



Central
Virginia
Section

Egg Drop Contest

Dear Teachers and Students:

ASME Central Virginia Section has for decades held Egg Drop Contests for high school and middle school students at the RJECE Celebrating Engineering Ingenuity (CEI) Day event in the Richmond area. This year's contest will be:

When: 11:30 AM to 3:00 PM
Sunday, February 25, 2024

Where: Science Museum of Virginia – Dewey Gottwald Center
2301 W. Leigh St.
Richmond, VA 23220

11:30 AM Check your devices in at the ASME table

12:45 PM Meet back at the ASME table. Eggs will be distributed and everyone will proceed to the stairwell in the main building for the contest.

2:30 PM Meet back at the ASME table. Everyone will move to the stairwell for the awards ceremony, and you will have a chance to retrieve your device.

The Egg Drop Rules are very simple. The objective is to design the lightest possible device that will prevent a medium size egg from breaking or cracking when it is dropped from the upper floor mezzanine to the ground floor below. The height is approximately 20 feet. There are two types of devices that may be submitted. The first utilizes a cushion design and the second uses a parachute. **No bubble wrap may be used** (it is too easy).

Students must build their devices before the contest and bring them to the event.

We will start around noon by registering the students and their devices. Each student must have his/her own device. No group designs are allowed. The registration process entails recording the type and weight of the device along with the student's name, teacher, and school. We then keep the device until the time of the contest. The entries are divided into the different design categories and between high school and middle school students. We give the students back their devices at the time of the contest along with the eggs that they will place into their devices before they drop.

ASME will provide the eggs on the day of the contest.

Each student drops his/her device onto a 4-foot by 4-foot square target. A penalty is added to the weight of the student's design if it lands outside this target area. We also check to see if the egg survived the fall.

Winners are determined once everyone has dropped his/her device and the penalties are added to the overall weight of the device. Those devices that did not prevent the egg from breaking are still judged in the category Most Creative Design, although they are not considered as part of the overall

contest. Each student will receive a certificate of participation. Winners receive trophies and cash prizes in each category, \$50 for first, \$25 for second, and \$15 for third place.

Please contact **Tony Marotto** at 804-459-2266 or education@cent-va-asme.org if you have any questions.