departments have rules in place that require organizations that work with user's personal information to keep that data encrypted. An example of this would be when two different people from two different companies come together and join, all data must be encrypted so that no one sneaks and steals information, money, or ideas.

Encryption helps protect information from data breaches, whether the data is at rest or in transit. Investigative services, agencies, industries need encryption, decryption to keep data safe, or even if industries are creating something new or different like a “secret sauce” and encryption allows them to keep it safe. Especially in classified cases in federal agencies encryption is needed to keep secrets away from the public to keep them safe from truths. Federal agencies decrypt files that they need to get into to solve an investigation as well as prove a theory about a particular case. From our own phones encryption is



used to keep personal things shielded such as photos, bank accounts, Internet Protocol addresses, passwords, usernames, and even to defend belongings if ever in a ransomware situation.

Ransomware is a device malware that blocks all personal files from use by the original user and blocks usually with encryption until they pay the ransom. Malware attacks have been appearing a lot lately, but did you know they have been happening since the early 2000s? An example of a famous ransomware attack is the ILOVEYOU letter. When an internet user clicked on the ILOVEYOU letter, the virus would take control of the computer extremely quickly - holding and deleting pretty much all of the files on the computer Shortly after it was released, it had spread to more than 10 million devices around the world, causing 15 billion dollars in damage. Malware in general is becoming something we might run into more and more, however with encryption our files are safe from any third-party interactions.

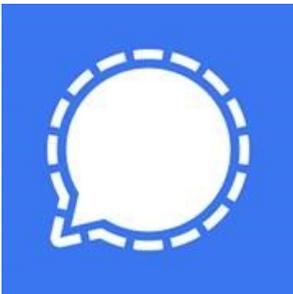
## Algorithms

What allows data to be encrypted and decrypted? Algorithms! The Data Encryption Standard, which is a form of a symmetric key algorithm, explains how to decode and encode data. This is also called public-key cryptography, this uses two mathematically linked but non-identical keys. The public key is used to encrypt and the private is used to decrypt. Private cryptography is a secret algorithm, this only works if the sender and receiver both know how to decode the message or file - without this it can't be called private cryptography. This is a better alternative because of its ability to only use one key instead of two keys. There are three distinct types of encryption: symmetric, asymmetric, and hashing. Symmetric encryption is a single key used to encrypt and decrypt data; both recipients must have the code to proceed with this process. Asymmetric encryption is a public encryption type that requires two significant keys to work, a private key and a public key. The public key is used to encrypt data and the private key is used to decrypt the data. Hashing or “hash function” is a specific tool given to each set of content like messages or files, hashing turns normal text words into cipher text.

## Where Encryption and Decryption Take Place

A lot of apps that so many of us use regularly - like Twitter, Facebook Messenger, Snapchat, and Instagram - do not use any type of encryption. This means that any type of private messages or personal specifics about you or from you or to you on these apps may not be fully protected. Features to look for when choosing certain types of services include end to end encryption, synchronization events, and different ways of communicating (like sending pictures and hand signs which are mostly linked to video chatting).

Some apps/websites/services that use encryption include, “Signal private messenger”, “Wire”, “Threema”, “Telegram”, “Whatsapp”, “Wickr Me”, and “Viber”.



Signal private messenger. Signal is one of the world's most famous encrypted communication systems. This app is amongst the few of this feature which has privacy-preserving technology always turned on. This allows no risk of your conversations being “leaked” for a second or two. This is a very popular app with journalists, who use it to protect sources.



Wire. Wire sets a end to end encryption standard which allows all data and files to be safe at all times. This program has transparent background so instead of having to activate “safety mode”, it already has it on. This is also 100% open source which means it allows users to modify and view. When typing on these apps each word is given a key which blocks any 3rd party interaction, which creates an even safer environment to keep away the hackers.



Telegram. Telegram, also used by most companies such as Paralect, CTT, and QIWI, is a widely encrypted program with completely safe conversation. Each conversation involves end to end encryption only if both the sender and the receiver use this, So when it isn't both recipients don't have it on it will not be encrypted. Telegram also provides a self destruction sequence which allows any messages, files, and photos to disappear for good after the designated time has run out.



Threema. Threema is used by at least 5,000 companies and organizations around the world. Threema is a private messaging app that allows itself to be guided by principle. Information managed here is usually managed locally on the device.



Whatsapp. Whatsapp, one of the most popular and well known communication apps owned by Facebook is the only app where the users are warned when an encryption isn't assigned to the conversation. Messages aren't stored in the servers, so don't worry if anyone were to hack into your conversation cause there is no way to decrypt the message.



Wickr Me. Wickr Me is one of the only apps that can be used anonymously. This allows unknown and unverified users to chat with encrypted messages. The theory is that anonymity prevents worry about information taken away. Users can also share screens, status checks, and locations. Encryption is turned on by itself, which means it requires no manual switch.

Many more apps offer end to end encryption to keep personal data safe. These apps are great options for personal use such as banking and taxes and especially for work - particularly work that is important or "classified". Encryption ensures safe and easy data procedures for all.

### Education/Jobs

You may be thinking "I like what I see so far," and now you're wondering if cryptography can be a part of your future job list. If so, Simplilearn CISSP online certification training course is a great starter. The price ranges from \$80 to \$5,000 with courses taking 12 hours to 10 months. This course increases knowledge in IT architecture and in designing. Building and maintaining a secure business environment using globally approved information security standards. Technology and Computer based schools are great for learning about topics like these, such as simpler ways to encrypt or decrypt. Some schools that provide study abroad cryptography in the United States are, Merrimack College, Brown University, Santa Clara University. Jobs that involve encryption and decryption can be federal such as certain investigative agencies. Jobs like financial services, hospitals, to keep medical records safe, as well as media companies, and agencies such as FBI, Homeland Security, and CIS. Three quarters of our government use encryption and decryption. Would you like to be a part of this fascinating job in the future?

John McAfee, the creator of the McAfee antivirus, stated that, "We are losing privacy at an alarming rate - we have none left." While encryption and decryption can ensure you the privacy that you need. Don't you want to give cybercriminals a devious comeback with encryption. Now when

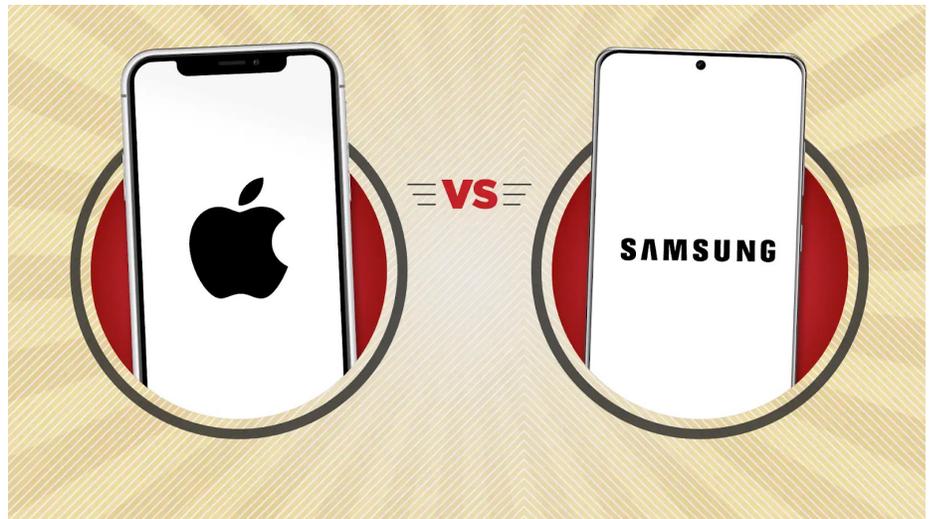
encryption is applied what will they see? Certainly it won't be your bank records. What is it? Jmmgqdfeadhui..."ERROR"...25fdfpbsd... "ACCESS DENIED"...



# The Superior Smartphone

Judi I. & Chloe T.

Would the buyer rather pick an Apple, or explore the Galaxy? We are of course talking about phones made by Apple and Samsung. In 2021, the number of smartphone users in the world is 6.378 billion, which tells us that about 80% of the world's population owns a smartphone. When it comes to electronics, Apple and Samsung



are two of the top-selling companies. In this article, we will compare the Apple and Samsung companies, as well as their newest smartphones. Then we will explore the College Prep teacher preferences, and help the buyer decide which phone is better for you. When you reach the end of this article, finding the best device for your needs will be simple.

The success of both Apple and Samsung have resulted in each of them becoming huge companies. Apple first started on April 1, 1976, but did not make phones until January 9, 2007. Samsung started way before that on March 1, 1938, as a grocery store, trading and exporting goods produced in and around the city but they did not make phones until June 29, 2009. Apple is more successful now, but we'll get to that later on. Steve Jobs, Steve Wozniak, and Ronald Wayne were the founders of Apple. Apple is called "Apple" because, as Steve W. claims, "We both tried to come up with technical-sounding names that were better, but we couldn't think of any good ones." Lee Byung-Chul is the founder of Samsung. Samsung is called this because Samsung is a Korean word and it means "three stars". In Korea, "three" means big, or powerful, while "stars" represents the idea of "eternal".



As of September 27, 2021, Apple has a net worth of over \$2000 billion (\$2.4 trillion, to be exact), which means this company makes \$1,752 every second. As of May 1, 2021, Samsung has a net worth of 220 billion dollars, which is still a crazy amount of money. So, based on this information of both companies' net worth, Apple is more successful than Samsung. However, as you can see, both Apple and Samsung are very successful and create more and more technology for their customers.

Both Apple and Samsung are constantly making new models of all their products, but the newest ones are what we'll focus on now. Apple's most recent model, the iPhone 13 Pro Max, came out on September 14, 2021. The iPhone 13 Pro Max comes in silver, graphite, sierra blue, and gold & \$1099, but an old phone can be traded in for the price to decrease, but depending on the phone, the price will differ. Samsung's newest model, the Samsung Galaxy Z Fold3 5G, came out on August 27, 2021. The Samsung Galaxy Z



Fold3 5G comes in phantom black, phantom green, and phantom silver and is \$1799-1899, but the buyer can also do trade-ins to lower the price.



Moving on to the durability of the phones. Both brands make phones out of strong materials that will sustain fall damage, however not from a very high distance. Apple claim their new iPhone is water-resistant. So, this means that when you go to the beach you can risk taking a little swim

with your iPhone, and pray that Apple is honest! Just like Apple, Samsung has made their phone water-resistant. Samsung, unlike Apple, has made their phone lighter, which is great for the buyer and the daily user of the phone. Samsung's screen is scratch-resistant, unlike Apple's.

Onto Samsung's new folding feature! One of Samsung's biggest accomplishments this year is that the Samsung Galaxy Z Fold3 5G's folding feature works, whereas their last folding phone was a disaster. The folding feature on this new phone has a typing feature where the phone is just like a computer, so that it can be used as a keyboard. This phone is also able to watch videos while the phone is laying on a surface, and watch videos on a bigger screen! The phone doesn't always have to be folded out, it could be folded to use as a regular phone. Luckily, Samsung has not given up on this feature and has brought us with this new and improved electronic. Another perk of this folding feature is that it allows the phone to create videos with multiple angles. One review of the Galaxy Z Fold3 5G informed us that the bigger screen is perfect for making plans and brainstorming ideas. However, many reviewers do agree that the battery does not last very long. Based on this information, because many people agree about the short-lasting battery life, that is most likely true. But, there are many likes and dislikes posted online about this folding feature.



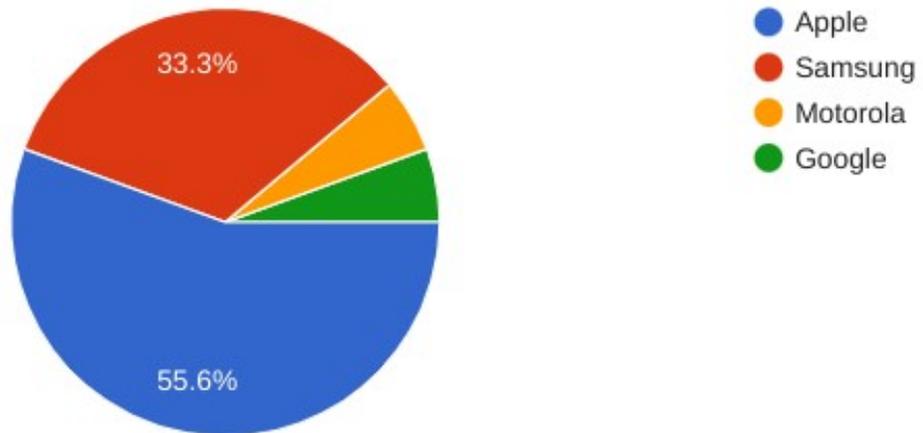
Both phones have three cameras built in different arrangements, which both companies claim allows the user to shoot the perfect pictures. Unlike the iPhone 13 Pro & Pro Max, Samsung has updated this phone's front and rear cameras, whereas Apple only focused on the rear cameras. According to [www.cnet.com](http://www.cnet.com), Samsung offers more versatility, but the amount of options, settings, and modes can become overwhelming.



Apple and Samsung have very different operating systems. Apple uses IOS, with the IOS 15 being the newest version. Samsung uses Android (part of the Google company), as do many other brands of smartphones. Android's newest version is Android 11. Apple's IOS 15 has updated many of its apps such as FaceTime and text messages, while the new Android update has mainly focused on messaging updates such as, pinning a chat, and adding "read" when the person who is texting opens the chat. Overall, IOS is a more closed system, while Android is a more open system.

We have surveyed the teachers here at College Prep Middle School to find out their thoughts and ideas for phones as a whole. As a whole, the teachers and staff mostly use Apple. Of the eighteen teachers we surveyed, ten have chosen Apple, six use Samsung, and there is also one each who use phones made by Google and Motorola.

Starting with the fifth grade, three of the teachers use Apple and one Samsung. Ms. Mammana tells us that she picked Samsung over Apple because she used Chromebooks at



her last school and wanted to use the same platform for all of her technology. Samsung runs Android (which, as mentioned above, is owned by Google). We believe that she made the best choice for what she needed on her phone and what she was going to use it for. She thought about what she liked, which is the same OS, and stuck with it.

Moving on to the sixth grade, two of the teachers use Apple and one uses Samsung. Mrs. Guiten tells us that she chose Apple because "Apple is at the forefront of the smartphone industry. It seemed like the logical choice." As long as Apple fits her needs, Ms. Guiten clearly made the right choice for herself.

Next is seventh grade, two of the teachers use Samsung, but one has chosen Motorola. Mr. Alarcon chose Samsung because, as he states, "I prefer Samsung because I can buy accessories that are just manufactured by Samsung. Also, I can add a memory card to my Samsung, something I cannot do with an Apple phone." We think that this is true and helpful, and beneficial for Mr. A's needs.

Last but not least, two of the 8th grade teachers use Apple and two use Samsung. Mr. Bensley chose Samsung because he has never liked how Apple has a different type of power cable, but does like how Android phones like Samsung have a "back" button. We agree with Mr. Bensley's reason for picking this brand because he focused on what makes using a phone easier. One thing we learned is that teachers of all grades here at CPMS are very loyal to the products they picked and very rarely have switched from one brand to another.

We believe that the phone the user buys should be the best for their needs. If you are buying this phone for business reasons, we believe that you should buy the Samsung Galaxy Z Fold3 5G. With the split-screen, it gives more ability to complete multiple tasks at once. The Samsung has a longer battery and when working they don't also have the option to go and charge their phone. With the long-lasting battery, the phone will stay alive longer making it easier to work with. The 1TB storage allows the user to save as many things as they need, with bigger storage more things can be downloaded and added. In conclusion, if the consumer is acquiring a phone for business, they should buy the Samsung Galaxy Z Fold3 5G.



If the consumer is buying a phone for personal use, we recommend buying the iPhone 13 Pro Max. Apple products can help connect to your family with shared photo albums and facetime calls. Apple also has a warranty where if the phone breaks or is unusable, it can be fixed at one of their stores. Apple also makes it easier for the users to understand their phone and how to work it. Apple is very consistent, they come out with the same types of products but make them better each time. So when you are switching models, it is easy to understand how to use your new phone. Apple makes the overall use for the consumers easy and simple. To sum it all up, if the customer is purchasing a phone for personal use, then they should buy the Apple 13 Pro Max.

In conclusion, Apple and Samsung have been the top two best-selling iPhones companies for a long time. Picking a phone from either company is a task that takes a lot of thought and research. We believe that if you want a phone for a business, you should buy the Samsung, and if you want a phone for personal use, we believe that you should buy the iPhone.

## Beyond Sports:

### How the sports industry has a ONE TRILLION dollar economy

Christopher A.

When you think about the sports economy, what do you think of? Ads, ticket sales, t-shirt logos. What you may not know is that the industry includes plenty more substantial professions. Well, the sports economy consists of a great deal of things that may not first come to mind when you think of the sports industry, such as

gaming, YouTubers, etc. In fact, according to the University of the West Indies, “the global sports industry brings in 700 billion dollars annually, making up 1% of the world's GDP, and the global sports market itself is worth a whopping 1.1 trillion



dollars.” You may then think, where does all this money come from, ads themselves can't bring that money in? So, prepare yourself to take a deeper dive into the vast economy of the sports industry to discover how the industry is a 1.1 trillion dollar stronghold, and to discover what surprising components the sports industry holds.

To start off, let's look into the sports entertainment industry, or entertainment outside of just watching the sport. The sports entertainment industry consists of a vast platform of content creators who analyze, predict, and even make fun of the players or the game itself. Let me tell you it's a lot more than just commercial television companies, there are also platforms such as YouTube and Twitch. For example, YouTuber Chris Smoove has 5.08 million subscribers and a total of 3.5 billion views across all of his videos according to his profile on YouTube. He has more subscribers than the population of Ireland! To put how much he made off views in perspective, [influencermarketinghub.com](http://influencermarketinghub.com), a site analyzing marketing, reveals, “On average, a YouTube channel can receive \$18 per 1,000 ad views, which equates to \$3 - \$5 per 1000 video views.” Views divided by the lowest rate, 3 dollars, puts his net worth at \$1.6 million just from ad revenue alone! And that's on the low side. In fact, a more accurate representation from



[networthspot.com](http://networthspot.com), a net worth analyzing website, states, “Chris Smoove has an estimated net worth of about \$2.76 million... off only advertising alone, Chris Smoove may be worth closer to \$3.86 million off all other assets.” 3.86 million! Can you believe that? A man who started making videos in his room, talking not even about the game but the video game of a sport itself, is worth 3.86 million!

Speaking about entertainment, the NCAA has also announced that college players may make money of their own image. This means that, just as Chris Smoove started in his room making videos, college players can now start in their dorm. They can start all sorts of things from documenting their experience, to gaming. In fact, the YouTuber “Destroying” had to give up his scholarship before this rule was announced. Now, networthspot.com, puts his net worth at \$1.96 million dollars off ads alone. With this new rule, college players can stay focused on their career and profit from the entertainment industry. Furthermore, television companies themselves are making record numbers! In fact, fool.com, a financial advice website, states “ESPN generates over \$11 billion in revenue annually.” Television companies are still banking off sports! Entertainment is a huge part of the sports industry; not only does the entertainer profit, but they bring light to the sport they are talking about. In this way, the entertainment industry helps sports leagues a lot.

The retail economy is one of the largest parts of the sports industry including, sports cards, games, clothing, etc. The retail end of sports can be found all around the world, fueling a multi-billion dollar economy. For example, video games are a vital part of the sports retail economy. Sports games all around the world are played by people, and some individuals even have careers upon these games. The world of video games is growing and growing especially upon sports. In fact, tweaktown.com, an gaming analytic site, mentions, “NBA 2K20 has managed to rake in over \$1 billion in total earnings with 14 million copies sold in less than a year.” For reference, GTA 5 (a non-sports game) made 595 million dollars in revenue in 2019 (according to pcgamer.com, an analytic based gaming website). So 2K20 more than doubled GTA, which is considered widely popular. Sports games may also introduce someone to a sport. For instance, my friend Sharmoota M. got into basketball because he was always playing 2K20. Now he is one of the biggest basketball fans I know!



Recently (especially during the pandemic), the industry for sports cards has boomed. As a matter of fact, sepctrumnews1.com, a news company, predicts “Market research shows the sports card industry was worth \$13 billion in 2019, and could be worth upward of \$100 billion in 2027.” I even went to Target during September to buy some sports cards, only to find out they were all sold out and a sign that stated they have had to impose a limit of two products per customer. This simple story shows how the sports card industry is enormously successful - not



only for the manufacture of sports cards, but for the many sports card investors and shops. Particular cards can even be worth millions of dollars. For instance, just recently in April, a LeBron rookie card sold for 5.2 million dollars according to overtime.tv, a basketball news company! There is also a huge sneaker market, clothing market, and more! The retail economy will just keep growing and growing, and we're here for it.

Speaking about sponsorships, the sports economy also is substantially made up of direct sponsorships such as, television ads, shirt logos, billboard ads, official partners, etc. Companies all around the world want to sponsor many different components of sports games. In fact, companies such as SoFi are reportedly spending 30 million dollar, per year for name rights of a new Los Angeles stadium recently built according to forbes.com. Can you believe that? A company is paying \$30 million per



year just to put a name on a stadium! And that's not the best of it - according to Forbes.com, this is a 20 year contract, meaning the contract is worth a whopping \$600 million. That's eight zeros! You may think, what about the ads I see every Sunday watching football, how much do those cost? Well, statista.com, a website analyzing statistics states, "The research shows that a 30 second TV ad during the broadcast of Sunday Night Football during the 2019/20 season cost around \$712,000, an increase of seven percent on the previous year." All for a 30 second ad! Don't you ever wonder how many people tune in to watch those ads every Sunday? Well, we have the answer. Nielsen.com, a stock analyzing company states, "primetime NFL battle drew an audience of 17.6 million on NBC, according to Nielsen, a stock analyzing company, an average 17.6 million people tune in every week to watch football games on Sunday on NBC alone! That's crazy. Television ads in the midst of sports benefit companies all around the world. They bring in huge publicity and even direct profit in some cases. In fact, I am among the many people who have been influenced by these ads . For example, there was a time when



I wanted an app called "Rakuten" but I needed to make sure it was trustworthy, it sounded a little suspicious. So I searched up "Rakuten" and immediately their logo appeared slapped on the jersey of the soccer player Lionel Messi. I then decided to trust the app and use it. Ads among sports can influence viewers greatly just as they have done to me. Direct sponsorships can help leagues profit and pay their players. They influence consumers' lives and can guide decisions.

Now, you know what the sports industry really is, from multi billion dollar gaming industries, to YouTubers - the Sports Industry consists of much more than a couple of television ads.



Reika P. & Savina J. & Sofia A.

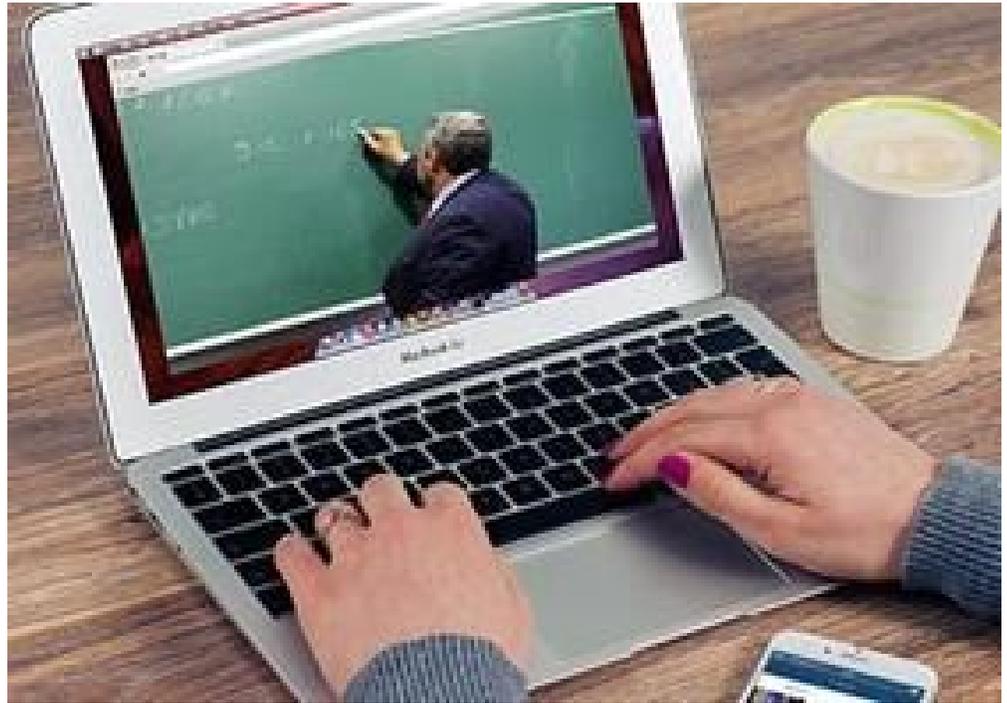
Welcome back to school! How do you like school so far? For students who were attending College Prep before and during the Covid pandemic, you might remember the day in-person school ended. It was March, **Friday the 13th**. Covid-19, a new virus with high infectivity, took over the world, impelling schools to close down and switch to online education with teachers and students at home. In the end, we were doing online school for one whole year. Did the year feel short or long for you? How long it felt for you might depend on how much you enjoyed or disliked online school. In this article, the reader will learn the pros and cons of online and in-person school, along with teacher thoughts and student opinions. First, let's start with online school.

After having California state in lockdown, many students were learning at home with the resources of technology. This led to many teachers using the video call "Google Meet" for teaching a class on a screen, answering questions remotely, and holding staff meetings.



As schools started closing down one after another, most of the schools started coming up with different ideas of how to continue education outside of school. Learning at home isn't entirely impossible. There is homeschooling where students learn at home from their parents or use online curriculums. However, there are many advantages to online schooling. One of them is being able to learn at your own pace. Depending on the person, they might be able to learn quicker than some students or maybe they might be a little slower at learning than their peers.

By learning at home, students can work on different parts of a subject that they need more help with. By doing this, students can take some control over their own learning. Another advantage is that the student can gain the skills to learn independently. Whether it is a school subject or not, by not having someone guide them through the learning process, they naturally learn to teach themselves. By acquiring this skill, it can help the student with tests and quiz studying, and many other things in life.



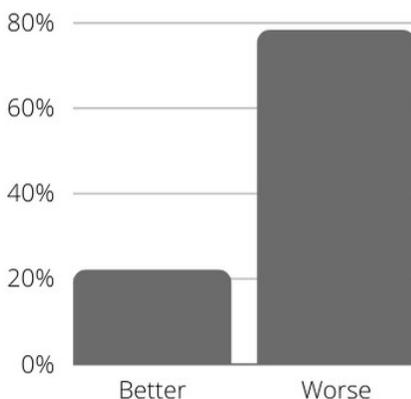
However, there are many disadvantages to online schooling. One of them is that students won't be able to see their peers.

Socializing is an important skill that students need to learn while they are small, and can help within their future. Although there are other options to communicate, such as using text messages, audio/video calling; almost all of the students who replied to our question about something they “enjoyed in In-Person but didn't have in Online learning” replied that they liked seeing their friends in person when at the school building.

Another disadvantage of online learning is that students have a hard time interacting and getting in touch with the teachers and vice versa. For example, since everything is in text, (assignments, instructions, emails, private comments) communicating with teachers can become harder and take up more time than if students go to school in person. For example, this can result in students not wanting to ask teachers for help, resulting in doing an assignment incorrectly, which can then lead to teachers having a hard time contacting, and correcting, the student's assignment. One of our teachers said that “When students invested their full effort and energy into learning from home, we were able to make it work. But it was very hard to reach some students.” In this way, online school can be a disadvantage for both students and teachers.

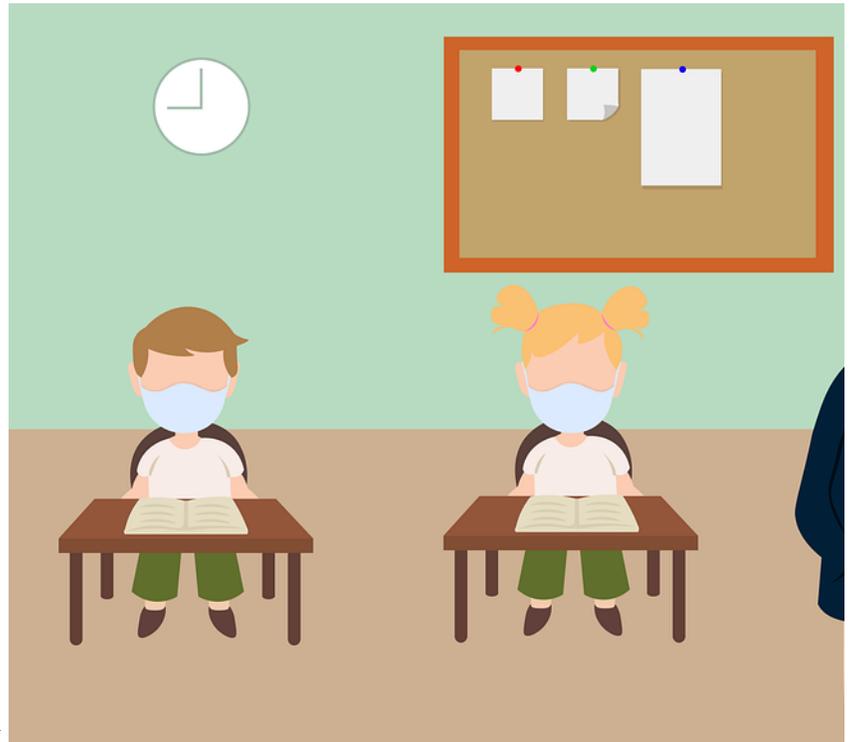
## Question 4

**Was your interaction with your teacher(s) better or worse in Online?**



Furthermore, a student, Isabella R. states that on-campus she had a “better understanding of assignments” rather than Online. Digitally, students would ask questions through email, a private message, or the Google Classroom stream. This led to multiple students stating that they had a harder time communicating with their teachers.

The In-Person school experience for many students has changed ever since the Covid-19 pandemic took over our world. Let’s go back to the time before online classes when students maintained a day-to-day life of regular schooling. Waking up early in the morning, the sun just over the horizon, as you get ready for school. Fast forward from your morning routine and you’re now in the car, pulling up towards the drop-off area for school. Waving “good-bye” to your parents, and heading on up to your classroom with a smile on the teacher’s face, as you greet your friends. Once settling down in your seat, you have conversations with friends as Tiger’s Den (homeroom) begins. Many students stated that they enjoyed seeing their friends every day in class. For instance, German S. (8th grade) noted how much we enjoy “the ability to talk and laugh and share a moment with friends.” In fact, not only



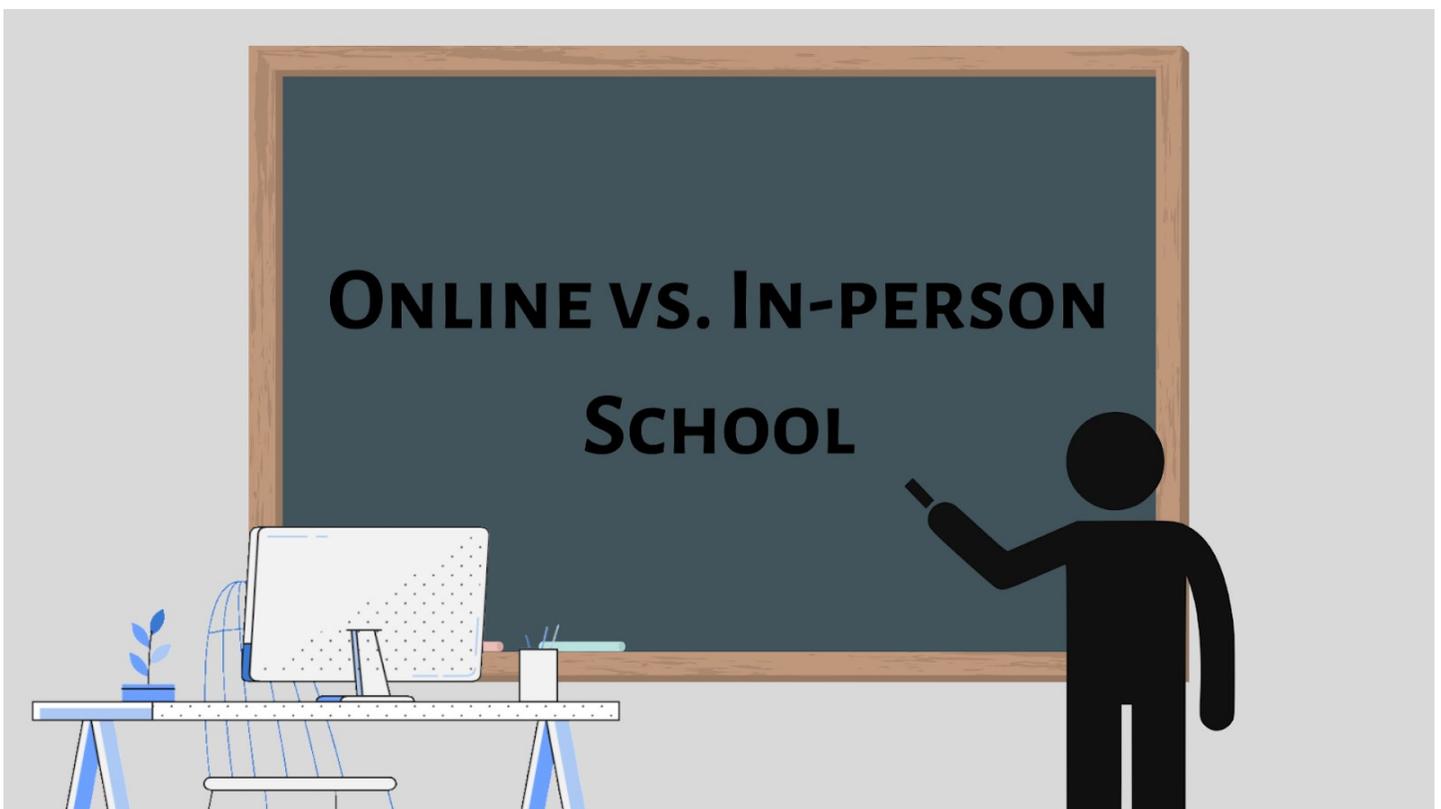
did students interact with their peers, but their communication with teachers was much more accessible. Moreover, Ava B. (8th grade) pointed out that she received “immediate access to a teacher and [got] to ask questions face to face.” Furthermore, Riley M. (8th grade) affirmed that “one thing I like about going to In-Person school is that you can interact with your friends and teachers easier and you can ask questions without a delay.” These different opinions from students show that In-Person learning helped build stronger relationships between students and teachers.

Additionally, building relationships with students and making friends can uplift a student’s mood, resulting in fewer students struggling with depression (a mental health issue that many students developed over online learning). Not only does In-Person learning help with these, but it can help many students interact with each other and build the important role of teamwork. According to the Pediatric Care Group, “Peer interaction is heightened in the in-person learning environment. Students can meet their teachers face-to-face as well as establish relationships with their classmates to some level. Learning is more interactive and group-oriented.”

According to Student Assembly - a student and teacher resource hub - one of the advantages is that there are fewer distractions in the school building, along with better academic development. This lines up with what Maya L. (8th grade) told us: "In online school, it was very easy to get distracted because you are at home, which is not typically a learning space. At school, it is easier to focus and to get your work done." She's right - at home, there can be plenty of distractions such as a student's phone, family, or neighboring noises. For example, if the student had siblings, those siblings could be loud and mess around while the student was in class. Another example is that a student can watch or talk with friends on another device during their online class.

Mr. Riley (8th-grade math teacher) expressed that, "It is also harder to work collaboratively in small groups with Covid restrictions. I am hopeful that these restrictions will ease as Covid abates so that we can maximize our learning." This points out that academic development will most likely slowly recover from online learning to in-person learning.

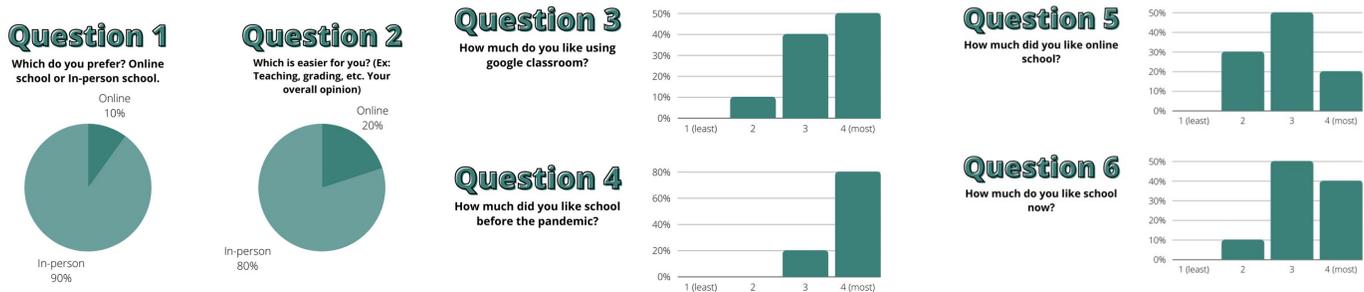
Additionally, in-person schooling also had a large impact on students' health from Physical Education (also known as PE). From a wide variety of sports, students were fit and energized while maintaining a healthy diet. During PE, students work on teamwork, on physical and health goals, and on strengthening their bodies. Sarai T. (8th grade) says, "I like doing P.E. with my friends." We agree because this class wouldn't be as fun without friends. Whereas, being at home, many people weren't able to exercise with their friends; which led to many neglecting to do any exercise at all. In one of our questions (What did you enjoy in school but didn't have at home?), Marlee G. agreed that she liked "being able to do PE" again.



Additionally, in-person learning sometimes piled homework on students, making them stressed and losing the sleep that they need each night, which would decrease the energy they needed for the next day of school. This disadvantage was explained by the Pennsylvania-based Pediatric Care Group: “Lack of structure for kids who thrive in a structured environment. With this, there may be some difficulty, for working parents, in keeping up with [their] student’s academic schedule.” This is accurate; if a student doesn’t have a structured schedule, they might have a stressful day figuring out what to do. With that, they must have good time management in doing homework. As a result, there are many advantages and disadvantages of In-Person and Online Learning.

However, the year of learning from home had some silver linings for some students. Julia J. (8th grade) realized that at before the pandemic she would get distracted by friends (at school) and that “there was really no drama so I was not distracted” while performing online learning. Additionally, Kaila S. (8th grade) had “more of a mind that was open without drama or having to act right” when learning at home.

Before and after the pandemic was exposed, many teachers had lots of opinions of online school and in-person teaching. Here are some thoughts from the staff here at CPMS.



From these graphs, it is evident that most teachers liked in-person school better than online school and that using google classrooms benefited teachers. This can be seen in the second and third questions. Ninety percent of the teachers said that they liked using Google Classrooms and 80% of the teachers said that doing their work was easier in online school. Surprisingly, although we finally returned to in-person school, some teachers are hoping things can return back to the old type of school, with more interaction between students.

An opinion in our survey responses that shows both the pros and cons of online and in-person schooling from a teacher’s perspective: “I definitely enjoyed working from home during our time off-site and having a bit more time to grade, but nothing replaces being in the classroom and interacting with students as we go through our daily lessons.”



One unique response from another teacher: “One of the things I would prefer is to have working tables with teams of 5 people. Also, I would prefer to be able to have students changing groups so they can meet all their grade peers.”

The writers of this article have also attended CPMS before, and during, the pandemic. We will close this article with their thoughts regarding the pandemic, online school, and in-person learning:

From our writer Sofia:

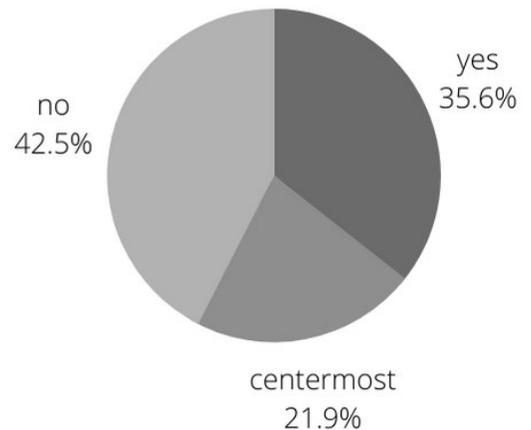
*From my point of view, in-person is way better than online school. On-campus, I can focus better on classwork and homework because there weren't a lot of distractions in class. I talk with my friends at snack and lunch and we have tons of fun together. I get answers quickly from teachers or peers, as opposed to emailing the teacher and getting a response a few minutes later. In specific classes, I liked doing labs in Science; and doing cool projects, and activities, in history. At school, I am able to work my hardest, though I did my best in either circumstance. In the building, I have a scheduled day, which is better for me.*

*Online was just distracting for me. At my house, it was crazy. If you have siblings, you know what I mean. I have six siblings and four are younger than me. So the two elementary kids and a three-year-old could be loud or the girls could just come in my room and play. I would have a limited amount of room to work in. And that space was my small room, usually with toys scattered on the floor. I missed seeing my friends and teachers and having conversations with them. Sometimes I would just go crazy for a day and then not the next. Overall, it was harder for me.*

*There were advantages to it though. I could wake up later rather than waking up at six in the morning to get ready for school. I found many helpful tools on the computer that would contribute to my learning and I can still use that knowledge now in school. I had more time to do homework and I can rewatch the live streams to see if I missed something when I was away from the computer. I worked in the comfort of my home and I was able to get up and get a snack or go to the restroom at any time. I also didn't worry about exercising because my family has a system where playing video games or watching movies are contingent on a certain amount of exercise.*

## Question 5

Were you able to work efficiently during online school?



From our writer Reika:

*I personally liked online school better. I felt that at home, I could study more efficiently and at my own pace. I also don't like being around people I am not close with because it can make me stressed and uncomfortable. Other people become a distraction for me. I also liked how we were able to sleep in more when we had online school, and that is the biggest reason why I like online school more. For me, if I don't sleep for at least 8 full hours I am all day and then can't focus on school. When we have tests and I have to stay up late studying, I sometimes only get 6 hours of sleep or so, and then struggle to do my best in school the next day.*

*In addition to this, I liked how the live streams were recorded and we were able to rewatch the lessons. I have a really bad memory and forget things very easily, so live stream recordings help a lot with studying. Although I try to do my best even if I am in online school or in-person school, I still get better grades in online school. I also had less of the "I need to get good grades" type of stress while in online school.*



*One good thing I can think of for in-person school is that there was P.E. While at home I did a little exercise, I feel like I barely exercised compared to now since we get at least 30 min of exercise 4 times a week.*

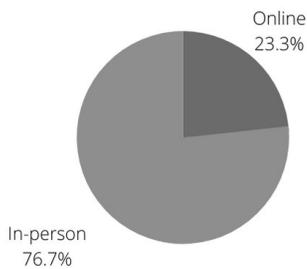
From our writer Savina:

*I enjoyed both online and in-person learning, because each had their ups and downs. In online school, I could manage work and homework more easily while getting more sleep. I also felt more comfortable at home because I am introverted, which means there are times that I don't like being around other people. Furthermore, I liked being able to do other things while being in an online class; for example, I sometimes practiced playing the guitar during online classes. On the other hand, maintaining diet and physical health was more difficult at home than at school.*

*In-Person school is fun because of the small laughs with the class and teacher while learning; and building a relationship with classmates and teachers. Additionally, I can focus better at school because there aren't as many distractions as there are at home. Also, I dislike how serious online classes are when comparing them to In-Person classes because when at school, it's somehow comfortable when talking and having fun in class. However, the online class eventually got dull because it felt like I wasn't able to perceive any information the teacher was teaching, so then I didn't learn anything. On the other hand, in-person learning lets me interact with the teacher face-to-face, so it's easier to pay attention.*

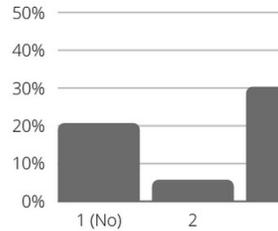
### Question 1

Did you like Online or In-Person learning better?



### Question 3

Were your grades good in your classes online?  
(Example: A's as yes. F's as No)



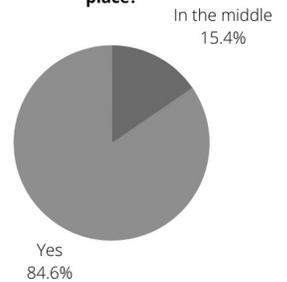
### Question 7

Were your grades good in In-Person learning?



### Question 8

Were you able to work efficiently in this learning place?



Overall, there are many different advantages and disadvantages between In-Person school and Online school. To most of the students, in-person classes were better as a lot of them had the reason for interacting with their teachers and classmates. Almost all of the 8th graders who replied to our survey said that they had stronger grades and worked assiduously. The opinions varied and it depends on how you, the reader, work better in school online or face-to-face. Thus, the opinion of enjoying one learning system better than the other depends on so many different variables.

## Whimsical Pictures: Anime & Manga

Christian O. & Elan G.

Most people consider anime a form of limited animation, which means it is generally stylistic. But, we disagree because there are endless possibilities of what you can do. Just imagine you are in an unfamiliar world, whether it is a huge planet with unfamiliar aliens to a not-so-normal high school. Either way, you are in a fantasy world that is brimming to the top with unreal possibilities including swords that transform, powers, tyrannical rulers, superheroes, and whatever you imagine it to be. This is the wondrous world of anime and marvelous manga.



Anime describes animations that are made and produced in Japan. This word describes all motion pictures that are made in Japan. The katakana for anime is アニメ, which translates into anime.

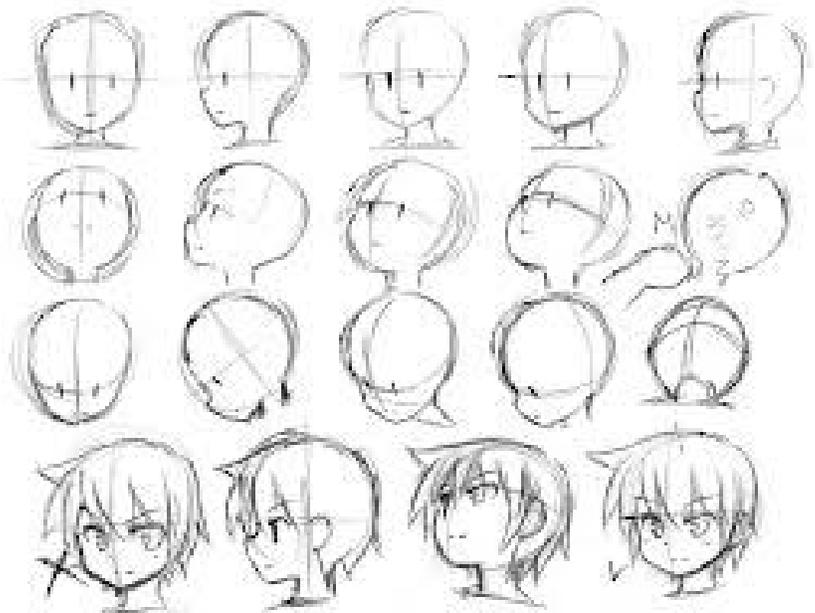
Manga is the term for comics that are made and produced in Japan. Manga (漫画) has two kanji, the first kanji, man(漫) means whimsical, and the second kanji, ga(画) meaning pictures. Manga is produced and put in manga newspapers. Some of the famous publishers are Shonen Jump, Shojo Beat, CoroCoro comics, and much more.

Did you know that anime is about 100 years old? And manga is even older, coming in at 1,427 years old! The first creation of anime involved stenciling and drawing to create pictures. This has evolved in many ways over the years - from digitally copying the finished product to mass-producing manga and digitally creating anime.



The first-ever anime is called Katsudo Shashin. It was created in 1907 and was only three seconds long! According to Wikipedia, this film depicts a boy who writes "活動写真" which means Katsudou Shashin. The boy then removes his hat and finally ends with a bow. This very short film was drawn using black and red. It was made using a slide from an invention called a magic lantern. A magic lantern was a projector that was used a long time ago.

Years later, many different anime were made but one in particular called “Dekobo's New Picture Book - Failure of a Great Plan” was the first ever to become very popular and used as propaganda for WW2. This brilliant person to come up with the idea was a man named Shimokawa Oten. Even though this was popular back in 1917, it was made using a very tedious process. This anime was made first by drawing the characters on a chalkboard then taking a picture of the scene, after that, erasing the chalkboard and repeated the process. This process of drawing, erasing and repeating had to be done multiple times to just make one single episode. Imagine making a 23-minute anime this way! How much effort would the creators have to put if they used this process?



Many anime was influenced by the U.S., but one company influenced the anime industry the most and affects it to this day. That company is Disney. Many early anime was made in the silent era, which was a time where all films had no sound used in the movie. When “Chikara To Onna No Yononaka” (which was the first anime to be produced with sound) was made

in 1932, it was a short episode that barely had a plot for the story. This was because at the time anime creators believed that anime could not be used to tell long stories. Soon, this opinion was completely changed when Disney produced “Snow White and the Seven Dwarfs” in 1937. Snow White caused much anime produced in Japan to have a plot and have a storyline over multiple episodes.



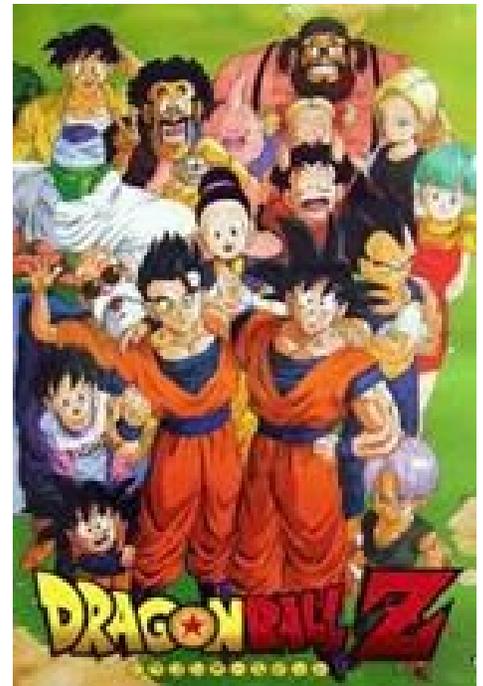
Switching gears to our other topic, the first examples of what might be called manga were called picture scrolls. These scrolls were so old that they were made during the 6th and 7th centuries by Buddhist monks. These scrolls ran without any page breaks using different symbols to represent time passing such as cherry blossoms and red leaves. The most famous of these works is called Choujuugiga. This meant "animal scrolls". This specific piece of work depicted animals behaving like humans and made fun of Buddhist priests.

When Japan became open to the outside world, they learned about European artists' speech bubbles and separate sequences. European countries also introduced more efficient printing techniques. During the late 1920s and early 1930s, the Japanese government started intimidating artists and publishers, which impelled many manga producers to close down. After World War II, the publishers who had been powerful before the war were now in ruins and this allowed many tiny new companies to grow. One of these new artists was a medical student named Tezuka Osamu, who became known as one of the founding fathers of manga and anime. Through "Ribbon no Kishi", Tezuka set the bar line for other manga artists. He also created classics like "Tetsuwan Atomu" - which was known as Astro Boy in the United States in 1952. By the 1960s, manga had begun to develop into what it is today.

Since those days, anime and manga have evolved so much - especially in the design department. Different anime have highly differing designs and styles to portray their story. Each anime can use these different styles to specify a specific audience. These designs can also help enhance the plot of the story. For example, "Dragon Ball Z" has a reputation for wild, crazy, and very exaggerated designs. This franchise is still popular with our generation - our classmate Savina J.(8th grade) enjoys it. Other anime have highly different ways of showing characters. For example, instead of having their body proportions exaggerated, "Jin-Roh" takes a much more realistic approach. This causes "Jin-Roh" to feature few proportional exaggerations. These are just some examples showing how anime make different distinctions with the way they are designed.

While different titles and different artists have their own artistic styles, some elements appear so often in anime and manga that these feature define anime now. However, this does not mean that all anime in this time follow specific "anime rules". According to Architizer.com, the most common form of anime drawings include exaggerated physical features such as large eyes, big hair, and elongated limbs and shaped speech bubbles, speed lines, as well as the use of onomatopoeia. Anime also tends to borrow many elements from manga, including background text and panel layouts. For example, an opening for an anime may use panels from manga to evoke suspense, drama, or even create a funny scene.

Many anime and manga characters feature large eyes, which is partially inspired by Disney's use of the same technique! American cartoon characters such as Betty Boop, Mickey Mouse, and Bambi have all influenced the way Tezuka created his proportions for the eyes and body. The exaggerated eye-size allows many emotions to be portrayed, happiness, sadness, anger, fear, excitement, and so forth.



There are five different kinds of anime: shonen, shojo, seinen, josei, and kodomomuke. Each kind of anime is focused on a specific target population of viewers.

One particular anime is called shonen (少年). First, shonen anime is a category of anime made specifically for younger boys. Usually, there is some type of main character, normally male, who has muscles, good martial arts abilities, and some type of ability to enhance their strength. Characters that fit this style include Son Goku, Dragon Ball; Natsu Dragneel, Fairy Tail; and Monkey D. Luffy, One Piece. A major character trait for these characters is their appreciation for their friends and their willingness to fight for them. For example, in “One Piece”, Luffy’s brother, Ace, had been captured by the Marines in order to save him, Luffy broke into the Marine prison, Impel Down, and had started a massive battle on Marineford, the headquarters of the Marines.

Shoujo (少女), translated as "young woman", is a demographic aimed at teenage girls, so is the counterpart of shonen. There is much great shoujo anime but some of the most popular include “Kimi ni Todoke”, “I Want to Eat Your Pancreas”, “Asobi Asobase”, “Kaichou wa Maid Sama”, “Fruits Basket”, “Gekkan Shoujo Nozaki Kun”, “Akatsuki no Yona”, “Nana”, “Sukitte li na Yo”, and “Kamisama Hajimemashita”.

Seinen (青年) is a genre of anime and manga that is targeted toward male young adults and college males and has more mature content than something like shounen anime which is targeted toward young boys. In the manga, seinen frequently uses kanji while shounen manga uses furigana (a Japanese text used as a reading aid) to help young readers who are not as advanced in their kanji study. Seinen manga and anime are targeted toward young men, but not the younger audiences of shounen anime and manga. Young adult men often like the subject matter of these comics as they transition from a young male or younger boy to an older teen. While this is the target audience, viewers can be of any age and gender, from teens to adults. These can be comedies, science fiction, high-school stories, and more.



Josei (女性 meaning woman) is a category of manga marketed to women, typically from 18 to 30 years old. Josei manga series are rarely adapted, so there isn't really a category of josei anime.

Kodomomuke “(子供向け)”, literally means “directed at children”. Though Kodomomuke is dominantly made for the children’s demographic, everyone can enjoy it. Kodomomuke anime’s work is so simple, positive, imaginative, filled with morals, teachings, and other essential values to children.

The impacts of anime on the world have been very significant. They have brought more diversity and variety to the entertainment industry. They have changed how people see things, for the better. They bring people joy and unity. They relieve people’s stress and anxiety. They support our mental strengths and our creativity.

Anime and manga are very popular for reasons we hope that you can understand now. It is these reasons that allow them to keep being produced and published. It consists of many art styles. They contain the ability to bring real emotions to viewers. We hope you received a basic understanding of anime and manga from reading our article.



# Earth's Extravagant Places

Joshua A. & Nathan C.

You feel the nice warm breeze coming from the ocean, with soft sand between your toes, the smell of the beach in the air, seagulls squawking overhead, and a nice cold drink next to you. This is just one of many great experiences that can be had when traveling to places like Maui or Bora Bora. Not interested in that? Well imagine the wind blowing into your face, the smell of pine trees surrounding you, you take a step forward and see everything below from the high mountain you climbed. This is another great experience you might have when visiting National Parks like Glacier. Today we will be taking you to places in America and around the world where you might want to visit.

The places in America that we are going to talk about are Glacier National Park, located in Montana, Yellowstone National Park, located in Wyoming, Yosemite National Park, located in Mariposa, California, the Grand Canyon, located in Arizona, and Maui, Hawaii. We have sorted these by the most popular according to the teachers' preferences in location.

The most popular location among the teachers was Glacier National Park, the teachers including Mr. Delgado, Mrs. Walker, Mrs. McNamara, Ms. Theriault, Mr. Alarcon, and Mrs. McGuire have selected this this park as the place they would like to visit the most. There are 734 miles of hiking trails, and great fishing spots tourists can explore. Mr. Alarcon said, "I will hike different scenic routes. I would like to go there because I have never visited this National Park before."



If skiing is one of your hobbies, well, you can participate in cross country skiing. With over 15 trails to choose from, your final decision may not be easy. Tourists recommend the McDonald Falls trail for its 4-mile distance. Visitors start at an unpaved road and end at McDonald Creek.

When the day ends visitors can pick from 13 different camping grounds including Apgar Campground, Bowman Lake Campground, and Kintla Lake campground. Apgar Campground is the largest campground in Glacier National Park, this park Campground includes spots for RV campers and tents. To get to Bowman Lake Campground, travelers will travel on dirt roads and it's located near Bowman Lake.

Mr. Delgado would also like to “visit Glacier National Park. I think it would be a great experience to see and explore a landscape that has been shaped by glaciers over thousands of years.”

The second most popular travel location by the teachers was Yellowstone National Park which was established on March 1, 1872. Thermal basins are one of the things Yellowstone National Park is famous for. More than 10,000 hydrothermal features are found at this park! Did you know that half of the geysers in the world are found in this park? About 500-700 geysers are active each year! According to the U.S. National Park Service, “In 2011, it was determined that 1,283 geysers have been recorded as erupting in Yellowstone.”

The hydrothermal features found in this park include hot springs, mudpots, fumaroles, and geysers. Fumaroles are steam vents that allow steam or other gasses to exit. Mudpots are like



hot springs that do not have large quantities of water, and tend to look like a pool of bubbling mud. The most famous hydrothermal feature is the Old Faithful Geyser. This geyser is more predictable than you might expect. It has erupted about every 30-120 minutes for the last 30 years. Since hydrothermal features change constantly, it may one day stop erupting. Geysers and other hydrothermal features are evidence of ongoing volcanic

activity beneath the surface. For people who want to watch the geyser, there is a viewing area and multiple boardwalks winding around the Upper Geyser Basin. When we asked the teachers what activities they would do at this park, Ms. Coplan responded, “I would try and spot some wolves or signs of wolves. The reintroduction of wolves to Yellowstone is such a fascinating story.” Ms. Spencer would like to “view the geysers and natural springs.”

Teachers voted Yosemite National Park as the third most popular travel destination. This park is known for locations such as Mariposa Grove and the Yosemite Valley. Mariposa Grove is located in the southern section of Yosemite and is famous for having over 500 mature sequoia trees. Hiking trails here include Big Trees Loop Trail, Grizzly Giant Loop Trail, Guardians Loop Trail, and Mariposa Grove Trail. Ms. Mammana said she would plan to “hike, camp, and sight-see” at Yosemite, including a “hike to the top of Half Dome!” Mrs. Casagrande also said she would like to “hike the park.”

Natural features Yosemite Valley is known for include its waterfalls and rock formations. Half Dome is a rock formation that is almost 5000 feet above the valley floor. El Capitan Mountain is 3000 feet high and only experienced climbers should attempt it. The waterfalls including Sentinel Falls and Ribbon Fall are some of the largest waterfalls in the park! The tallest waterfall in the park is towering 2,200 feet high and the lowest waterfall is only 317 feet high. There are nine beautiful waterfalls to visit.

There is also the Yosemite Museum which was built in April 1925. The Yosemite Museum was the first museum constructed in any of the national parks. Constructed of native rocks, logs, and shakes which are made of wood are used for the exterior. This gives the museum a rustic look created by architect Herbert Maier. Inside is a wide variety of art styles from meticulous renaissance style art to captivating rock carvings.



The fourth destination selected by teachers is Maui. Maui is located on an island of Hawaii. Here tourists can do many things like the Road to Hana. This road is 52 miles long and twists through the forest. Drivers may stop at a scenic lookout to view towering waterfalls or the abundant greenery. Many tourists recommend starting this drive on the road at daybreak because the road should be less congested.

In addition to the Road to Hana, people can visit Haleakala National Park. Located in Hana is one of the world's largest dormant volcano craters. The capacious park takes 30,000 acres of land on Maui. Here visitors can travel on the Pipiwai Trail. Stretching 4 miles roundtrip, it is the park's most popular trail. The trail will take you through a lush bamboo forest and at the end, there is the towering Waimoku Falls. The ambiance of the environment will cause tranquility. This trail may take 3-5 hours to complete, but you will not regret it.



When we inquired the Tiger staff about what they would do at Maui, Ms. Callaway chose “mostly swimming and snorkeling.” Mr. Riley would “play golf, surf, and hike.” Snorkeling tours are favored in Maui. Numerous colorful fish, sea turtles, and vibrant coral can be found in the crystal clear blue waters of Maui. These tours may be pricey; some tickets may cost over \$145 per person! Thankfully, some hotels in Maui offer complimentary snorkeling equipment.

The fifth travel destination on the list is the Grand Canyon. This national park is known for its 277-mile canyon. This was formed by the Colorado River 5 to 6 million years ago by erosion. One of the things tourists find pleasurable is the Trail of Time. This is a 2.83-mile paved walk. This trail was created to signify one million years of the geologic history of the Grand Canyon. Along the way, rocks and exhibits will teach visitors how the Grand Canyon was formed. This



was also created so people who are unable to hike the canyon can view it easily because the trail is flat and stretches around the canyon.

Desert View is located on the South Rim and is 23 miles east of the Grand Canyon Village. The Desert View Watchtower serves as a shop and a visitor contact station. There is the Tusayan Museum and Pueblo nearby, which showcases the story of the American Indians of the region. The Tusayan Museum was built in 1928. The

inventory of artifacts ranges from 2,000 to 4,000 years old. These artifacts are handicrafts made by regional tribes. The Tusayan Pueblo is the remains of a Puebloan village. Pottery and arrowheads are one of the many things this community created. The Grand Canyon Railway is the way to travel to the park. This train carries more than 230,000 people to the Grand Canyon every year. You do not have to deal with gridlocked traffic of the interminable automobiles on your way to the park, you can hop on and enjoy the ride.

## *Places Around the World*

Though the U.S is beautiful, there are many other amazing places around the world. From London to Tahiti, places all around the world provide an experience you dream for.

### *European Destinations*

A popular location is London. It is mainly known for its giant clock (Big Ben) and double-decker buses (buses with two levels), but there are other things you can see and do too. You can visit a variety of museums like the National Gallery or Natural History Museum and learn



about all sorts of things. There are beautiful landmarks to visit, such as Buckingham Palace. Tourists can find delicious food at places like the Portobello Road Market, and get cuisine like escargot, food made from snails. Mr. Riley says he would travel to London for “day trips to ancient archeological sites and golf courses.” Mrs. Casagrande would like to “visit the historical sites.”



Paris, located in France is well known for the Eiffel Tower and delicious French bread. Some examples of things to do include visiting landmarks like the famed Musée du Louvre, which shows the history of France. You could go to parks like Jardin des Tuileries and maybe even have a picnic with your loved ones. There are also tours

around the city, and operas like the Palais Garnier. A popular destination is Paris Disney (also known as Euro Disney), which has exclusive rides like Animagique and RC Racer. Ms. Coplan revealed that she would want to go to the Musée du Louvre museum. Ms. Spencer “would like to visit Paris again, as I was [with] two of my sons the last time and mostly visited Euro Disney. I would like to visit the Louvre Museum.” Ms. McNamara said that she would like to visit museums, get food, and just wander the city. Also in Europe, a short flight from Paris is the Czech Republic, where Ms. Coplan “would want to visit Prague. I’d probably take an architecture tour and eat a bunch of yummy food.”

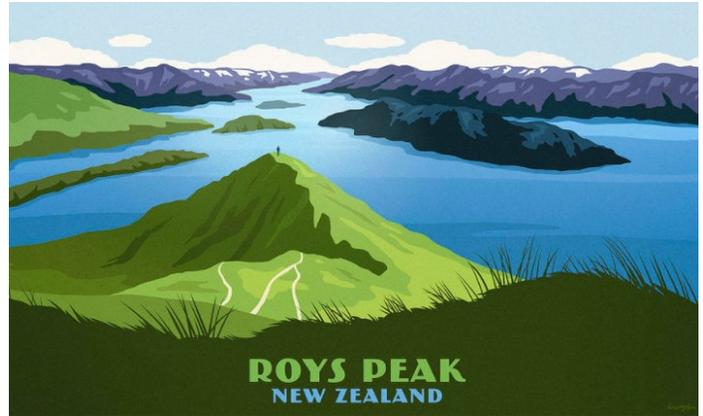
## *Island Retreats*

In Bora Bora, located in French Polynesia, visitors can view wildlife in places like aquariums and the ocean. Popular things to do include boat tours to see the surroundings of the island, viewing the island with its beautiful ocean floor while swimming in its wonderful waters. Many visitors hike up mountains or a volcano (Mount Otemanu or Mount Pahia) for amazing views of the island. Some snorkel in the clear water and view the ocean life. Some learn about the native tribes and their traditions. Others jet-ski on the ocean . Mrs. Walker, Mrs. McGuire, Mr. Delgado, Mr. Bensley, and Ms. Mammana are teachers who would like to visit Bora Bora.

We questioned them to find out what they would do there. Mrs. Walker said that she would, “Get an above-water bungalow with the see-through floor. I would hike, swim and relax.” Mr. Delgado replied, “Simply put, I would just like to relax and enjoy the island atmosphere. Bora Bora has been on my list of travel destinations for some time now.” Ms. Mammana answered that she would, “Snorkel in the crystal clear water.”



In the south island of New Zealand, there are a variety of things to do. Visitors can explore caves like the Waitomo ones, or take boat rides around the island. There are many walks on the pretty terrain of the island. Hiking up its lush mountains (like Roy's Peak) is popular, as is relaxing in some of the island's geothermal pools or snorkeling in its beautiful waters. Mr. Alarcon, one of the teachers we asked to tell us what they would do there, told us that he "will love to visit New Zealand since I have never been to that part of the world. I would snorkel and scuba dive." Ms. Jordan replied that she would, "Try local food, relax, and take in the scenery." Ms. Guiten revealed, "I'd learn more about Maori culture, customs, and cuisine."



The final destination is Tahiti, which is located in French Polynesia and has some pretty places to go. You can go to beaches like Lafayette beach also to areas like Fautaua Waterfall. You can stroll around the towns like Faa'a. You can visit museums like the Museum Tahiti and Her Islands. You can surf on some big waves. You can go to aquariums like the Moorea Dolphin Center. You can go to town stores like the Papeete market. What a great holiday that would be!

Aside from all of those locations, where the Tiger teachers want to visit may surprise you. Ms. Callaway and Ms. Jordan picked Antarctica! Ms. Callaway said, "I have always wanted to visit Antarctica! I have read all sorts of stories about the explorers and scientists who have lived (and still live there) and work there and it is just fascinating to me! To be at the bottom of the world, see the life that is there, maybe experience almost 24 hours of sunlight-during its summer of course! For me, it has always been such an interesting place to learn about! I always want to learn more." Ms. Jordan said, "...because regular people can't travel there, it's pretty much just for researchers. But it would be awesome to experience such an isolated,



pristine, and unique place! I would also nerd out over all the scientific studies conducted there by the research team." Mr. Delgado replied, "If I could go anywhere in the world, I would want to go Italy. There is so much history and culture in that country, dating all the way back to the Roman Empire. I think it would be very cool to visit see the old architecture, admire the art, and explore the Tuscan countryside." Eighth-grade ELA teacher Mr. Bensley would like to travel to Kenya so he could, "visit an elephant sanctuary."

Out of all of the destinations listed, which one would you like to visit?

# The Dirt Underneath My Nails

Kaila S.

You look around to see lush green pastures that move with the wind, there are yellow and orange flowers spread all throughout the land contrasted with the dark brown soil, the sound of twinkling water runs from the forest to a clear stream with silverfish, you see bunnies, bears, and beavers roaming the land. With every breath, cool air cleans your lungs, the sky is blue and the sunlight hits your skin just right. A butterfly lands right on a flower next to you. This scene is like a dream but it does exist, or it used to, at least. Now, all there is in this once beautiful area is dirt, not an animal in sight, murky waters surround the area, and the sun is harsh. There is not a speck of color on the ground except for the brown and yellow dying grass, and the air is hard to breathe in. The Earth is dying and slowly we will die with it. We already are. As we continue to corrupt the soil beneath our feet with human agriculture, we kill plant life and destroy soil health. So what exactly is causing this? Has the solution been here for thousands of years?

## Conventional Farming

Conventional farming is one of the main reasons for the corruption of soil and the contamination of water. This way of farming - which is used in so many places - uses mass amounts of pesticides that contaminate both our water and the actual plants we eat. Animals are raised in one spot and they overgraze this area, which causes disruption of soil. The soil loses its protective barriers or, plants, and water that is filtered and contained won't be able to be in the soil, so the dirt becomes dry and brittle with little life. Conventional farming causes many disruptions to the earth like the water, soil, animal biodiversity, causes climate change like sand storms or rapid changes in weather, even disrupts human health.



## The Water Cycle is affected

Conventional farming includes tilling the soil, overgrazing the plants that protect the soil, and using poisonous fertilizers and pesticides that cause soil to become corrupted and water to become contaminated. For instance, groundwater is kept deep within the soil. The best part about this is that this crucial source of water is kept clean; but as humans continue to use up this precious groundwater and damage soil with conventional farming practices, this water will no longer be available.



To explain, the plants that are in soil serve as a protective barrier but also a filter for water that seeps through the vast roots of the plants down to a lower level where aquifers reside, or a solid rock deep underground with groundwater above it like a pool of water. But when soil



loses its health it has less of an ability to purify and retain clean groundwater. Next is the practice of fertilizers. Fertilizers that are from conventional farms can be poisonous. These poisonous fertilizers pollute water that runs off from farms - water that goes into streams, lakes, rivers, and even seas. Many of these bodies of water are the places that people swim and even drink from. Both fertilizers and overgrazing continue to damage the once-in-a-lifetime water. The water on Earth will never continue to accumulate more so as humans continue to damage water sources, the less water there is for future generations, even present day there are people dying of thirst because water has been polluted.

## *Climate Change*

When soil becomes corrupted, it loses its resiliency. But why does this happen? One important factor is that plants that are meant to protect the soil succumb to the overgrazing of conventional farming. But using regenerative farming practices like cover crops will put plants in the ground that will take in carbon dioxide, which is what causes the greenhouse effect on Earth. It is this effect that causes climate change. In addition to this, cows produce carbon dioxide and as more carbon dioxide is in the atmosphere and the fewer plants there are, the more climate change will continue to happen. But why are the greenhouse effect and too much carbon dioxide causing climate change?

Well, a greenhouse is for plants to trap heat, making it humid and hot - but this activity is happening using Earth as the greenhouse, causing polar ice caps to melt that will cause floods. More droughts happen because of mass amounts of heat. Along with the greenhouse effect, the ozone layer of the atmosphere that protects us from the sun's heat and radiation is forming holes because of the pollution of the air.



Therefore, more heat and radiation are in Earth's atmosphere and causing climate change. But this solution is so simple, we just need more plants in the ground to help take in the mass amounts of carbon dioxide in the atmosphere and decrease our carbon footprint. Did you know there's a solution that does both these things and will put more plants in the ground?

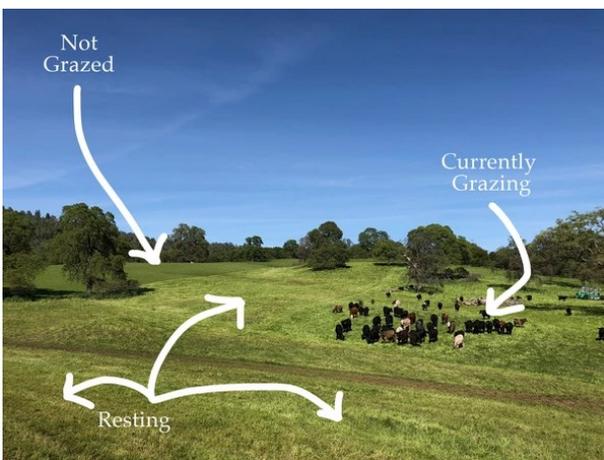
## The Dust Bowl



*In the 1930s in Oklahoma, destructive dust bowls occurred due to poor farming practices. This land was once home to grasslands but now all that was left was dirt.*

## The Solution

That solution is regenerative farming. This is the practice of farming that helps restore soil by reducing the use of pesticides, planting cover crops that protect the soil, using rotational grazing, planting native species, and overall using practices the way nature intended them to be done. What this means is that this way of farming is very similar to the way animals would roam around grasslands freely and would fertilize the soil. The way plants wouldn't be grown in just one spot until all the nutrients from the soil were gone, but instead, their seeds would disperse to other areas so that soil could recover. Regenerative farming mimics the way nature is and always has been - it is the opposite of conventional farming. Regenerative farming uses cover crops by planting native plant species on the soil. These native plants could be as simple as grass that the rotational livestock would graze. The plants would protect soil, take in carbon,



and help produce groundwater. Rotational grazing of farm animals is when livestock do not overgraze in one area for too long, but instead move from one area to the next. For example, in regenerative farming, cows have a set destination for a day to eat plants from while fertilizing the soil through feces, and naturally tilling the ground with hooves. Then they would leave that spot on the farmland, and that grazed area will have time to regrow with added nutrients. Next, let's discuss the no-tilling practice. Tilling itself disrupts the soil by digging up the soil and causing

soil erosion, then leaving soil without nutrients. Regenerative farming has restrained tilling, which means that soil can stay healthy and not erode. Lastly, regenerative farming uses almost little to no harmful chemicals like fertilizers. Fertilizers are used to help give nutrients to the soil for plants to continue growing. Fertilizers wouldn't be needed anymore if the soil was protected with cover crops and had a refill of nutrients every time the livestock came around.

Regenerative farming is a reliable solution to the problems humans have caused with our factories and our farming techniques, but it's just awesome a simple change in our farming practices that could help save the world. That this "farming practice" has been the way Nature has done it for thousands of years from the way the bison roamed the land and plants always being in the ground.



## *The Benefits of Regenerative Farming*

Regenerative farming will reverse many of the damages, like pollution of the air through automobiles and factories. Conventional farming causes damages like dust storms, changes in the water cycle, soil erosion, climate change. But there are also individual human benefits to being in health and the economy. First of all, the improvement of air quality and climate change will help with human health. But as livestock on regenerative farms will need less grain that is human-made with hormones, farmers will instead feed their livestock with full pastures of grass that are full of nutrients from the soil. In addition, as the living conditions of farm animals improve, so will the livestock themselves become healthier. This will result in overall healthier food we will put into our body that is filled with nutrients.

As mentioned earlier on in the text, regenerative practices help renew and put nutrients into the soil, therefore less hazardous fertilizers are needed for the growth of plants. Without the poisonous fertilizers, plants will be safer to eat, and our waters will be cleaner. These fertilizers often mix with runoff water from conventional farms and pollute the water we drink and use. This results in human health degrading because humans drink from these waters. Moving back to the ground, the healthier and stronger that soil becomes through being regenerated from the practices of RA, the more stable the soil will be. These practices could prevent calamitous disasters like the Dust Bowl or just less dirt debris in the air, meaning cleaner air for humans to breathe.

The economic benefits are phenomenal. Farmers will save tons of money from a decrease in fertilizers and food for livestock. But only because livestock will be feeding on the pastures of grass that have been grown through regenerative practices. Farmers will be able to grow more of a variety of crops that will cover and protect the soil along with rotational grazing regenerating soil health. The Dust Bowl was due to poor farming practices that caused erosion of soil. Plants were not able to grow in the poor conditions of soil and so this led to a decrease in revenue from crops, and the economy was hurt greatly. Regenerative farming will decrease the chance of crops being delayed in growth, which harms the economy.

## How Can an Individual Person Help?

There are many ways we can be more environmentally conscious but here are a few ways that are primarily easy, and low in cost.

1. **CUT DOWN ON MEAT INTAKE!** When people eat less meat, it will reduce greenhouse gas emissions, and as the article states above that cows have been mass-produced for human consumption. The fewer cows being mass-produced, the less damage to the planet. So try only incorporating a meal with meat, especially cows, in one meal a day. Some people like their eggs, hamburgers, and steaks. These foods can still be eaten, just in moderation. Additionally, moderating our meat consumption can lead to being a healthier person as well as saving money on groceries. Adding onto the groceries, look for the label of “regenerative meat” when buying the occasional meat product. Even organic labels are worthwhile because they are healthier with fewer hormones and are likely free-range.

2. **Recycle, Recycle, Recycle.** Normally there is a recycling bin next to a waste bin. It’s very simple to tell what trash goes in which. Plastic bottles, glass, cardboard, metal containers, and paper all go in that blue bin to be recycled again.

3. **Reuse, Reuse, Reuse.** Many people think reusing means just using a bag over and over again. Yes, this is correct but there’s more to it. Buy a reusable water bottle, a metal straw, tote bags, use reusable containers like Tupperware, and continue to use clothes or donate them. It may sound like these things would cost money, but many of these items are valuable to have and could save money over time. For example, there won’t be a need to spend \$5 on a plastic water bottle when there’s a reusable one that is filled with more water, these situations will come about many times, and a reusable water bottle will save money on each \$5 water bottle wanted. Some of these items may not always save as much money, but they are handy to have on hand and they help in saving Earth.



*\*If you would like more information on Recycling and its benefits, be sure to also read the amazing article (written by Megan U. & Bridget C.) later in this edition of the Chronicle\**

### **If Walmart can do it, so can we!**

Many news outlets have recently reported that Walmart plans to become more environmentally friendly by cutting greenhouse emissions, reducing carbon footprint, and contributing to less waste. Now, this is a large company with over 10,500 stores that basically supports human’s everyday needs and these needs tend to be quite wasteful like toilet paper, shampoo bottles, and many items that involve plastic packaging. Walmart is claiming to want to do more “regenerative practices” that will help restore the Earth. So what’s stopping us, comparing our small school to a mass production company that causes way more damage to Earth yearly, that if they can reduce their large impact, so can we.

## *How can CPMS be more environmentally friendly?*

Regenerative farming is one of the major steps to making Earth a healthier environment, but also non-farmers need to take part in helping Earth. CPMS can do this too. Water bottles are one of the main keys to being more environmentally conscious. College Prep has an easily accessible water bottle filling station with cold and clean water. Too many students use multiple plastic bottles each day at CPMS, which costs students money and also damages the Earth. By buying inexpensive and reusable water bottles, both students and the whole school can be environmentally-friendly. Next, students should know what goes in the blue and gray bins during snack and lunch. Plastic, cardboard, glass, and paper can all go in the blue bin while waste like leftover chicken nuggets or the milk/juice cartons can go in the gray bin. We each must think before we throw out. Some students do not even pick up trash that is theirs and simply throw it away. We should speak up when we see that happen. Please everyone, pick up your trash.

Another option for the teachers is to open the blinds in our classroom, instead of using the lights, this will save money on electricity by using natural sunlight. Plus, studies according to the U.S Green Building Council Leadership in Energy and Environmental Design (LEED) have proven a student's concentration and test scores will increase with natural light. How else can CPMS save money on electricity but also help Earth? Solar panels! College Prep should look into solar panels. Solar panels may sound like a lot of money but in the future, they will be able to justify themselves with the saved money from clean energy. The largest school that uses solar panels is Michigan City Area Schools and they save \$704K annually which is equal to \$23million over the course of 30 years. To make this investment seem even more reasonable, about 5,500 schools in the US have begun using clean energy and they save thousands of dollars annually. Think about the resources for students CPMS can buy new textbooks, computers, an increase of salary for teachers, and overall benefits. We may be a smaller school, but that also means installation costs will be less and we would still be making more money from clean energy than we had initially put in. But here's the main benefit CPMS should be aiming for. When we use solar panels, fewer fossil fuels are being burned so there will be less pollution in the air. Less pollution in the air and makes it easier for regenerative farming to reverse the effects of pollution and help restore Earth to its natural state.

Please use these environmentally-friendly ways of living to help save Earth, our blue planet that has been the only planet known to be able to sustain life and the only home we are likely to ever know and future generations to live on and cultivate. Know that regenerative farming and you are the future of Earth and its people. Earth doesn't need us, but we need it.



# The Importance of Recycling

Megan U. & Bridget C.

You look out onto the once pristinely blue ocean as the toxic air engulfs your lungs. The sounds of animals crying out silence even the largest waves. You walk forward and find that the surrounding beach is hidden beneath the corpses of marine animals that had succumbed to the billions of pounds of plastic in the ocean. The year is 3000. If only someone had done something sooner. Dr. Seuss - renowned children's author - once wrote, "Unless someone like you cares a whole awful lot, nothing is going to get better. It's not." Chances are you have heard this quote, and you may also wonder how this relates to recycling. This similarity simply



lies in the fact that *you* have the power to make a positive change in our world, so why wait? If anyone wishes to protect the planet Earth from a doomed fate, they should consider recycling. Recycling involves the action of throwing out a used item, where it is then transported to a recycling facility, sorted, sent to a manufacturer, and made into something new. This process not only helps the environment by preserving animal habitats, but it keeps landfills, a major

contributor to global warming, from expanding. As Dr. Seuss suggested, it's better to take action against our plastic-wrapped planet than to wait for others to make wise decisions. Some damage cannot be undone, but further devastation can be prevented, and it all starts with us.

While you may seldom explore the idea of how waste impacts our oceans, the destructive effects of trash continue to harm millions of sea creatures, and in turn, humans. Have you ever seen an animal caught in plastic?

Unfortunately, this sighting isn't uncommon, as plastic harms over 267 species of marine animals globally. Similarly, plastic debris can impede commercial fishing, transportation, and further threatens the health of people living near these bodies of water.



A survey of our fellow 8th graders also demonstrates the idea that some students

hold electric eels, seals, turtles, and dolphins to be their favorite animals. Sadly, however, these animals are among those most harmed by waste. In fact, it is estimated that both sea turtles and dolphins will be extinct anytime between 2050 and 2100, while the Caribbean Monk Seal was declared extinct in 2008. The extinction of these animals stems from both overhunting and obtrusive plastics.

As sad as this sounds, there is a way to spare our world from impending doom. The answer lies in recycling. By just throwing out a piece of plastic into a recycling bin, for example, you reduce the likelihood that that plastic will end up lodged in the throat of an innocent animal. While recycling itself is a big step to stopping these problems, there are a variety of other ways to help out.

Beach cleanups, for example, are organized gatherings of people at local beaches. These cleanups not only reduce the amount of trash in oceans, but they raise awareness about the ever-increasing amounts of plastic in the oceans. During a survey, it was shown that less than half



of College Prep teachers have participated in a beach cleanup. But, with a quick Google search of “Beach cleanup: San Diego,” thousands of volunteer cleanup times and locations are listed. La Jolla Shores, Coronado Beach, and Mission Beach are among the popular beach cleanup locations. For instance, volunteer cleanups are typically held from around 5:00-7:00 pm on the weekdays and around 9:00-12:00 am on the weekends.

For those with phones, apps are not just used for entertainment purposes. On average, 8th grade Tigers were found to have access to at least four popular social media platforms. These apps, including TikTok, Instagram, and Facebook, can be used to educate others on the importance of recycling and how they, too, can help the environment. Phones can also function as an efficient way to answer any questions regarding what to recycle. As explored later in this article, while there are ways to know if items are recyclable. Using the internet is a simple way to find answers to any of these questions. Google really can help!

Additionally, people have found their own, creative ways to reuse trash. A great example of this is a man named Naman Gupta, who lives in India, and creates a variety of products from reused cigarette butts. He turns this common litter into stuffing for toys, soil for farmers, mosquito repellent, and fabric. In total, he has recycled 300 million cigarette butts over a short period of 5 years. Young people in college are also devoting their futures to helping prevent climate change. Of course, any contribution doesn't need to be as notable as these, but just picking up litter and recycling throughout the community will help in the long run.

Now, picture this: you have just taken a bag full of recyclable items out to the recycling bin, where it is to be delivered to the nearest recycling facility. You might be thinking, “But where does all of this recycling go after I drop it off?” After the recycling is deposited at a sorting plant, manual labor and technology are used to separate the materials. Once separated, materials are sent to manufacturers to be made into new products. Paper products and cardboard, for example, are sent to Asian countries to be made into boxes, tissue paper, and packaging, while plastic is sent to places such as Malaysia and Thailand, where it is made into everything from t-shirts to backpacks.

Some people, however, question whether their recyclables are actually being recycled. Unfortunately, there is no way to know for certain if these materials are being recycled, but research suggests that many recyclables are recycled, due to the fact that “they have a dollar value.” In other words, the paper and plastic that are recycled can be sold to manufacturers in the form of their raw materials. This said, recycling companies are much more likely to sell your recyclables to a manufacturer than to dump possible profit into a landfill. While there is some skepticism surrounding this topic, it is safe to say that what goes into a recycling bin is later made into a new product, so don’t let this stop you from throwing your plastic water bottle into the blue bin.



To see what our community knows about recycling, we tested College Prep teachers on what they thought was recyclable. The results detail that only one-fifth of the teachers were able to correctly identify all of the recyclable items, a common misconception being that many teachers mistakenly thought aerosol cans and Styrofoam were recyclable. While aerosol cans can be recycled, this is only possible if the hazardous waste within them is removed, and people often forget this crucial step. On the other hand, few recycling facilities accept Styrofoam, due to the fact that it is “extremely difficult to recycle.”

Our classmates also described that paper products and plastic bottles were recyclable. And, while this is a good starting point, there are other recyclable items. Some of these include cartons, glass jars, aluminum, yogurt tubs, plastic toys, baskets, and boxes.

Whenever in doubt, it is always best to check products

for a triangular symbol made up of three arrows. The number found within the triangle (and the sequence of letters below it) indicates the grade of plastic, how the product can be used, and how difficult a material may be to recycle. When recycling at home, plastics with triangles numbered 1, 2, 3, and 5 are safe to be recycled. However, be wary of products with the numbers 4, 6, and 7, as only a select number of items made from these materials can be recycled and a recycling center may not accept these materials at all!

 <p><b>PETE</b></p> <p>POLYETHYLENE TEREPHTHALATE</p> <p>Cosmetic containers Plastic bottles Mouthwash bottles Prepared food trays</p>	 <p><b>HDPE</b></p> <p>HIGH DENSITY POLYETHYLENE</p> <p>Detergent bottles Grocery Bags Milk Bottles Shampoo bottles</p>	 <p><b>V</b></p> <p>POLYVINYL CHLORIDE</p> <p>Garden hose Window frames Blood bags Blister packs</p>	 <p><b>LDPE</b></p> <p>LOW DENSITY POLYETHYLENE</p> <p>6 pack rings Cling film Bread bags Squeezeable bottles</p>
 <p><b>PP</b></p> <p>POLYPROPYLENE</p> <p>Bottle caps Packaging tape Cereal liners Straws</p>	 <p><b>PS</b></p> <p>POLYSTYRENE</p> <p>Disposable coffee cups Styrofoam Plastic cutlery Foam packaging</p>	 <p><b>OTHER</b></p> <p>POLYCARBONATE</p> <p>Baby bottles Water cooler bottles Fiberglass Tupperware</p>	

These sincere endeavors to prevent further devastation of the ecosystems within our planet will, in fact, lead to promising results. As recycling becomes more commonplace in households throughout the globe, environments - especially marine ones - will begin to regenerate. This is because the more plastic recycled, the less plastic and ocean acidification that can potentially harm sea creatures. The EPA (a government organization founded in 1970, dedicated to protecting the environment) website explains how recycling “conserves valuable resources” and “saves energy.” These details suggest that recycling reduces the amount of greenhouse gases that are released into the atmosphere, and, therefore, functions as a solution to climate change.



Not only does recycling impact environments and the animals living within them, but it creates more jobs in both the recycling and manufacturing industries.

As you have likely determined, planet Earth is in serious trouble. Preserving our world for future generations doesn't require superpowers; all it takes to help is a little recycling. Just remember the tips displayed in this article, and you too can make the world a better place. Reuse, reduce, and recycle Tigers!

Tiger Chronicle Staff:

Sofia A.	Bridget C.	Joseph L.	Kaila S.
Joshua A.	Aidan D.	Maya L.	Chloe T.
Chris A.	Aiyana F.	Riley M.	Megan U.
Charlotte B.	Elan G.	Gavin N.	Alana Z.
Trent B.	Jackson H.	Leo N.	
Donte B.	Judi I.	Christian O.	
Nathan C.	Savina J.	Reika P.	

