

EGG DROP

1. **DESCRIPTION:** A team will bring in an already-constructed cargo crate to protect a large Grade A raw chicken egg from breaking. The crate will be dropped free fall from three heights at a spot selected by the tournament director. The lightest container which permits the egg from leaking or cracking from the maximum height wins.

A TEAM OF UP TO: 2

APPROXIMATE TIME: 30 minutes

2. **THE COMPETITION:**

- a. Teams will bring in already-constructed cargo crates. Foam stretching, bubble wrap, and styrofoam are not allowed.
- b. All parts of the crate must begin above the designated drop line.
- c. Crates will be weighed prior to load before initial drop.
- d. Each crate will be dropped three times from varying heights (approximately 3-12 meters) designated by the supervisor.
- e. The student must remove the egg for inspection between drops.

3. **MATERIALS & CONSTRUCTION:** The supervisor will supply the raw eggs.

- a. Must use one raw egg, which will be made available at the time of competition. If the egg is broken after it has been inspected and accepted by the student at any time before the drop, another egg may be received with a 10 cm penalty added to the final score.
- b. The maximum egg crate size is **18 cm x 18 cm x 18 cm**.
- c. May use scotch tape to hold the crate together. No pins, no nails, or other sharp metallic objects may be used in the construction.

4. **SCORING:**

- a. Breaking the egg is defined by cracking the egg enough to leave a wet spot on a paper towel.
- b. The crates whose egg did not survive will be ranked below those that do.
- c. Ties will be broken by massing the device before loading the egg.
- d. The lightest crate which survives the greatest height wins.