

November 12, 2016

Mr. Perrel
Anderson High School
4610 Madison Ave.
Anderson, IN 46013

Dear Mr. Perrel:

As you may know, NASA has slated another martian rover for deployment in 2020. Due to the nature of this rover we need a new design for the landing system. We have decided to host a competition to give students a chance to submit their ideas by building scale models in the classroom.

Your objective will be to create a prototype lander that will deliver the 2020 martian rover from orbit to the martian surface. We would like to see all prototypes created using primarily drinking straws with the minimal addition of glue, tape, paper clips, plastic bags, or other common objects. In addition, an raw egg should be used to simulate the rover itself. All prototypes are to be dropped from a 5.5 meter height, the objective being to protect the egg from cracking or breaking upon impact with the tile floor. Note that the egg cannot be coated with glue or taped in any way. In addition, momentum and impulse must be taken into account in the design.

We would like this to be an educational effort as well, so all entries must provide a detailed explanation of why the design works. Each display must include a well-labeled drawing or picture of the device and a description. Labels and captions should be placed below or within every picture.

The registration deadline is **Tuesday, November 22**. We can accept five entries from each class. We wish you the best in your egg-drop design!

Sincerely,

Blaine Baggett
Director for Communications and Education