

## Math and Science Camp News

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http://www.ipfw.edu/physics/msc/msc.htm

## **Campers Build and Fly Rockets!**

The rock-

filled with

water and

placed on

the launch

pad. The

campers

then pump excess air

about 1-

liter of

ets are

This afternoon the campers built water rockets. These are a fantas-



tic rocket that is fueled by a mixture of air and water. The best rockets can soar to heights of 50 meters or more! These rock-

ets are built

Nick builds his rocket

of 2-liter bottles and cardboard.

Before building the rockets, the students had a discussion about rocket science. In particular they learned about two critical points of rocketry: center of gravity and center of pressure and how to design a rocket that can fly well. To launch the rockets the campers went behind the Fine Arts building where there is a large open field.



Mr. Shadle helps Andrew put the into the finishing pressure in his rocket. rocket using a

bicycle pump (hot work)! After reaching a pressure of 50 PSI in the bottle, the rockets are launched.



The campers rockets were fantastic and every single one flew beautifully, though some did not survive reentry!

A rocket just lifting off!



A rocket launch sequence

## Campers do orienteering, puzzles and finish T-shirts

In the morning, the campers made their complete their T-shirts and then proceeded to orienteering.

The campers worked at finding their bearings for various landmarks and pacing off various distances.

The campers also worked on various geometric puzzles trying to create specific shapes.



Dominick gets some direction!



Miles is NOT Lost!