

Rover Landing – Design Challenge – Engineering Club Week 3

This week’s Engineering Challenge: Design and build a landing device for your ‘Egg Rover’ that will protect it from structural damage when landing after being dropped from a height of 10 feet.

Our Benedictine Engineering students were given the following materials:

- Newspaper
- Plastic Bags
- Foam (all kinds)
- Balloons (1-2 per team)
- Bubble Wrap (1 6”x4” piece)
- Cardboard Tubes
- Straws
- Craft Sticks
- Masking Tape (10 in max)
- Rubber Bands
- Strings
- Cardstock
- Paper Clips
- Binder Clips
- Scissors
- Egg

The Constraints were:

- *The base of the landing device must fit on the launch platform and rest in a stable position.*
- *The egg may not be modified in any manner.*
- *Devices must be built to allow for quick “unloading” of the ‘Egg Rover’ for damage assessment.*
- *Only the provided materials may be used and if you take the material it must be used in the design.*
- *Maximum of 4 individual layers may be used. (you cannot double or triple wrap)*
- *Must consist of at least three different materials.*
- *Everyone on the team must be included (no more than 4 engineers).*

By the end of the club period there were many broken eggs. However, four teams were awarded prizes earning prizes by completing the challenge with an egg intact.



The first team to win is pictured below:

Front row Brad Floyd Jr., Lesire Kennedy

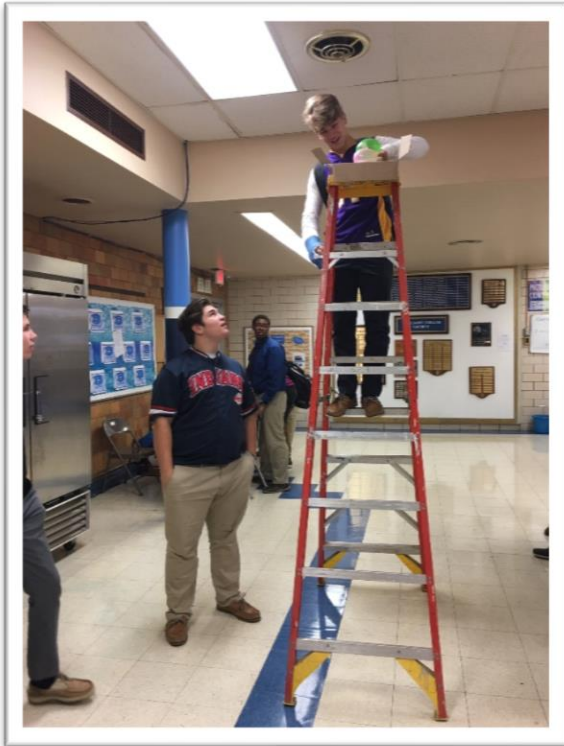
Back row Chris Woody, Jameson Gordon

ENGINEERING CHALLENGE ROVER

Also earning prizes were team two: Will Young, Luke Faulisi, John Poston NS John Witherspoon

Team three: Ian Menefee, Rodney Washington and Reggie Walker

Team four: Max Bouffard and Joe Fallon



The Engineering Club will host a Mechanical Engineer from Lincoln Electric at our next meeting.

Our group will also be participating in the NASA Manufacturing Day on October 30th with students from Beaumont and St. Edwards.