

Virtual Regeneron visit to Grady shows the fun of science

Although science was the focus of the day, one third-grade student had an emotional conclusion rather than a scientific one: “I have never met a scientist,” she said. “This is like the craziest day of my life. I loved it!”

Her enthusiasm was inspired by the “Regeneron Day for Doing Good,” which took place on Oct. 23. Regeneron is a biotechnology company based in Tarrytown that makes pharmaceuticals. Several Regeneron employees hosted a meeting with students from Alice E. Grady Elementary School. During each virtual session, Regeneron staff members conducted scientific experiments, showing not only how fun and cool science can be but also sharing how the Regeneron employees became scientists.

The Regeneron Day of Doing Good is the company’s global day of service. Last year, the pharmaceutical company contributed more than 16,000 volunteer hours to 155 organizations.

“We wanted to say thank you so much,” Principal Andrea Hamilton said to the school’s virtual Regeneron guests. “Our kids are really excited. It’s the highlight of the week. We’ve been looking forward to this.”

Garima Chopra, a cancer researcher at Regeneron, said that science had always been interesting to her. Not only did she like to participate in STEM activities as a child, but she was also fascinated by insects.

Her colleague Stacey Mills, who works in software, said that her interest in science began with a chemistry set she had as a child.

“At Regeneron, we try to find out how medications make people feel better,” said Dimittri Delevry, a fellow Regeneron employee. “I feel the work we do help people all across the world, even though we don’t know each other.”

One experiment showed students a series of common objects at a very close range. Students were asked to guess what they were looking at.

A piece of glass, a rug and an orange or mango were all guesses that students made as different images were shown on their computer screens. The item that student thought looked like glass was actually soap bubbles. The bright orange item thought to be an orange or mango was actually a carrot slice and the item that students thought was a rug, turned out to be a close-up image of pages in a book.

“I was convinced it was a carpet,” fourth-grade teacher Anthony Carolini said when he saw the book’s pages.

“Wow – just wow,” one student said when they were told the image they were seeing was actually a close-up of toothbrush bristles.

Students were asked why scientists might take very close look at things. “Because it’s cool,” one student answered.

Ms. Chopra explained that scientists have to sometimes zoom in for a better look. At other times, she added, they need to zoom out. It is all about getting a different perspective on things.

In another session, students were introduced to polymers – or “low-density polyethylenes.” These are “light-weight, durable, flexible and can serve as moisture barriers,” Ms. Mills told the students.

“We want you to all think like a scientist,” Ms. Mills said before showing her experiment — pushing a pencil through a Ziploc bag filled with water. “What do you think might happen? What is your hypothesis?”

One student said: “I think the plastic bag will rip.” Another said: “I think it will stay together.”

There was no leak once Ms. Mills had pushed the pencil through both sides of the bag.

Due to the flexibility of the polymers that make up the plastic bag, they were able to make room for the pencil and cover over the hole produced. That is why the bag did not leak, Ms. Mills explained.

Scientist Matthew Fury stuck with the polymer theme in his experiment.

“The thing to think about is ‘what are plastics?’” he said. “They are chains of chemicals, like links that we cannot see. I am going to prove that there are polymer-like substances in milk.”

To do that, Mr. Fury poured vinegar into some heated milk, which immediately caused the milk to curdle. The “curds” turned out to be polymers. He was able to mold the curds into different shapes.

“It looked like the milk turned rotten,” one student observed.

“That’s why I switched over to almond milk,” another student said.