



Welcome to the UMD STEM Workshop 2023! *Week Five: Introduction to Ballooning*

a. What is Ballooning?

Instead of the usual party balloons, we launch “near space weather balloons” which are just huge versions of normal party balloons. We send these balloons up with fun that range from ice cream makers to atmospheric sensing equipment. Below, you can see a picture of one of our launches. We have more pictures available at our website: <https://bpp.umd.edu/>.



A big issue we face, however, is retrieving our equipment intact! We use a parachute to make sure our projects have a soft landing so we can fly them again and again.

b. The Physics of Forces and Car Crashes:

Why does a parachute help our projects survive? Why do slower impacts feel less forceful? Learn more about Newton's 3rd law and how to reduce forces in the video below and in our presentation from this week!

<https://www.youtube.com/watch?v=v9ML4GA47Rg>