HES Construction Update

By Lena A. and Laci O.

Last year, Harvard residents voted to build a new elementary school. Over April vacation, construction started on the new HES. It is exciting to have your new school built right outside your classroom window, but you might have some pressing questions about what the new school will be like or about the construction process, so we interviewed Mr. Myler and John Seymour, the head of construction, about the new school.

When the new school is finished, it will have improved from the old one in many ways. It will have a system that brings in fresh air from outside inside the building. Fresh air is healthier to breathe and might help students concentrate while they are in the classroom. There will also be a new and improved stage for performances. The heating and air conditioning will be improved as well, no more extreme temperature variations inside the classrooms. Another change is that there will be small spaces right outside of classrooms for students to get more one on one attention. A lot of times, students who have difficulty concentrating in the classroom have to work in the hallway, where there are more distractions. The breakout spaces, as they are called, will solve this problem.

Since we cannot use the HES field, outdoor events such as Field day and Wellness day, an event put on by the Student Leadership Group, will be moved over to the field across the street. During recess, students in grades 3–5 may choose to play on this field. If you would like to go across the street, line up behind the red arrow in the hallway. A recess aid will then escort the group across the street. Those who would like to spend their recess at the HES playground should line up behind the yellow arrow.

John Seymour and his team are hoping that the construction will not affect the staff and students at HES in any way. They are trying to be as respectful of everybody as they can. They are hoping to finish construction and move everyone into the new school in 2021. That means that the current fourth and fifth graders have to go through most of the construction process, but will never get to experience learning in the new school. Mr. Myler has agreed to give all the Bromfield students special tours of the new school. He will also be giving tours to others in the town.

We would like to thank Mr. Myler and Mr. Seymour for taking the time to answer our questions. We hope that this article has answered some of your questions about the new school. Thanks for reading!
Science Spotlight: Are Black Holes Actually Holes?

By Gabriella T. and Hannah H.

Black holes aren’t holes. Items can go into them, but nothing can ever come out. They act a little bit like whirlpools, but they aren’t actually whirlpools. The border around a black hole, called the event horizon, does not have as much gravitational pull as the parts that are closer to the center, which is a characteristic that black holes and whirlpools share.

Black holes are formed by stars, although not every star becomes a black hole. Stars that are below 25 times the weight of the sun are lightweight stars, and won’t become supernovas, and therefore don’t turn into black holes. Stars that are 25-40 times the mass of the sun will go into a dazzling supernova, which is when a star runs out of fuel. When a star becomes a supernova, it increases greatly in brightness and size, then burns out in vivid color. After the supernova stage, the leftover gases and material will collapse into itself, creating a black hole. Stars that are over 40 times the mass of the sun directly fall inward, forming a black hole quickly.

A black hole’s pull is gravitational. They have a ton of gravity, but the space around them has almost none. Nothing can play a game of tug of war, and win, with a black hole. Nothing at all. Not everything on earth combined. They have the strongest pull in the universe.

One of the biggest black holes, with one of the strongest pulls, is NGC 4486 (also known as Virgo A), a supermassive black hole which is 50 million light years away in the constellation Virgo. It is so huge, the diameter of it is almost the same as the diameter of Pluto’s orbit! It’s mass is about 3 billion times the mass of the sun!

One of the closest black holes to earth is V4641 Sagittarii (also known as V4641 Sgr), a stellar mass black hole that is 1,600 light years away in the constellation Sagittarius. But, to be clear, nobody could travel to a black hole in a lifetime; even the closest one is way too far away.

Another black hole that is “nearby” is Sagittarius A, a supermassive black hole that’s in the center of our galaxy, the Milky Way. It’s also in the constellation Sagittarius.

Black holes are invisible, because no light can come back through it. That’s also why it’s name has black in it. How did we discover black holes? A telephone engineer in the 1930s was trying to figure out why static was in the phone lines when he found out that radio energy (from space) was getting in the way of phone signals and causing static!

A radio engineer named Grote Reber decided to help. But he had a problem: to investigate the radio energy (which is invisible), he needed a radio telescope, and it was still to be invented at that time. So he made it himself. Reber and other astronomers discovered that some radio sources were seen as two spots that were next to each other, one on each side of a teeny dot. They came up with a name for these paired dots: “radio galaxies.”

Eventually, in the 1980s, new photos unveiled an astounding picture: radio galaxies’ spots were really the ends of monstrous strings of radio energy, each trailing thousands of miles. Something with extraordinary power had to be generating these strands of radio energy. No star could do work like this. In 1994, telescopes revealed evidence that verified the cause—a supermassive black hole with the mass of millions and millions of stars.

If black holes are invisible, then how do we find them when they aren’t interfering with phones? Scientists have found a few signs of black holes: twirling stars, multiple blurry images of galaxies, and X-ray rings. But black holes aren’t the only things that cause twirling stars, blurry galaxies, and X-ray rings.

Black holes vary greatly in size. The biggest type of black hole is called a supermassive black hole. They can be millions to billions of times the mass of the sun! A medium-sized black hole is called an intermediate-mass black hole. They can be 100 to 10,000 times the mass of the sun. A small black hole is called a stellar mass black hole. They can have the mass of three to ten times the mass of the sun. There may be another type of black hole called a micro, or primordial, black hole. Scientists haven’t found real proof that they exist yet, but think that they can have about as much mass as Mt. Everest!

Recently, the first ever photo of a black hole was taken by scientists.
**Arbor Day**  
*By Laci O. and Satriah S.*

What is Arbor Day? Arbor Day is a day on which groups and individuals are encouraged to plant trees in their communities and at home. The Spanish village of Mondoñedo held the first arbor plantation festival in the world, organized by its mayor in 1594. The place remains as Alameda de los Remedios, and it is still planted with lime and horse-chestnut trees. A granite marker and a bronze plate remind the town of the event. Additionally, the small Spanish village of Villanueva de la Sierra held the first modern Arbor Day, an initiative started in 1805 by the local priest with the enthusiastic support of the entire population. A few years later in 1872, Arbor Day was celebrated in the USA. About 100 years later, in 1970 the United States declared the last Friday in April to be Arbor Day. In other countries like Australia, Arbor Day is celebrated on other days like Sunday.

This year Arbor day is on Friday, April 26. The origin of Arbor Day is Latin. Arbor Day translates to tree day. The Arbor Day foundation is planning to have planted 100 million trees by 2022.

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**Harvard Residents Save the Trees**  
*By Lena A.*

On Earth Day, the Harvard Planning Board met to decide if five trees were going to be removed on Littleton County Road. These beautiful trees stand tall and make Littleton County Road one of the prettiest roads in Harvard. Many Harvard residents, including my family, were upset that the trees were going to be removed. People posted signs on the trees that alerted others to “Root for the trees” and a petition was formed. The petition had over 1025 signatures in support of saving the trees. Many people showed up to town hall and spoke out in support of the trees, which have no voice themselves. Victory was achieved when the planning board voted 3-2 to save all five trees! The trees have been standing tall on this road well before most Harvard residents were even born. Together, the trees' ages add up to over 750 years old. They will continue to grace this road and as people enter Harvard, the trees will still be one of the first things they see, welcoming you to our country town and reminding us of Harvard’s history. This shows the power of petitioning and speaking up for what you believe in. As Wendell Berry, an American novelist and environmental activist, states, “The care of the Earth is our most ancient and most worthy, and after all, our most pleasing responsibility.”

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**Jerry**  
*By Gian M.*
Ask the Editor

*By Lena A.*

Illustrated by Clara A.

For this edition, I visited Ms. Lauren’s preschool class and collected a number of interesting questions. At the time, the class was learning about dinosaurs, making dinosaur crafts and holding class discussions about them. I was not surprised when I was asked a great number of questions about dinosaurs. All the questions I was asked were great, but two kids in the class asked questions that really stood out to me. Louisa asked me “how dinosaurs got to be on earth and how did they die?” and Oscar asked me “how dinosaurs got to the museum?”

Scientists don’t have any definite answers to how dinosaurs came to be on Earth. Some scientists think that the dinosaurs *evolved from a type of reptile called chordiates that lived before them. Dinosaurs probably became the dinosaurs we know today about 230 million years ago on a huge land mass called Pangaea. Pangaea was the only continent back then, the land had not yet been split up. Among the earliest dinosaurs is the eoraptor, a meat eating dinosaur from Argentina.

There are several theories about how dinosaurs became extinct. Some people think dinosaurs died out because of climate and geological changes that disrupted dinosaurs’ food supply. Others have showered the earth in radiation that killed all the dinosaurs. The last theory is that dinosaurs did not die at all! Instead, they *evolved into different animals as time went on. People say that birds are descendants of dinosaurs. So next time you’re bird watching, you could actually be looking at the relative of a Pterodactyl!

Millions of years after the dinosaurs’ extinction, scientists called paleontologists dug up the dinosaur’s fossils, buried under the ground. The bones of the dinosaurs are scattered, so scientists put the bones together like a puzzle and study the skeleton to learn more about what dinosaurs looked like. They might bring the finished skeleton to the museum and put it on display for other people to study and enjoy.

I would like to say a big thank you to Oscar and Louisa for providing the questions for this edition.

*evolve- to change or develop gradually

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Easter

*By Saya D. and Natalie G.*

Why do we celebrate Easter with eggs? The egg is a symbol of new life. It is also like a newborn chick hatching out of (his/her) egg. It has been included with festivals celebrating spring. If you do dye hard boiled eggs at home to celebrate Easter, it might be a little messy. The Easter Bunny is associated with Easter. It is also referring to a symbol of spring and new life. A fun way to celebrate Easter is to hide eggs and receive a basket of goodies. The basket might include headbands, clothing, games, and bubbles. A basket of goodies could also include chocolate and candy.

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Dragons

*By W.S.*
This is a story about two sisters sent away on a transport ship, sent away from all they knew. But they might just find something that will change their life forever.

Chapter 1: Shipwrecked

Terrified yells came from above deck, the water slowly dripped down into the hold. Two ten year old girls sat below clutching hands in fright. The girl on the left had long brown hair down to her shoulders, her feisty orange-red eyes were always blazing like a forest on fire. Her clothes were shades of scarlet with beautiful embroidery of golden thread. Her shimmering gold bracelet had a small sun. It seemed to glow with its partner’s fiery spirit. She held the name of Sophia.

The girl on the right had a braid of thick golden blonde hair that cascaded down her back. Her vibrantly blue eyes were so soft and caring that she could be an angel in disguise. Her clothes were periwinkle blue with embroidery of silver thread. She had a small silver chain draped around her neck with a crescent moon. The moon seemed to glow peacefully with its owner. She had the name of Caroline.

“What will happen to us?” Sophia whispered. She usually had a fiery spirit but even if they survived the violent storm, their future is still unknown.

“I don’t know, but I think we should be fine if we stick together. That’s what uncle told us” Caroline whispered back, clutching her small moon locket that had spirals engraved into its surface.

“Yes, although even if we survive what will become of us? Will they maroon us or throw us into the streets of some city or…” Sophia’s voice trailed off. They both knew the possibilities of being sold.

“We should have luck with uncle’s stories…” Caroline tried to reassure her sister, and even herself. Then everything went quiet. A loud creak, a quick snap, and the world went black.
Mad Lib By Harrison B.

This April vacation my family and I went to _________. It was so__________. We saw this ________ _________. It was weird. Then we went and saw a sculpture called ________! It was so ________! Then we went back to our ________ and slept for the night. When we woke up ________ took us to ________ and I got a _________. It was so _________.

On the way back home we went on this ________ ________ and ________ home.
March Madness Recap

By Ben M., Eric B., and Alex S.

Most brackets were toast after Duke lost to Michigan State and North Carolina lost to Auburn. Also, nobody predicted that Texas Tech would beat Gonzaga and make it all the way to the Final Four. After being the first number one seed to lose to a sixteen seed last year, Virginia overcame these problems and reached the final four this year. In the Elite Eight this year, Michigan State beat Duke, North Carolina lost to Auburn, Texas Tech beat Gonzaga, and Virginia beat Purdue. Then in the Final Four, Auburn lost to Virginia and Texas Tech beat Michigan State. In the Championship Game, Virginia beat Texas Tech to win it all!

Think Fast

By Javier E.

The Guinea Pig Life

By Maddy K.

Call for Contributors

Any 3–5th graders may attend The Husky Headlines meetings. Look for meeting announcements in the HES email newsletter next school year. We welcome artists, illustrators, photographers, journalists, and short story authors. Students in grades PreK–5 may submit work to smulcahy@psharvard.org.
April Fools Day
By Saara P., Annabelle P., and Laci O.

Scientists speculate that April Fools Day started in 1582, but are not quite sure. April Fools started as an accident. It happened when people did not realize that the new year had switched from April 1st to January 1st. People celebrated the new year from the last week of March to April 1st. It became a week where people pranked each other, and the tradition has stayed with us to today, though it is just one day now, April 1st.

People fell for outrageous pranks, including, publishing a fake almanac, a fake show in which someone lied and said they could squeeze themselves into a bottle, a newspaper saying someone had dug a tunnel under the White House and stolen silver and gold, people trying to elect rhinos to the city council, BBC broadcasting people growing spaghetti off bushes, tricking fans to hold up a sign that rooted for another team, and landing a fake UFO.

Out Now: Special Edition
No-Homework Gnomes
By Ellie P., Ellen H., and Charlotte A.

Are you tired of homework? If you are, then we have a solution for you! 99.9% of the students at Hildreth Elementary School hate their homework. That’s a lot of kids! Do you hate your homework? Do you want a way to end homework forever? Well, a solution has been discovered! Thanks to our high technology, you can now buy a No-Homework Gnome! These creepy little beasts can do your homework for you in just five minutes! Isn’t that amazing? Just make sure you lock him in your closet at night. Only available on April 1st. Call 811-566-AprilFools!

Tips:
Don’t forget to charge it.
Don’t put matches in your closet.
Keep your gnome in a cage.
Don’t let the gnome meet your pets!
Keep your knives in your kitchen!
Husky Headlines
Editor and Chief: Lena Aloise

By Annabelle P., Hannah H., and Saara P.

As you may know, Lena Aloise is the editor and founder of the Husky Headlines (newspaper) at HES. Lena is in Mrs. Accorsi’s fourth grade class.

Lena got the idea of the newspaper by reading a book called The Landry News by Andrew Clements and illustrated by Brian Selznick. In the book, “The Landry News”, Cara Landry makes her own newspaper called the Landry News, because her teacher, Mr. Larson, would rather read the newspaper, than teach the students. Lena loves writing, so it was a perfect idea.

Lena’s favorite authors are J.K. Rowling and Rick Riordan, the authors of Harry Potter and Percy Jackson. Lena lives with her mom, dad, two sisters, and her beagle Lucy. If you want join newspaper you can ask Lena for details.

Last Walk or Bike to School Day of the year! June 7th

THE GREAT BIG Robot AND MANY, MANY MORE!!!

By Cole D. and Mathias H.
Illustrated By Siena C.

Sora looked up at the Robot, awe-struck. This amazing…thing he had made stood in front of him, casting his glorious, lumbering shadow over him. Like a skyscraper in Time Square.

A few days later he made the Robot take him to Mars, and he did, except the whole time Sora was playing with his circuits, he was planning; planning for a glorious battle and a devious escape. His allies were coming from all over the galaxy to help him take on Sora and leave to o to another planet. Somewhere else - it really did not matter where at all, just away from Sora.

The great big Robot carried a great secret along with him in every last stride he took. He dragged a deep, dark secret that was locked away in his complicated Robotic systems that would change the world, and possibly destroy it, if not stopped.

Back in Japan everybody was talking about a great big figure leaping out of the eye of Mottomo Takai Chozo and throwing aside Heytai with enormous ease, an amazing feat that would have been nearly impossible for any person to even think about doing let alone gather up enough stamina to actually do. They knew a figure that could do this would not be human so they thought that it would look a bit more muscular, but instead they saw a much weaker figure. It is true that the Robot met anything but their expectations but they still could not find a reason for such a weak-looking Robot to have been granted the power to break glass with ease and just speed off into the distance with enormous speed and agility.

Back in Hawaii (the great big Robot was still charging) a trio of building-sized robots was forming at Sora’s front step, probably in wait of the great big Robot who was more or less “sleeping in”. The robots were getting fed up with the nonsense of the lazy and spoiled Robot. They blew up the house and Sora was terrified of these new robots with angry faces and clenched fists when suddenly a cool looking person in an expensive looking car drove up to him and without any other option Sora kicked the driver out of the car and drove away.

The robots sprinted after him but he got away. The robots knew where he was going so they took off to Mars.

TO BE CONTINUED...

Tips for Contributors

• Use a black pen or marker over pencil marks so drawings, comics, and games can be seen well.
• Bold colors will show up best. Bold colored pencils or markers will work well. Art crafted on a computer or tablet will work well, too.
• Work with a buddy to write a story or article for your illustration! Work with a buddy to make an illustration for your story or article!
• When taking a photo make sure to stand still so your photo is in focus.
• When taking a photo, or a scan of art, leave extra background when possible. The publisher can always zoom in/crop.