



Straw Rockets



Read how teachers and students are finding success with Pitsco Education products in their classrooms.

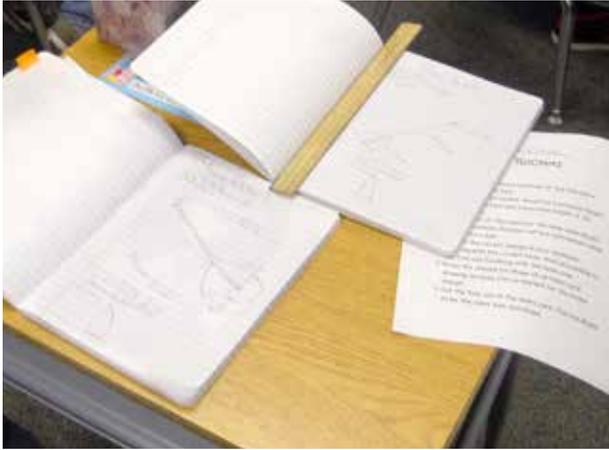
At Jefferson Elementary School in Pullman, Washington, fifth-grade teacher Jill Brockmier along with first-grade teacher Rena Mincks have developed a peer-mentoring STEM program between their classes. Each first-grade student is partnered with a fifth-grade STEM Buddy, and they meet each Thursday to learn about science, technology, engineering, and math. As Brockmier explains, "We wanted our kids to experience the whole process of engineering with something on a bit larger scale." So, they began to search for the right application for the STEM Buddies to work on together.

School: Jefferson Elementary School

Where: Pullman, WA

Teachers: Jill Brockmier, fifth grade,
and Rena Mincks, first grade

Goal: STEM mentoring program using
Pitsco Straw Rockets



"We searched online and discovered Pitsco. We looked for science concepts that could be introduced to first graders and practiced by fifth graders. I decided to use the Pitsco Straw Rockets with our STEM Buddies because, as a fifth-grade class, we had been studying force and motion concepts during science in the classroom." Straw rockets allowed Brockmier's class to further explore force and motion while discussing the mechanical potential energy that enabled the rocket to move (kinetic energy).

Together the fifth- and first-grade STEM Buddies designed and diagrammed their rockets in their Engineering Lab Books. They then built their rockets and conducted trials to test their rockets' success. The STEM Buddies were allowed to redesign their rockets, based on the trial results, and test again. "Fifth graders helped their buddy to learn the scientific process of controlling the variable, except the variable they were testing."

"When students launched their rocket, their enthusiasm for the activity was clear. I loved hearing their discussions. Students were comparing their rocket designs and discussing why they thought their rocket was flying or why it was not. Science learning was active, and thinking was observable." Brockmier said. When you combine hands-on learning with great products, you are bound to get kids to pay attention. "Kids show great persistence and determination because Pitsco products have them engaged in their learning. I have also noticed that when we are not with our STEM Buddies but are doing our fifth-grade science curriculum (state standards) in



"The straw rockets were especially fun because as I was doing it, I got to think about the physics involved in the flight of my rocket."

– Collin, age 10

our classroom, students keep referencing things that they noticed while using Pitsco products." Brockmier explains, "Just the other day, after launching the straw rockets and discussing what we noticed, students decided there must be a relationship between the size of the rocket fins and cone to the size of the rocket when it came to flying the greater distance."

Brockmier also found that the Pitsco Straw Rocket Launcher and materials are equipped with everything you need to get started in the classroom. "Pitsco products and straw rockets are the best for my students because you are able to get a quality product for a good price. I also like how the products come with great directions and lesson ideas."

So how do we prove that hands-on learning and Pitsco products are a success? "In the state of Washington, students are given a benchmark state assessment in science at the end of the fifth grade. Last year all 25 students in my fifth-grade class hit or surpassed the expected benchmark score in science for Washington State. I believe STEM Buddies and Pitsco products had a lot to do with that success!"