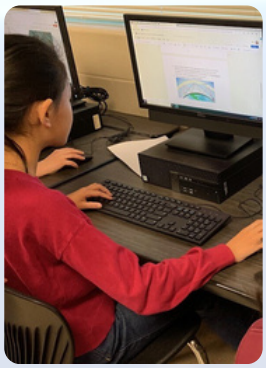
ARISS Newsletter

Mountain View Elementary

Vol. 7: February 26, 2024

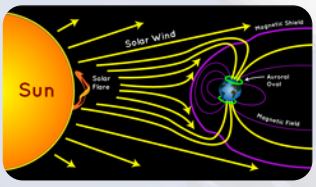
#TheBestView

#TheSkysTheLimit



Space Weather Facts

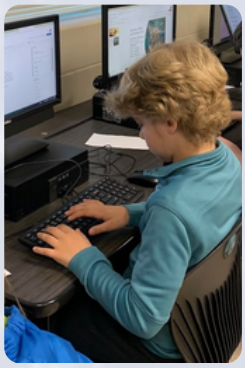
By: Cathy Wen, 4th Grade Junior Stem Key Team member



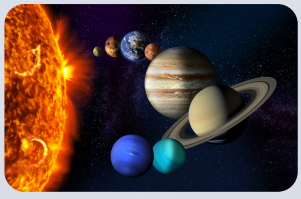
Did you know that space still has weather? Space may have weather, but it's nowhere near what you're probably thinking about! Space weather is made up of solar flares and solar winds. Space weather happens when the sun gives off charged particles that we call solar flares and solar winds. Sometimes, solar winds can give off beautiful effects, such as auroras! Although this may be pretty, if we didn't have the atmosphere around the Earth, the Earth would suffer considerably serious damage! There are some cases where some charged particles have sneaked through the atmosphere (Earth's shield), that's how the phenomenon of auroras came to life. You may be wondering; how come we don't check space weather down here on earth? The reason being that space weather is usually mild in space; so, we usually don't need to check it down on Earth! In addition, if the satellites in orbit got hit by a very strong solar wind, the damage could be equivalent to €15 billion or $16,154, 205. Not only that but, if you are an astronaut, you must check space weather as you are closer to solar winds and solar flares, which give off deadly radiation! Finally, space weather can impact radio; solar flares sendoff X-rays, and other different types of electromagnetic energies. More X-rays can cause disruptions to the ionosphere; the ionosphere protects signals, so a disruption to the ionosphere causes disruptions to radio signals all over the world; causing radio blackouts! Those are some facts about space weather.

SPACE WEATHER

By: Luke Davis, 4th Grade Junior Stem Key Team Member

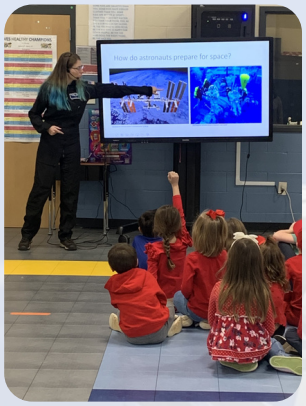


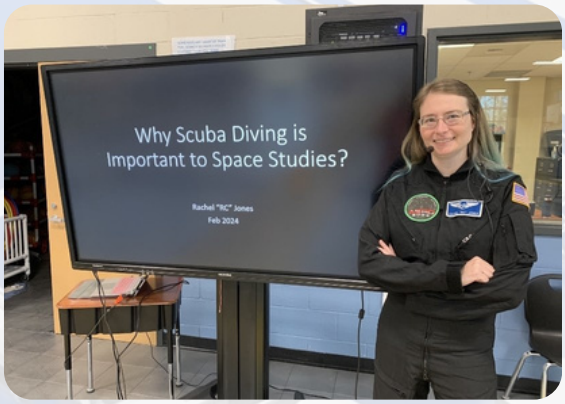
Weather in space can be very different than the weather on earth. The weather on Mercury is extremely hot and much brighter because it is right by the sun. Planets can have quite different weather than other planets if they're further away from the sun, just like Pluto even though it is a dwarf planet, I am still going to tell you about it. It can get to 400 degrees Celsius! Did you know that Neptune has fascinating weather? It has clouds now. We're not the only planet with clouds! Not all planets have weather that you cannot see. Did you know that if you look at Jupiter you can see a big red spot which is a storm on Jupiter? A fun fact about space is that many other galaxies have much different weather even though they're all in space. I hope you learned something from this amazing paragraph about weather in space!



Special ARISS Event: Aquanaut Training

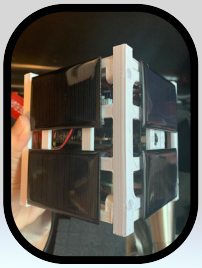
In preparation for our possible ARISS contact, we had a special visit from Analog Astronaut Rachel Jones on Friday, February 2, 2024. Students learned why scuba diving is important in space studies. participated in aquanaut training, designed water habitats, and completed tasks as a team!





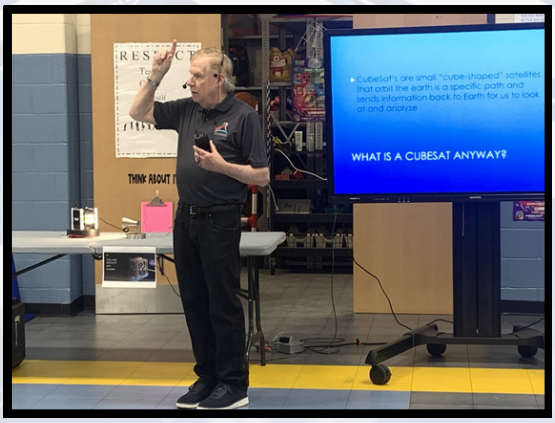
SPECIAL ARISS EVENT:

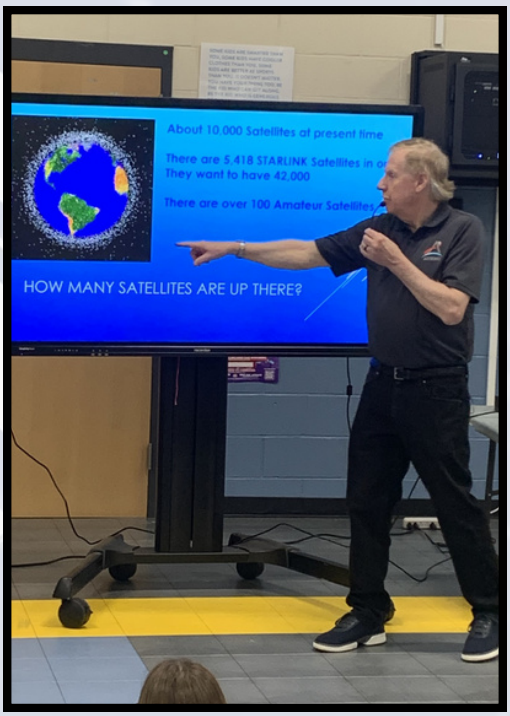
CUBESAT IN SPACE



Cube satellites are lightweight, square-shaped artificial satellites that orbit Earth. They are so small that you can hold them in your hand! Cube satellites are easy to launch into orbit from a rocket or from the ISS, are relatively inexpensive to build, and can be used for a variety of reasons, such as testing instruments or conducting science experiments.

On Monday, February 12, 2024, we had two special guest speakers visit our school to talk to our students. Marty Buehring and Jay Street, members of the Cherokee Amateur Radio Society, shared about orbits, radio waves, and CubeSats!

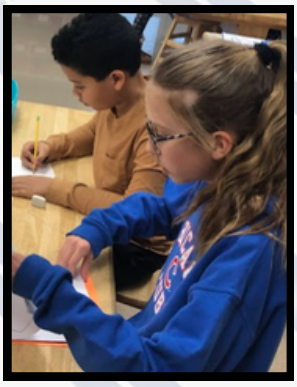


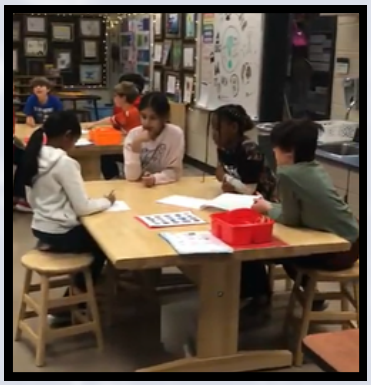


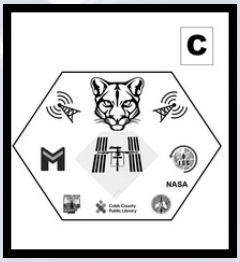
MISSION PATCHES

In Art classes students participated in the schoolwide competition to design a "mission patch" to commemorate our upcoming ARISS contact. Students learned about the history and process of mission patch design and had the opportunity to view a collection of real-life examples from many NASA missions.

Working in teams, students learned essential design and collaborative thinking skills. After a week of lessons, the students produced approximately 40 unique mission patch designs. These designs then went through 3 rounds of voting throughout the school to select one example to become our official ARISS mission patch. You can see the six amazing final designs at the bottom of this page. Everyone is very excited to see our winner! STAY TUNED!







4th Grade “STEM Squad”

Under the direction of Ms. Mary Ann Farah (2nd grade instructor), Mrs. Debby Taylor (Technology Instructional Specialist), and Dr. Cassondra Zielinski (STEM Instructional Specialist), 27 students comprise the newly developed “STEM Squad”. These students are working on numerous challenges such as welcome signage for guests, writing newsletter articles for ARISS and MVES, conducting research about space and astronauts, and more! Their work is helping MVES leading up to Launchapalooza in March and our possible ARISS contact in April!

5th Grade Stem Ambasadors

These student-leaders, under the guidance of ALP teacher, Ali Brisse, are working with social skills groups, playing STEM-related games with students and getting to know them in a fun, relaxed setting.

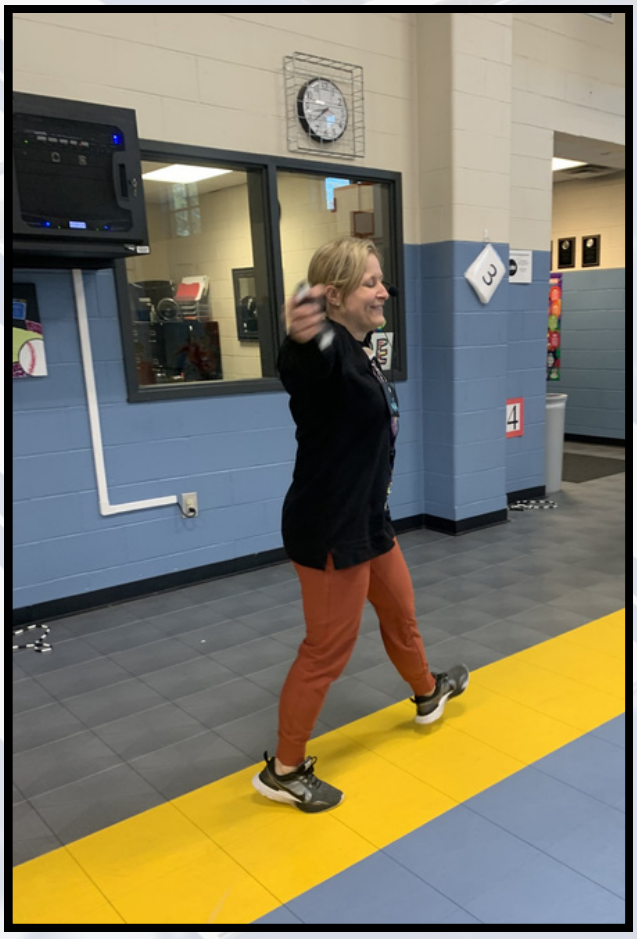
Kids Heart Challenge--Our Heart Heroes

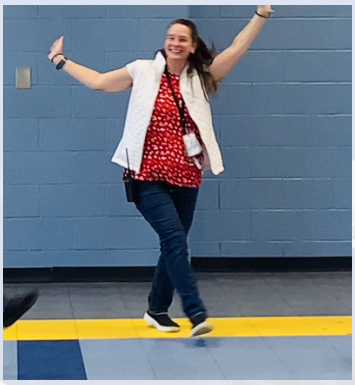
During preparation for ARISS, one of the discussions students have been having is about how and why astronauts exercise on the ISS. Coach Smith and Coach Jean's motto in our PE classes is "Don't just sit, get fit!". Our students now have an even better understanding of what that means after learning what astronauts experience in microgravity. Knowing that the heart can actually decrease in size during a long period of time in space has made an impression on them!

Students have also learned about the variety of experiments performed on the ISS that specifically address heart health issues. These studies not only help ensure that astronauts now and in the future have the healthiest hearts possible during extended periods of time in space, but also help doctors take better care of people with cardiovascular health issues here on Earth.

We, as a Mountain View community, are healthy heart champions and have a great appreciation for the work the astronauts are doing on the ISS! Last year we were the top fundraising school in Cobb County for the Kids Heart Challenge, leading the way for CCSD to be the number one school district in the nation for the amount of money raised to support the American Heart Association!

Here are some pictures showcasing this year's "Kids Heart Challenge" at Mountain View!

















VIBES

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We are so grateful for your support!

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49 Days!