

# BELLE MEADE



School | Summer Day Camp | Farm | B & B



My thingy is utterly amazing. It uses a pulley to pull up a weight into a chain of dominoes that knock a quad-copter down two ramps. It drops into a launch pad and presses a button to make it fly. Tada!

Thomas



My Rube Goldberg machine is to staple a piece of paper. It requires a toy car, books, pulley, ladder, pipe, string, hammer, stapler, and paper.

First with a ladder I tie a hammer with the string and then place the string on the pulley. Then place the pipe on the step of the ladder. Next I set up a book at the end of the pipe and place the stapler in front of the pipe. I take the hammer and pull it back, causing the hammer to rock which hits the toy car/truck. The car travels down the pipe, hitting the book, causing it to fall over onto the stapler. It works!

James



## Middle School Science Projects: Rube Goldberg Machines

A Rube Goldberg machine uses simple machines in a complicated way to complete an easy task. Simple machines include: ramps, pulleys, wheels and axles, wedges, gears, and levers. A Rube Goldberg machine may use excessively a complicated contraption to do something that is not very productive.

We are designing and building machines that will staple paper, launch helicopters, smash pumpkins, and paint picture of horses using materials like marbles, bowling balls, clothespins, and other found objects. Everyone has survived so far.

Alyssa and I have been working on our Rube Goldberg machine for the past two weeks. We have incorporated a bowling ball, marbles and pulleys with a bowl that holds books. The point of the machine is to have rock fall on a line of paints and have it hit an outline of a horse jumping.

We tied the pulleys to a post and tied the books up to it then the bowling ball rolls away. The bowling ball pulls the box out of the way. The books fall and then the bowl of marbles gets pulled up to hit a power outlet. The marbles fall onto a tray that hits a road to made the rocks fall on the paint then it hits the paint and squirts onto the horse stencil. In the end we have a picture of a horse!

Sofie



The goal of Sofie's and my machine is to squirt a horse stencil with multi-color paint that heavy objects have fallen on it starts when a large box is pulled out from under a stack of books which on a pulley will pull up a bowl of marbles that will in turn spill onto a tray and push heavy objects onto the paint bottles to splatter onto a stenciled canvas.

Alyssa

**Rube Goldberg**



I made a Rube Goldberg machine that is meant to take down a plastic dinosaur. My machine is made mostly out of books with two stacked to make a ramp. I used a clothespin with a bundle of popsicle sticks to hold it in place. Then I dropped a book on the bundle flipping them backwards which allows the clothespin to roll down the ramp and knock down a thin popsicle stick wall along with the dinosaur. The dinosaur is down.

Ryan



Ezra and I are working together. Our Rube Goldberg machine is based on dominoes. The main goal of it is to have an axe cut a fruit or vegetable in half. It all starts on the top of the Belle Meade School's back deck on the second floor of the building on a chair that has a few books and a PVC pipe leading to a tin small long piece of roofing. There is a domino that is thrown down the tube that goes down the tube and hits another domino and causes it to have a domino effect it is a cause and effect machine.

Ethan

**2016 HIGHLIGHTS**

**CANOE TRIP**

As with every new school year at Belle Meade, we begin with our annual canoe-camping trip on the Shenandoah River. It is a great way to establish team bonding and provides everyone with a comfortable environment in which to interact with each other while we grow as a school "family". This year we were blessed with great weather and an amazing group of students. We built fires to cook over and all formed new friendships as we learned much about one another.

Elliott



**WRITER'S EYE**

In November, Belle Meade went to Charlottesville for our annual Writer's Eye trip. This is when Belle Meade goes to Charlottesville to view art at UVA's Fralin Art Museum of Art. We then had some time to decide on what piece of art we wanted to write about and started our projects before having lunch in the school dining hall. After lunch, we toured the UVA campus with a student and learned a lot about both the university and its history.

James



## DC TRIP

The annual Belle Meade School DC trip was in October. It was very eventful. As every year, there was first timers and old timers who have been on this trip before. This year, we toured the Capitol and went to the American History Museum. At the museum, we were put into teams and had to find information in one of the exhibits (like a scavenger hunt). At the very end of the trip, we stopped in Warrenton to have dinner at Chipotle.

Ethan



## VERDUN

Verdun was really fun! Teamwork was the focus of our group activities. One of the obstacles I remember is called the "Walk of Life". It was a cable that ran between a bunch of poles, and we had to get across without falling off. If we fell off, we had to go back to the beginning. After completing a variety of obstacles (including a rock-climbing wall), we met with Doc (the Director) for a bit. He talked about how your mind is an acorn, and you want it to blossom. Then we went outside and had lunch before heading back to school.

Oliver



## RAFTING

The 2016 rafting trip was really fun. We went to West Virginia and stayed in these absolutely freezing little cabins. When we first got there we did an "Adventure Course" of sorts which was terrifying because we were up pretty high for some parts. The next day we went rafting on the New River. It was my first time rafting which was *nervousiting* (both nerve-wracking and exciting)!

Madison



## SHAKESPEARE

Another grand moment from our school year: In early 2016, Belle Meade School paid a visit to the Shakespeare Theatre located in Stanton. We were blessed with the privilege of watching a spectacular performance of Julius Caesar, a tragic story of betrayal. We all appreciate having been given this chance to witness such wonderful actors portray incredibly realistic emotions and beautifully dramatic scenes. Hopefully, we'll be lucky enough to see them and their stage again next year!

Julia



## MASQUERADE

This year, Belle Meade held a masquerade dance for Halloween along with a haunted lab that was up in Kimber's classroom. It was a lot of fun as there was goofy dancing, a scary haunted lab, and good food. We had a somewhat DJ (Elliott) who played tons of songs that everyone danced to, slow and fast. The haunted lab was a blast! People came and walked through the lab while being terrified by our "actors" and "actresses". The school had a fun time scaring others, eating sweets, and most of all having a great time!

Lauren

## FARM TOUR

Ah, the farm tour is both an effective method to get publicity as well as one of the more memorable experiences for students of the entire year, be it for better or worse. Only on this day of the year is the hay bale maze used for its intended purpose. The actual fun part of the maze is not at the bottom wandering the 40 square foot maze, but atop the bales for various activities. ANYWAY, this event consists of many kinds of activities including a cook-off, bee-keeping demonstration, silent auction, live auction, and tour around the farm on a tractor towing hay bales. Considering the overall success, the farm tour brought in school publicity. I'd definitely go so far as to say it's both an enjoyable experience as well as a beneficial one.

Jasper



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