



**MARTIN COUNTY FAIR AND SCHOOL DISTRICT PRESENT:
THE 5th ANNUAL STEM DESIGN CHALLENGE**

STEM Mission:

Design and build an Egg Protection Device (EPD) that will prevent an uncooked egg from breaking when dropped from two (2) successive heights.

CONSTRUCTION SPECIFICATIONS

All egg crates must meet the following specifications:

MATERIALS

- A. Parachutes, balloons, helium balloons, propellers (of any type) or inflatable material (i.e. inflatable foam, bubble wrap, liquids, oils, food items etc.) of any kind are **NOT** permitted. No glass or shattering materials.
- B. Eggs will be supplied (Large chicken eggs).

CONSTRUCTION

- A. The maximum dimensions of the crates shall be 6" x 6" x 6".
- B. The entire egg crate must be able to pass through a square aperture of 6 inches by 6 inches (6" x 6") in all three axes to be eligible for competition.

TESTING AND JUDGING

- A. Each egg crate will be measured and drop tested from two (2) successive heights.
- B. Egg must be able to put into devise and checked with ease. Devise must be able to open and close without having to add extra tape. *no written directions on devise
- C. Material may not differ after the first drop.
- D. Only one devise may be used for both drops.
- E. Only one entry per individual. **STUDENT NAME—GRADE—SCHOOL—TEACHER—CONTACT NUMBER-** must be clearly labeled.
- F. Only individual projects

TIMELINE OF EVENTS

EPD's MUST be dropped off by February 20, 2022 (6:00 pm) in order to be in the deployment.

Egg Deployment

Saturday-February 22, 2020 2:00 pm

EPD's may be dropped off at the front gate during fair hours and must have required information clearly written on the devise. *If judges are unable to read student name/grade/school/teacher/contact number EPD will be disqualified

Participants do not need to be present to win-if an individual wants to attend the drop they must pay the fair entry fee.

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