Shakya 1

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Math/Physics-¾

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**Background Research for Final Rocket**

We are making a paper rocket for our final launch. Our goal is for the rocket to launch, reach 50 ft. in it’s flight, and make sure the egg lands safely. In order to do that one of the things we need to do to make sure we reach our objective is to make sure the rocket body is not wrapped around the pipe too tightly. Otherwise, we will have to rip it in order for it to fit and it won’t work as well which has been proven by my first attempt. Besides, making the width of the body too small, my partner and I had put in the egg the day beforehand so it would be easier to get ready to launch the next day. The only problem was that it had mysteriously died overnight whereas others who had put the egg in the day of the launch had a healthy egg to work with. The next time, we learned our lesson and didn’t trust our classmates to the safekeeping of the egg overnight. However, we did reach our objective which was for the rocket to launch with the egg.

Next time, our goals were to have the rocket go fifty feet and to launch with the egg. From the first time, we had noticed that the rockets that went the farthest were covered in tape. We also had different shaped fins, however it didn’t seem to matter as others with triangular shaped fins went as far as ours if not farther. We had built a car seat (box) for the egg so it wouldn’t bounce around. Not only did the rocket meet both objectives, but it also kept the egg from shattering. The car seat saved the egg because, according to Newton’s first law, once the cone hits the ground there is nothing that’s stopping the egg. So, the egg will keep moving until something stops it which is the ground. Now, if there’s a car seat the there is something to stop the egg before it hits the ground. This time, we are going to keep the car seat and the taping going all around. We are also going to make a bigger cone than before and make sure that we put the tape on carefully so that it is smooth. Plus, we will have medium sized fins to make sure that it is stable. This will make sure that our rocket meets out three objectives.

Our rocket did meet all three objectives. It went 53.7 feet high which is well over 50 feet. It launched with the egg and the egg survived which is something most of the other rockets didn’t do. It also tipped in the air perfectly. Our Peter Pan rocket succeeded in reaching all three objectives.