

# Motoko delivered an arty math mash up at Marblehead's Glover School

*Mass Cultural Grant brings award-winning storyteller and artist to third graders via Zoom*

**Chris Stevens**

Wicked Local

Is it math or is it art?

That was the question from Glover School third-grader Will Carpineto as teaching artist Motoko walked students through an origami lesson via Zoom.

“It’s arty math,” declared Vlad Volkov.

And he was right – it is arty math.

“We use a lot of math in art,” said Glover School art teacher Tammy Nohelty.

“They just don’t realize it.”

Nohelty has spent the month of May teaching third graders geometry through origami as part of their STEAM (science, technology, art, math) program.

Mokoto, an award-winning storyteller and artist, came to them through a Massachusetts Cultural Council grant. Nohelty said she went after the grant after learning not a lot of people were taking advantage of the opportunity.



“People weren’t accessing [MCC’s] grant money this year because of COVID,” she said. “A lot of schools weren’t in session but we’ve been in session.”

The grant was for a residency project which typically would mean Mokoto would spend a week or two in the school and work with students daily but because of COVID-19, she Zoomed in daily instead, for one or two sessions.

“The grant fully funded Motoko for a month-long residency and our PTO at Glover funded our art materials for the workshops,” Nohelty said.

And using origami to teach geometry was a perfect mash-up, she added.

“This is actually part of the third-grade curriculum,” Nohelty said. “It’s part of what we have to do.”

According to her website, Motoko’s origami workshops allow students to “experience origami both as a traditional Japanese art and as a modern practice with mathematical applications, and explore how art and science are connected.”

The kids just thought it was fun.



## The lessons

Projected onto a big screen for all to see, Motoko showed students how to fold various sized pieces of paper into a variety of shapes and other creatures including a math lesson in nearly every step.

She started out each project by asking students the area of the piece of paper they were using and would follow it up by asking the name of the triangle they made and how to find the area of that. At the end of some lessons, the students ended up with a swan or a panda bear.

Third-grader Lyla Gardella pulled several finished projects from an envelope on her desk.

“My grandpa was really good at this,” she said. “I already knew how to make some things. I knew how to make a fortune teller and a paper boat.”

Some lessons ended with a simple shape like a parallelogram or a rhombus, the names of which Motoko would make the kids repeat.

Sometimes it felt like “we did 100 folds and all we got was a Christmas tree,” said Virginia Jellison with a laugh.

Lexie Hoffman darted from desk to desk correcting folds and offering praise. A senior at Marblehead High School, Hoffman is doing her senior project at the Glover School.

“It has been so much fun,” she said regarding her senior project and the origami. “I’ve learned to make a frog and a butterfly too.”



Superintendent John Buckey joined the folding fun one Friday morning, creating a heart, an octagon and a parallelogram.

“It’s exceptional,” he said. “It’s so fun and it’s learning geometry.”

“We were so fortunate to be able to receive this residency grant from the MCC,” Nohelty added. “We were awarded over \$4,000 to support our STEAM program making math and art connections.”