**PEACOCKS**

STEAM Teacher: Ms. Chantel

This week the Peacocks focused on the “E” in STEAM, learning about all things engineering. We discovered what engineers are and what they do. We tested the strength of paper with three different 3D designs. We learned that paper shaped into a cylinder can hold a good amount of weight due to the shape having no sides. This allows for all weight to be distributed evenly. We also looked at other things created by engineers, such as bridges and houses. We built our own bridges using popsicle sticks and created houses using various recycled materials and modeling clay. We wrapped up the week up with an egg drop challenge, creating devices to keep an egg safe from a 10 foot drop.

**BEES**

STEAM Teacher: Ms. Williams

Ask, imagine, plan, create, and improve! This week the Bees rose to the challenge to think and design like engineers. They dove into the world of bridges. They learned which shapes worked to keep bridges strong. They learned about different types of bridges and how various materials affect how bridges move. Using recycled materials, the Bees worked in groups or independently to create bridges that were sturdy enough to hold several toy cars. The engineering challenge didn’t end there. They moved on to designing and creating their own homes. We were impressed with their creativity and how they reused recycled materials to tackle each of these challenges!

"I love this. That's what I tell my mom and dad. I love that I get to build stuff."

- Daniella, Bees
This week the Hawks learned to think like engineers as they imagined, built, tested, and improved their own designs. The Hawks looked at simple designs for catapults, parachutes, zip lines, paper helicopters, and paper airplanes. They brainstormed ways to change these designs to improve their performance. The Hawks then investigated which shapes are the strongest, and used this knowledge to design and build their own paper bridges to hold as many crayon “pedestrians” as possible and to construct geodesic domes. Finally, the Hawks put their knowledge of simple machines together to construct Rube Goldberg machines that complete simple tasks in a complex way.

This week, the Cougars worked to design video games by coding in Scratch. They learned how to create costumes and commands for their sprites in order to enhance the user experience. They then chose backgrounds and play tested each other’s games to provide authentic feedback to improve the design. Campers continued the week by designing catapults out of recycled materials that were powered by rubber bands. They launched ping pong balls towards a target for points in our Catapult Competition. Finally, we continued to work on EV3 Lego robots were also coded to complete various tasks before we ended the week learning about and designing Rube Goldberg Machines! Go Cougars!

"I'm going to 3D print a house for my peacock. Look how cool it is!"  
- Julian, Bees
This week, our friends from the GIANT Room came back for a final session to show our campers different ways to design a life size Rube Goldberg machine. Campers formed design teams to create a part of the final chain reaction that will ultimately pop a balloon. They used recycled materials, littlebits, giant legos, and other materials to make their silliest creations.

Did you know robots can do magic? Campers were enchanted by robot magic creations and fell into silly laughter as they participated in a Zoom show from Mario the Maker Magician!