

Creative Construction

Grades 6-8

July 25 – 29

9 am to 3 pm

In this camp students will exercise their creativity and explore engineering as they learn how to design and build a variety of things, including model buildings, weight-bearing structures, and powered vehicles. Students will start by learning how to read a blueprint and then use foam core to build a detailed 3-D scale model of the Kopernik Observatory. Next they will learn about designing structures that have to carry loads and then construct a bridge from wooden craft sticks and test it to see which team's bridge holds the most weight. Finally students will design and build a mousetrap-powered car and race the cars to determine which team's car is the fastest and travels the farthest.



Monday	LEARN ABOUT DIFFERENT SCALES: ARCHITECTURE VS MAPS GET INTRODUCED TO BLUEPRINTS BEGIN TO BUILD SCALE MODEL OF KOPERNIK
Tuesday	LEARN ABOUT THE HISTORY OF BRIDGES LEARN ABOUT GEOMETRIC SHAPES AND STATIC LOADS BEGIN BUILDING POPSICLE STICK BRIDGE
Wednesday	LEARN ABOUT KINETIC AND POTENTIAL ENERGY BEGIN BUILDING MOUSETRAP CARS FINISH MODEL OF KOPERNIK
Thursday	FINISH BRIDGE / TEST BRIDGES TO DETERMINE STRONGEST WORK ON MOUSETRAP CAR
Friday	FINISH MOUSETRAP CAR RACE MOUSETRAP CARS