



The Bayan Post

“Innovative, Insightful,
Informative”

Breast Cancer Edition

Welcome back Bayan students to another month of this school year! I hope you all had a great start! The month of October, is known for “breast cancer awareness” activities. The school has organized a pink day on the 27th of October, in support of this cause, and all the money gained, is to be donated to the Dream Society, and organization that aims to make cancer patients’ dreams come true. In addition, the school held an assembly briefing on breast cancer, followed by a walkathon. We pray for the health and wellbeing of all patients and their families.

-Basel Al Jishi

(Editor-in-Chief)

Trip to CERN

By: Zain Al Bastaki

Hey Bayanees! Hope your first month and a half of school hasn’t drained all your energy yet, because we still have seven months of hard work and academic excellence to go. Although the past few weeks might not have been particularly eventful for the rest of us, Abdullah Zaini and Mr. Abdulbaky wouldn’t quite agree.

After a rigorous selection process, Abdullah was chosen to be the Bahraini male representative to travel to a workshop based in CERN with Mr. Abdulbaky. He submitted his application and transcript, and he was chosen from dozens of ambitious youth to undergo an interview. When he knew he was selected, he was “over the moon” to have such a great opportunity. Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME) is currently in its final stages of construction in Allan, Jordan and is expected to be in full operation late this year. This facility is going to be the first major international research



center in the Middle East. Its goal is to foster scientific innovation and provide a platform for scientists all over the Middle East and neighboring countries to come and create. In its efforts to spark young scientists’ interests, they decided to send one female and one male representative



from each member state (including Bahrain) along with their teacher to the site of SESAME's larger predecessor CERN in Europe. CERN, also known as the European Council for Nuclear Research was founded in 1954 near Geneva. It is the world's most advanced research center where particle physicists and engineers are using cutting-edge technology to explore the basis of matter and our universe. Using state-of-the-art particle accelerators to collide different particles at a speed close to the speed of light, allows them to get an idea of how particles react and interact with one another. The LHC (Large Hadron Collider) is the particle accelerator used at CERN and is contained in a circular tunnel with a circumference of a whopping 27 kilometers and a depth of 175 meters underground; large is definitely an understatement. In addition, CERN is where the World Wide Web was invented by Dr. Tim Berners-Lee and for computer science enthusiast Abdullah, the CERN computer center was the highlight the trip. He says "as a computer science student I was really interested in going to see CERN's computer center where they had all their networks [...] I got to see the birth place of the World Wide Web and all the server rooms which was really cool". He also enjoyed seeing anti-matter, which is, simply put, the opposite of matter; all the subatomic particles in anti-matter have properties opposite to those in matter. He also "got to see all the particle

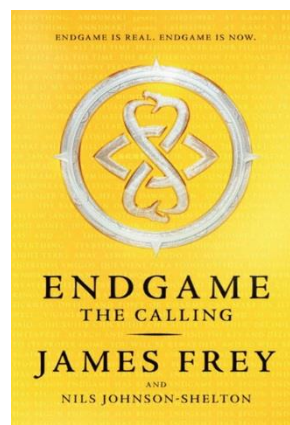
accelerators [...and] a large iron ring particle accelerator".

Abdullah concludes the interview by giving an overview of his experience. He is very grateful for this unique opportunity and says, "This was like a once in a lifetime experience because [...] the overall trip was just amazing". He particularly can't forget the environment of students and scientists all sharing a common goal and passion "that we're going to make the world better" says Abdullah. We're all very excited to see such an amazing place recreated in SESAME and wish young scientists just like Abdullah Zaini the best of luck in their innovative voyage to changing the world.

Endgame: The Calling (book review)

By: Zain Buhindi

Have you ever wondered about what goes on in the lives of those around you? Or



have you been too busy worrying about that party on Friday or that essay due on Monday? What if I told you that there are teenagers training; training for a game in which lies a puzzle they must solve in order to save their line? In James Frey's book "Endgame: The Calling", thirteen descendants from ancient bloodlines (ranging from the ages of 13-

17) must all take part in a test that will determine whether their bloodline (and the country they come from) will survive the "apocalypse". When a massive asteroid attack happens on planet earth, in several parts of the world, 12 Players (teens who have trained their entire lives for "Endgame", they know that it's their time. They must play. Playing means traveling to one location, where an alien being gives them each their own unique clues. The first step to winning Endgame? Find Earth Key. Which can be found literally anywhere on the planet. This book is incredibly dark, incredibly twisted, and incredibly unlike anything else. I personally went into it, thinking I'd hate it, and I actually was amazed by how well done it was. This story proves to be a more savage version of "The Amazing Race" heavily rooted in aliens and science fiction. The plot is told from several different characters' points of view, all of which come from all over the world; killers trained so well in not only physicality, but puzzles, technology, languages, etc. They basically make James Bond look like Flounder from "The Little Mermaid". I'm not a big fan of James Frey and the controversies surrounding him, but I must say I was incredibly impressed by the work he and Nils-Johnson Shelton did together. Endgame reads like a movie script, present-tense, and incredibly different. Much like "Unwind", it is told in a third person omniscient point of view. I found myself unable to put this book down, and

I'm dying for the second one. I also have no idea how to solve the puzzle that goes along with the book, because I'm not a genius. The book is filled with strange clues and phrases and numbers and symbols, which is intriguing in itself. I think it's going to kick butt on the YA market!

Teacher Spotlight

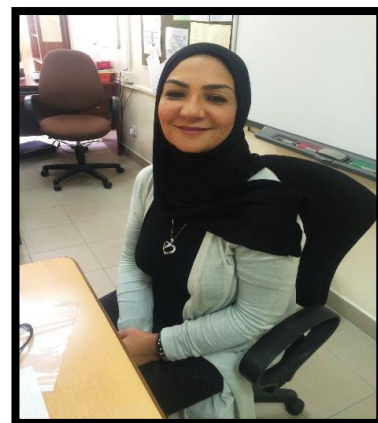
By: Rabab Khalaf

This month's post recognizes Mrs. Hanan BuKamal, a teacher who has entered her 27th year of meritorious service at Bahrain Bayan School.

Although she had opted French and English as her major subjects in university,

later she fell in love with the beauty of Arabic poetry. As a result, she decided to change her major to the Arabic language and at present she is enriching her students with Arabic literature.

Mrs. Hanan is one of the very rare teachers who is the main figure behind many success stories in Bayan. She helped a student write his first published book and still has the first draft until today. This student dedicates every single work



published to her, as she inspired him to become a writer and supported him in every step of the way.

She tries being strict in order for the students to actually work, but she's honestly one of the most loving teachers who values the students' presence in school. Plus, everyone can get access to her good list if he/she actually puts in the effort. Away from school, Mrs. Hanan is a shopaholic at heart which you can tell by her daily outfits. She is also the mother of three children; Nouf, Nawara, and Nasser, who have all completed their graduation by the support of an amazing mother.

Drunken Driver or Forbidden Love?

By: Amal Sarhan

30th of August, 1997. A day notorious for the demise of the enchanting Princess Diana. Diana's death is considered one of the most bemusing mysteries of all time. Until this day, when presented with the evidence collected from her crash site, no one has been able to explain or deduce the real events of that night. How could this tragedy occur? Was it merely an accident? Or was it a plot - a conspiracy organized by the Royal family themselves? Diana and Dodi Fayed (whom she was having a romantic affair with) had just exited the Ritz Carlton in Paris to be swept by their chauffeur away from the stampede of reporters and paparazzi. at about 12:20 am, racing at the speed of 100 plus in a posh Mercedes Benz, they shot

through the Pont de l'Alma road tunnel fleeing from a remaining herd of paparazzi. It only took an instant - the driver loses control of the vehicle and it goes swirling. The shocked passengers find themselves grabbing whatever they could reach.. But Investigations done on the site revealed that the driver - who was found to have been drunk (which is why he lost control of the car) - had led the



car straight into one of the pillars supporting the roof of the tunnel. The stream of photographers had rushed to help the sprawled victims of this terrible crash. Both him and Dodi had passed away instantly due to severe damage to their spines. Diana was amazingly still conscious at the scene. She was found crouched on the floor of the vehicle. One of the photographers had tried to help her out but her feet were stuck under the heavy debris. Dr Maillez was the first to attend to Diana. He reported no facial injuries, declared that she was in shock, and therefore supplied her with oxygen. Police patrol officers arrived at 12:30 to control the situation. They finally managed to get her out at 1:00, but a few moments later she underwent severe cardiac arrest. The team was able to get her heart beating again via cardiopulmonary resuscitation. She was carried into an ambulance at 1:20,

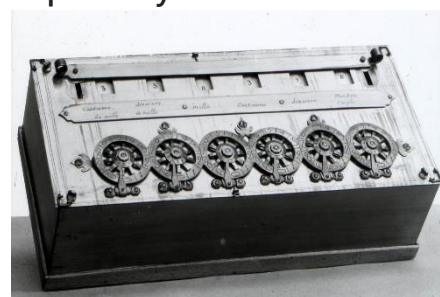
left the scene at 1:40 and ultimately reached the hospital at around 2 am. Despite various attempts to make her overcome her injuries, she too succumbed to her wounds at 4 am. Her heart had been displaced to the right side of her chest and as a result it had torn her pulmonary vein and pericardium. When confronted with this evidence, many individuals have failed to make sense of this heartbreaking and catastrophic event. Was it the driver's fault? Was it due to the speed they were travelling at that caused them to hit the pillar? Was it because of the meddlesome flock of hungry reporters and paparazzi? Was it an organized plot by the Royal family in an attempt to demolish Diana's relationship with the monstrous Dodi from tainting their image and shaming their name? Were they the ones who leaked the location of the couple to the press knowing full well that they would naturally want to flee from the prying eyes of the paparazzi? All these questions are astoundingly yet to be answered. It is unfortunately unlikely that anyone will ever discover what actually happened. The true events of that night is trapped within that time frame.

The History of Calculators

By: Rashid Almusalam

The main purpose of a calculator is to allow people to perform complex calculations. Other than basic operations such as adding, subtracting, multiplying,

and dividing, modern calculators can also calculate many other problems, such as trigonometric or statistical problems. Before calculators, people used the Abacus to perform basic calculations. The first inventors of mechanical calculators include Wilhelm Schickard and Blaise Pascal. Pascal's calculator could only add and subtract, but could also multiply and divide if used repeatedly. On the other hand, Schickard's calculator could perform the four basic math



operations. Leibniz on the other hand used the ideas of those two inventors to create a calculator that could perform all four basic operations more efficiently than Schickard's calculator, as well as using it to develop his Leibniz wheel. After the Industrial Revolution, calculators were greatly improved because they were made to be much more compact than their previous alterations. Many mechanical calculators were designed and improved, but electronic calculators soon took over. The first electrical calculators were large and heavy, unlike the portable ones used today. Later on, during the 1970s, calculators did not need as many chips and wires as they used to, and the first portable electronic calculators were created. Today, calculators are no longer limited to performing basic mathematical

operations. They are capable of graphing and solving complicated equations, use word processing software, collect data and send it to computers.

Guernica Unraveled

By: Razan Hafud

Born in southern Spain, 1881, Pablo Ruiz Y Picasso grew up to be one of the most renowned artists of his century. His development of cubism had a great impact on modern day art. *Guernica* is considered to be his greatest masterpiece.

In January 1937, Picasso was commissioned by the Spanish Republican government to create a large mural. His inspiration came from an eyewitness account he read in a newspaper of the devastating bombing of Guernica. During the Spanish Civil War this quiet village was considered a hub of Republican resistance. On April 1937, Nazi forces acted in support of Franco when bombing the town of Guernica. Their only aim for doing so was to intimidate Guernica's people. The bombing demolished seventy percent of the town.



The painting portrays the chaos and suffering of featuring people and animals alike, all wrenched by unfolding carnage.

The scene is set in a room. On the left, a woman cries uncontrollably over a dead child in her arms. She has a pained, anguished expression and her eyes are drawn in the shape of tears. Above her a strong wide-eyed bull is situated. Out of all subjects present in the painting, the bull is the only one that seems composed and dispassionate. The bull has a dark

body and a light head. Beside the bull is a dove holding a branch upwards, inscribed in the wall. In front of

the woman lays a dead soldier, dissevered and open-mouthed. Above the scattered pieces of the soldier's body is a wild-eyed horse with a large gaping wound and a bent knee. The horse has a javelin pierced through its body. Its snout and teeth form the side view image of a human skull. Directly overhead is a blazing bulb. The bulb, bare in its form, is similar to the light bulbs often present in a torture cell. Picasso alludes the bombing in the form of this light bulb through speech sounds as the light bulb's name in Spanish (bombilla) is similar to the sound of the word bomb in Spanish (bomba). To the right of the

horse is a flame-lit lamp that is carried by a right arm that extends through the window. The lamp clashes with the bulb as a symbol of hope. Beneath is a woman that staggers to the left side of the painting. Her intent gaze follows the bulb's fervent blaze and her expression portrays a feeling of awe.

Perhaps most debatable is the symbolism in this painting. The only thing Picasso confirmed to the public that the bull



represents brutality and darkness. The rest was left for us to interpret. People have often considered the bull in Guernica as an

indirect allusion to fascism. The inscribed dove, the growing flower and the light of the lamp are symbols of hope. In contrast, the light bulb that doubles as a bomb has been said to represent the advancement of technology, as in the technological advancement that has been tested during the town's bombing. In addition, the newspaper print reflects how Picasso first heard about the Guernica bombing.

Picasso successfully projects the horrors and tragedies of war. His symbolism and different techniques has made this painting the most powerful political painting of the 20th century. His art

preserves the atrocity of the Guernica bombing and serves as a poignant anti-war reminder at an international scale.

Trichotillomania

By: Mariam Al Bastaki and Yahya Al Hayki

Have you ever been so stressed out you considered pulling your hair out?

Trichotillomania or hair pulling disorder is an impulse control disorder characterized by the compulsive urge to pull one's hair, leading to hair loss and balding, distress, and social or functional impairment.

Trichotillomania may be present in infants, but the peak age is between nine to thirteen years old. It is usually



triggered by depression or stress.

Moreover, the scalp is the most common pulling site, followed by the eyebrows, eyelashes, face, arms, and legs. People who suffer from this disease only pull one hair at a time, and this pattern can last for hours. In some or rare cases, the hair that the victims pull is ingested. This can be fatal, whereby a hairball is created, and that hairball's "tail" can extend to the intestines. Furthermore, the environment is a large factor which affects hair pulling. The most extreme example of automatic trichotillomania is found when some patients have been observed to pull their hair out while they are sleeping. One

specific case of Trichotillomania is described by Stephanie Thomas a specialist regarding this particular diagnosis. She named the participant 'R' in order to protect her identity. R was just 13 years old when she met Stephanie, having a chronic case of Trichotillomania prior. She had already seen several therapists to undergo traditional treatment but nothing had been working. R was facing serious bullying from peers at school, and was grieving the loss of a biological parent and so lived with her grandparents. Therefore, we can see that it is because of emotional abuse that this diagnosis is made. After continuous sessions and treatment, R thankfully stopped having the urge to pull her hair. Finally, the treatment of this disease involves behavioral modification programs run by psychologists. Although in some instances, treating other disorders the patient has, acts as a cure, in which those disorders were a cause for the diseases' development.

Top 5 Junk Food Alternatives

By: Shaikha Al Khalifa

Unhealthy foods are almost impossible to avoid. In order to avoid these junk foods we can at the very least satisfy our cravings by replacing junk foods with healthy substitutes. To guide you on this transformation, I compiled a list of the top 5 junk food substitutes.

1- Dried Fruit as a Substitute to Candy:

As far as nutritional content is concerned, candy is about as bad as it can get. Loaded with unhealthy refined sugar, candy offers nothing beneficial to the body: no fiber, no protein, no vitamins or minerals -- only empty calories.

A healthy alternative is dried fruit like apricots or dates, which will satisfy your craving for sweets.



2- Dark Chocolate as a substitute to Milk Chocolate: Chocolate bars are adored by many, however chocolate bars are high in calories, refined sugars and saturated fats. The healthy choice would be to opt for organic or milk-free dark chocolates that are high in cocoa content and free of additives.

3- Sweet Potato as a substitute to French Fries: French fries may taste great, but they are high in sodium, Trans fat and calories. To satisfy those salty urges, whip up some homemade, oven-roasted sweet potato wedges instead. Sweet potatoes are an excellent, antioxidant-rich anti-inflammatory alternative to white potatoes.

4- Mineral water with lime as a substitute to Soda: Sodas are 100% nutrition-free, therefore, drinking only a few sodas a day may lead to tooth decay, obesity, diabetes and even heart disease. Switching to a glass of mineral water with lime will do the trick as it is high in vitamin C and contains anti-cancer properties.

5- Organic Probiotic Yogurt as a substitute to Ice Cream: Ice cream may be decadent and delicious, but it can be bad for your health. A single scoop of premium ice cream contains about 250 to 350 calories and half-a-day's worth of saturated fat. To avoid this calorie-heavy nightmare, opt for organic probiotic yogurt, which can promote digestive health.



Young Artists
By: Hanan Abdulaal

Hayden Williams is a young artist that creates appealing fashion illustrations for IRL outfits. When it comes to capturing the best fashion moments, most people choose a camera, but this artist opts for a pencil instead.

Hayden Williams is a 24-year-old British fashion illustrator. His parents discovered his



artistic abilities at the age of three and he hasn't stopped his passion for art ever since. He frequently sketched Disney characters as a child, and as he got older, his drawing style matured, and it was a

natural progression into fashion illustration and design.

Hayden Williams' fashion illustrations are absolutely gorgeous, and not only does he capture the looks, he calls the trends as well. From models to street style stars and everything in between, Williams surely has an eye for all things fashion. In the midst of studying, he would share his sketches online to platforms like Twitter, Tumblr, and Instagram, garnering a strong fan base over time. Before long, the likes of Beyoncé and Oprah were showing love for his work. It is also evident that it's not only the stars that seem interested in his illustrations, with over one million followers on Instagram, it is obvious that people love what he does.

Williams has already collaborated with Kate Moss, Rimmel London, and Disney for their famous Cinderella dress. Although, Williams' ambitions go higher than just major movie pictures and cosmetic brands, Williams aspires to open his own fashion label someday, as he mentioned in a previous interview "One of my ambitions is to have my own fashion label one day. I think becoming a fully-fledged brand is something I am always working towards".

With his skills, this dream could easily become a reality. He posts his own sartorial creations to Instagram on top of sketching out existing style icons, so it looks like the sky's the limit for this illustrator.

Away

By: Fatima Janahi, Rawana Al Dajani, and
Salem Bin Huwail

Have you ever wondered what it would be like to go on a trip to somewhere far away? You might be gone for a month, a year, or even more, but you eventually come back home. Well, that's what happens to the pieces of garbage you throw "away" each day. Just because you don't see the waste anymore doesn't mean it just magically disappeared. Have you ever thought about where your waste ends up if you throw it "away"? Is there even such a thing as "away"?

Bahrain produces an unbelievable amount of waste each year, amounting to 1.3 Billion Kg. That is a very large number! This means that every individual, including you, generates on average 3 kg of waste per day. So where does it all go?

Most of the waste ends up in the Askar Landfill, which is an enormous man-made hole in the ground in Askar, which Bahrain has adopted to be its garbage dumpsite. However, 84% of the landfill's waste is made up of recyclable elements. The landfill would not have reached the level of damage it is today, if people just started to separate their waste into recyclable and unrecyclable materials.

However, "away" is not in Askar landfill or anywhere else, "away" is within us, humans. We are carrying the diseases that

are the results of our careless garbage disposal. The waste we recklessly throw "away" ends up in the sea and the land surrounding it, where marine animals are exposed to these harmful chemicals. Eventually, we consume these animals, such as fish, which are carrying toxins that end up in our system. Harmful substances also seep into the soil and are taken in by plants. Therefore, they end up in our fruits and vegetables. They even end up in meat and chicken, as animals eat the contaminated plants. All these factors have

contributed to the spread of diseases.

According to "Gulf News" (أخبار الخليج), a local Bahraini

newspaper, the amount of patients diagnosed with cancer has been increasing throughout the years due to the poor environmental conditions.

So, the next time you throw a piece of "garbage", think about whether you can really call it a piece of "garbage"? Think about whether it can be reused or recycled? And remember that every decision you make will impact you, your family, and the future generations to come. Everything will find its way back into your system, if you choose not to value the environment we live in.



Wearable Technology

By: Faisal Al Doseri

Wearable sensors could one day interpret the gestures in sign language and translate them into English, providing a high-tech solution to communication problems between deaf people and those



who don't understand sign language.

Engineers
at Texas
A&M

University are developing a wearable device that can sense movement and muscle activity in an individual's arm. The device works by figuring out the gestures a person is making by using two different sensors: one that responds to the motion of the wrist and the other to the muscle movements in the arm. Another device program then wirelessly receives this information and converts the data into the English translation. One drawback of the prototype is that the system has to be "trained" to respond to each individual that wears the device, Jafari said (one of the developers). This training process involves asking the user to essentially repeat or do each hand gesture a couple of times, which can take up to 30 minutes to complete. Jafari thinks the issue is largely the result of time constraints the team faced in building the prototype. It took two graduate students just two weeks to build the device, so Jafari said he

is confident that the device will become more advanced during the next steps of development. For future development, the researchers plan to eliminate the training time of the device, so that the wearable device responds automatically to the user. Jafari also wants to improve the effectiveness of the system's sensors so that the device will be more useful in real-life conversations. Currently, when a person gestures in sign language, the device can only read words one at a time. This, however, is not how people speak. "When we're speaking, we put all the words in one sentence," Jafari said. "The transition from one word to another is seamless and it's actually immediate."

"We need to build signal-processing techniques that would help us to identify and understand a complete sentence," he added.