THE SCIENCE EDITION

Classroom Connection

Dear Families,

Why STEAM education? The jobs that are available today are not jobs that were available to workers in the 20th century and a 20th century education will not adequately prepare today's students for the world they will need to navigate. The "new" 21st-century jobs require a growth mind-set, the ability to solve problems, think critically, be innovative, multitask and work collaboratively with a diverse group of colleagues.
With almost daily advances in technology, the world keeps shrinking and becoming more accessible to its citizens. Today there are libraries with no visible books. Many younger students known as "digital natives'- those who are born with a sixth sense for technology as opposed to older adults who are viewed as "digital immigrants" in need of user guides and often the help of their students to operate everything from their smartphones to their entertainment systems. Being STEM-ready and digitally literate is what our students need to be prepared for this new global reality.

Scientifically speaking,
Mrs. Shari Gigante

"Impossible only means that you haven't found the solution yet."

– Anonymous

Grade	Units and Lessons
1	Students make observations of the Sun and shadows throughout the day and across the seasons. They use their observations to understand patterns that occur throughout the day.
2	Students explore the incredible diversity of animals and habitats! They investigate animal classification and the traits that define each group. Students then explore habitats to discover how the living and non-living aspects of the environment affect the diversity of organisms. They use this information to design a bird feeder that will attract birds with specific food preferences.
3	Students compare the structures and functions of traits that enable organisms to survive in a specific environment. Analyzing the traits of animals provides evidence for how those traits vary, how they are inherited, and how they have changed over time through selection. Students also examine how the environment can affect inherited traits and determine which animals will survive in a particular environment.
4	Students plan and carry out investigations to explore the transfer of energy through matter and how understanding patterns can be used to transfer information. Students observe about energy transfer and information that provides evidence to help construct explanations about conservation of energy. Student understanding is applied by designing and testing a device that converts energy from one form to another.
5	Students consider the importance of water as a natural resource. Students investigate the distribution of fresh water and salt water on Earth. They explore how water cycles through Earth's systems, investigating how the hydrosphere and atmosphere interact. Students also consider how water affects human societies and design solutions to mitigate effects of weather-related natural hazards.