



## SUMMER STEM CAMP

Excite your middle school son or daughter with days filled with science and engineering activities. Your child will get hands on while learning about the engineering and science behind bridges, rockets, air cannons, sling shots, and engineering computer design. All students entering 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, or 9<sup>th</sup> grade in August 2018 are welcome to attend.

**Week 1 - \$150 - Monday June 4<sup>th</sup> - Friday June 8<sup>th</sup>**

**Week 2 - \$130 - Monday June 11<sup>th</sup> - Thursday June 14<sup>th</sup>**

The activities for weeks 1 and 2 will be the same, but students are still welcome to attend both weeks if they would like to.

Camp running time is 8:00 am - 2:00 pm. At 2:00 pm on the final day of each week will be the camp award ceremony.

Price includes a STEM Camp T-shirt and other camper designed souvenirs.

Campers will need to bring their own bag lunch each day of camp. A full refrigerator, freezer, and microwave are available for camper use.

Please contact Andrew Forsman, Engineering Academy Instructor, at

[aforsman@pasco.k12.fl.us](mailto:aforsman@pasco.k12.fl.us) for a registration form or if you have any other questions.

# Camper Activities for the Week

## **Monday**

Physics of Projectiles - build and test sling shots for a sling shot competition.

Model Rockets - instruction for the building of model rockets.

## **Tuesday**

Rocket Launching - launch the rockets from Monday twice.

Bridge Building - build a bridge out of balsa wood.

Puzzle Cube Project - design a puzzle with different interlocking parts that when put together will be in the shape of a perfect cube.

3D CAD Modeling - learn how to design a puzzle using the 3D CAD modeling program Autodesk Inventor

## **Wednesday**

Bridge Compressive Stress Testing - break the bridges from Tuesday to test for the compressive strength. Camper with the strongest bridge will receive an award.

Science of Flight - instruction and building of wooden gliders.

Science of Pneumatics - instruction behind pneumatic cannons. Students will get to launch items out of the cannons.

## **Thursday**

Produce Cannon Competitions - campers will launch produce from cannons constructed on Wednesday in a series of various competitions. Awards will be issued for the winners of each of the competitions.

Glider Competitions - campers will enter their gliders built on Wednesday in a series of competitions. Awards will be issued for the winners of each of the competitions.

Science of Electricity - get hands on with DC circuits

## **Friday**

Friday Fun Day - campers will get to have fun redoing some of the activities from earlier in the week.