



October & November Newsletter

Scientific Progress Made!

This learning unit, fifth grade scientists have been exploring the states of matter and the physical world by examining the properties of food. In our role as food scientists, we have been conducting tests to separate substances from mixtures, examining the results of chromatography, analyzing solubility, and determining levels of attraction between different liquids.

Fourth grade scientists have taken on the responsibilities of marine biologists. We have been exploring the ways that dolphins and other animals can communicate. We discovered how sound waves travel by modeling with slinky toys and have created instruments to show how sound travels as energy. In addition, fourth grade scientists have been using Sound Wave simulations to create custom sounds in order to explore amplitude and wavelength.

Third grade scientists have been pulling and pushing to explore balanced forces. We began our study by investigating a mysterious floating train and made hypotheses on the forces that were acting on the train to allow it to float. We continue to explore different kinds of forces such as magnetism and electricity.

New Discoveries Ahead!


Fifth grade food scientists will explore the properties of liquid mixtures and emulsification. During the next learning unit, fifth grade students will investigate patterns of Earth and sky as astronomers.

Fourth grade scientists will explore ways that humans communicate through transmitted codes and patterns. During the next learning unit, fourth grade students will become engineers in order to learn about energy conversions and electricity.

Third grade scientists will conclude their exploration of balanced forces by engineering and designing balanced bridge structures. During the next learning unit, third grade students will take on the role of biologists to explore inheritance and traits of animals.

If you have any concerns or questions, please do not hesitate to contact me at LLi26@schools.nyc.gov. I am also available to meet in person on Tuesdays from 2:30 to 3:00.

~Mr. Li



Big Ideas for This School Year

	Third Grade	Fourth Grade	Fifth Grade
September and October	<p><u>Balancing Forces:</u></p> <p><i>What can make an object move or not move?</i></p>	<p><u>Waves, Energy, and Information:</u></p> <p><i>How do waves transfer information from one place to another?</i></p>	<p><u>Modeling Matter:</u></p> <p><i>What happens when two substances are mixed together?</i></p>
November and December	<p><u>Inheritance and Traits:</u></p> <p><i>How do organisms get their traits?</i></p>	<p><u>Energy Conversions:</u></p> <p><i>How does the electrical system work?</i></p>	<p><u>Patterns of Earth and Sky:</u></p> <p><i>Why do we see different stars at different times?</i></p>
January and February	<p><u>Environments and Survival:</u></p> <p><i>Why are different organisms more likely or less likely to survive in an environment?</i></p>	<p><u>Vision and Light:</u></p> <p><i>How do animals use vision and other senses to survive in their environment?</i></p>	<p><u>The Earth System:</u></p> <p><i>What can determine how much water is available for human use?</i></p>
March and April	<p><u>Weather and Climate:</u></p> <p><i>How can meteorologists predict the weather for a particular place and time?</i></p>	<p><u>Earth's Features:</u></p> <p><i>How do rocks and fossils tell us about the way Earth changes over time?</i></p>	<p><u>Ecosystem Restoration:</u></p> <p><i>How do organisms in an ecosystem get the matter and energy they need to grow and thrive?</i></p>
May	<p><u>Engineering and Design:</u></p> <p><i>How can we build machines to perform tasks?</i></p>	<p><u>Engineering and Design:</u></p> <p><i>What can we create to solve problems caused by natural disasters?</i></p>	
June	<p><u>Science All Around! Why and How:</u></p> <p><i>What are some mysteries that we can solve using the scientific method?</i></p>		