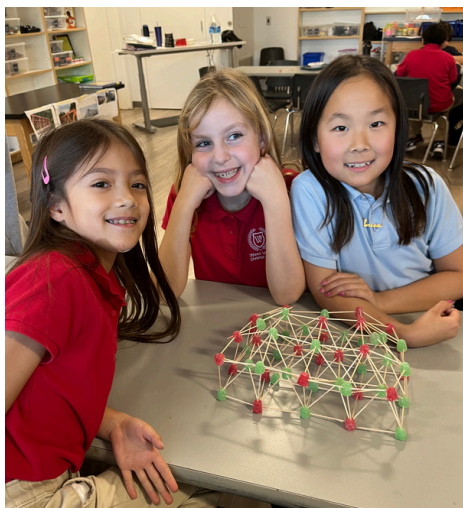


LOWER ELEM STEM

The holidays are upon us and students were excited to dive into some fall and Thanksgiving themed STEM the week before Thanksgiving! To hook students into the challenge, I read the story, Turkey Trouble, about a turkey who disguised himself so that he would not be eaten for Thanksgiving. Their STEM challenge was to work with a partner to protect their turkey by constructing a shelter that would keep him completely hidden and safe. Students used building manipulatives such as wooden planks, cardboard, linking cubes, and craft sticks to construct an enclosure for their turkey. This was a great activity to engage our young elementary engineers and it promoted collaboration, problem solving, creativity, and team building.

Our Kindergarten engineers, Caleb and Lion said, "We made a three story shelter for turkey. We felt good that it held up and collaborated on it together. It was so fun!"

James and Vincent said, " We engineered a hideout for turkey. It was three stories high! We felt confident and happy and we worked together on it." The students enjoyed this activity and said it was a fun way to celebrate Thanksgiving.



In TK and 1st grade, students engineered the highest shelf possible for their elf. After discussing horizontal and vertical lines and joints, students created their shelf using craft sticks and playdough. Using a variety of shapes, students found success when they collaborated with their partner. James and Ashur in 1st grade said, "We started out not working together and we couldn't make the shelf. When we worked as a team we made it!" Other students found success when they persevered to try different shapes for their design. Matthew in 1st grade said, "At first I felt mad because I couldn't make the shelf. But when I added triangles to the shelf it worked and I was very happy!" Students measured their shelf to see who created the highest one. Tucker and Sebastian said, "Our shelf was 42 inches high. I believed we could do it and it was very fun!"

Finally, in 2nd and 3rd grade STEM, students engineered a strong tower made out of toothpicks and gumdrops. After building, students tested their structure by adding a heavy textbook to the top. Some students found their structure would fall and twist. To offset this effect of gravity on their tower, they learned they needed to incorporate triangles and to have a strong base. There was a lot of fun and screaming going on when their structure could hold the weight of the textbook and not collapse.

