



## Middle School Science Lesson

When middle school teachers planned their curriculum for this school year, they had no idea that the students' spring study of astronomy would come at a time when the skies are clearer and freer of pollution and air traffic than they have been in decades. But this has been the case for Seabury middle school students whose distance learning program in science has included a study of astronomy.

Specifically, students have been engaged in experiments and projects that have been designed to explore:

- How light refracts and is reflected using items at home such as mirrors and spoons
- Why things that are far away appear smaller – strange when you think about it!
- Why things appear upside down in the bowl of a spoon but right side up on the back
- The physics of lenses, including building a simple refracting telescope
- Gravity, including simulations on the web
- Stargazing, including developing Padlet websites to share their searches for planets, meteors, stars, constellations and satellites.

In one astronomy project, students created infinite reflections using mirrors to create a series of reflections that seem to go on forever. Students noticed that in their photos, the colors green and blue are affected as the image is repeated and explored why that might be the case. This observation has led to a whole new exploration into why that happens and how some cell phone cameras seem to be designed to combat the problem. Students have been stargazing as well, and some

families have even ventured out of the city to find darker places to see more stars. They looked for the “green flash” (<https://earthsky.org/earth/can-i-see-a-green-flash>) at sunset and have noticed how visible planets are right now.





Students received a distance learning care package from Seabury and in it found the parts they need to assemble a working, simple, hand-held refracting telescope.

Inquiry science, doing science like scientists rather than just reading about science, is part of Seabury's program from prekindergarten through middle school. Our middle school students are asking fascinating questions and are wanting to jump in and explore to find answers. Questions and investigations lead to more questions as students dive deeper and deeper into learning. Active, hands-on engaging learning isn't just for the little kids at Seabury, and it isn't just for when we are at school. It is also an integral part of Distance Learning: Seabury Style.

Seabury School challenges gifted children in a community that cherishes each individual and fosters a love of learning, discovery and creativity.

– Seabury Mission Statement