

Cramming for Creativity

Teacher: Miguel Pimentel

Ages: 8 years & up

Time: 10:55 – 11:25

Number of students: minimum 3 maximum 6

Teaching Text: I will probably draw on classical physics (Newtonian), history, and modern inventions.

Supplies needed: A box of k'nex, graphing paper

Supplies provided:

Extra Cost: none

Description: This class introduces the engineering concept of rapid prototyping. The students will be meeting challenges by thinking up and prototyping various machines built from k'nex. There will be a look at the most simple classical machines and their uses. There will also be a look at rube Goldberg style machines. Not all machines will be built, many probably won't be due to time constraints but, the class will be project based (with a flexible time frame).

This class will teach students: Basic concepts of engineering, simple physics, problem solving techniques and teamwork.

They will be responsible: For coming up with solutions to problems provided

They will be given: handouts of the various problems

It will also be helpful if: I would like feedback from the kids, parents and anyone else on interesting physical problems for the kids to solve.

