February 2016 Newsletter

This month Gan continued their study of Penguins focusing on the question, “How do penguins stay dry?” They listened to the book Penguins by Bobbie Kalman and we had a wonderful discussion about staying dry. After coloring a picture of a penguin with crayons and a picture of a cat with a pencil, the students used eyedroppers to drop 5 drops of water on each picture. The students observed that the picture of the cat got wet, however, the water drops beaded up on the picture of the penguin. That’s because a penguin secretes a wax-like substance which it spreads over its feathers with its beak to keep dry. The various body parts of a penguin were discussed as the students enjoyed watching some interesting videos from National Geographic Kids, Mr. Rogers clip and Brain Pop Jr. throughout the unit. They also loved watching the live Penguin Cam from Sea World in Orlando.

February was Children’s Dental Health Month, and the Kindergarten students learned about good dental hygiene. We Need Dentists by Lola Schaefer was read to the students and discussed. Our experiment “Why All the Fuss to Brush” demonstrated proper tooth brushing techniques. Each child received a hard-boiled egg which had been soaked in cola. They observed the egg, and the similarities between the shell of the egg and teeth enamel were discussed. In addition, we discussed that teeth are also affected by what we eat and drink. They then used a toothbrush and toothpaste to brush the egg to clean it completely. We talked about the importance of brushing teeth after every meal to keep them clean and healthy.

The First grade continued their study of the Five Senses this month. We discussed that some people can’t hear. After listening to the book Moses Goes to a Concert by Isaac Millman they learned how people can “hear” by seeing. They worked in pairs and tried saying a few sentences without making any sound and noticed that reading lips is very difficult. The students discovered that deaf people can have conversations just as well as hearing people using finger spelling or American Sign Language. They worked in pairs and tried finger spelling words. Upon seeing how long it took, they looked at a sign language book entitled My First Book of Sign and tried to sign a few sentences. We finished the unit by discussing Helen Keller. The first graders listened to a book about her life and viewed a video. They were amazed at all she was able to accomplish and what an inspiration she is to everyone.

We started a new unit was started and the students became Geologists. They learned what a geologist studies and what geology is. The students became a model of the layers of the earth – one student held a ball which represented the core, several students formed a circle around the core holding red yarn which represented
the outer core, several more students surrounded the outer core holding brown yarn representing the mantle, and finally the rest if the students held green yarn and surrounded the mantle and represented the crust. Students then worked in pairs observing the layers of a hard-boiled egg and comparing it to the earth. The shell represented the crust, the white represented the mantle, the gray area outside of the yolk represented the outer core, and the yolk represented the core. The first graders also created a flip book of the layers of the earth.

The Second Graders began a new unit of study this month – “Our Bodies”. They explored what muscles are, how they help us move, that they work all the time, and observed their own muscles at work. The students participated in several tiring activities such as timing how long they could squat with their hands on their thighs and their backs pressed against a wall, and counting how many times they could open and close their hands keeping a rubber band around all their fingers. The second graders discovered that some muscles, such as the heart, are always working. They learned what the heart looks like, and that the heart pumps blood all over the body. A meat baster and water were used to demonstrate the rhythm of the heart pumping blood. To see the effect of exercise on the heart, the students took their pulse sitting still, after doing arm circles, after doing jumping jacks and after dancing to lively music.

The Third Grade finished the unit on Heat this month. We focused on how air acts as an insulator to prevent heat loss, observing the cooling effect of evaporation and inferred how to keep warm during winter. Two experiments were conducted to illustrate this. Each child put a thermometer inside an empty glove for two minutes, then removed the thermometer and recorded the temperature. They then put a hand inside the glove, waited five minutes, removed their hand and measured and recorded the temperature. Finally, they placed the thermometer back in the glove and timed how long it took for the glove to return to the starting temperature. Next, the students placed two thermometers side by side and recorded the temperature of each. A wet cloth was placed over the bulb on one and a dry cloth over the bulb of the other. After fifteen minutes the temperature of each was recorded. The students discovered why they feel cooler in a wet swimsuit than a dry one. To understand that light colors reflect heat and dark colors absorb heat, another experiment was conducted. Circles of different colored construction paper were placed in the bottom of containers. Thermometers were placed in next, and clear plastic wrap covered the top of the container. All the containers were placed in direct sunlight, and the students hypothesized which would be the warmest. After thirty minutes the temperature of each was recorded, and the students analyzed their observations.

The Fourth Grade continued their study of Electricity this month. The students began to discover what an electric current is and how it works. They used wires, paper fasteners, batteries, light bulbs and index cards to create an electrical pathway that allowed electrons to flow. They observed that electrons flow from the negative to the positive end of a battery, and
that they need a closed circuit to flow and create an electric current. The excitement in the room was “electric” as each student was able to successfully create a closed circuit and get the light bulb lit. The students assembled a three-wire electrical tester to classify items as conductors or non-conductors of electricity based on whether they completed a circuit. They concluded that conductors allow electricity (electrons) flow and insulators or non-conductors stop electricity (electrons) flow, electricity passes through metal but does not pass through non-metal, the light bulb lit with metal objects but not with non-metal ones, and that metal objects completed the circuit but non-metal objects did not. The students discussed that because rubber acts like an insulator and does not allow electricity to pass through, wires are wrapped in it. In addition to conducting these experiments, the students watched a few videos and played some smartboard games about circuits, conductors and insulators.

The Fifth Grade took a break from the Physics unit and will continue it in a few weeks. They are very excited to be participating in The Pringles Challenge. This is a fun and interesting competition that our school will be involved in among the community of independent schools. The students will work in pairs to design a package that will allow a single Pringles Potato Chip to be safely mailed through the US Postal Service to our partner school – The Milwaukee Spanish Immersion School in Milwaukee, WI. Upon arrival, the chips will be evaluated and scored. The goal is to engineer the package to have the smallest mass and volume, while protecting the chip so it arrives at its destination undamaged.

The students were so excited to exhibit their Science Fair projects Wednesday night. Thank you to all the parents who helped with the preparation and presentation. All of the projects were well thought out and executed with mindfulness and creativity.