Durham’s Annual Egg Drop Challenge

**Vehicle Design Challenge**

**Description:** To design a container to keep a raw egg from breaking when dropped from a pre-determined height while also limiting the mass of the container.

Remember what you have learned about air resistance and Newton’s Second law. Plan to reduce the acceleration of your vehicle, so the force of impact will be lessened.

**Rules regarding the egg:**

1. The egg must be raw; not boiled or cooked.

2. The egg cannot be tampered with or altered physically or chemically.

3. Your video must show the egg being loaded and unloaded.

4. You have success when you show your egg survived.

**Materials**:

You may use household materials to build your device.

Maximum size 8 ½ x 11 x 11 inches; size of a piece of notebook paper

**Balloons, food material of any type, and motors are NOT PERMITTED!**

The container must be constructed so that the egg may be quickly put in the container before the drop and easily removed after the drop.

**Sample materials:**

A container such as a milk carton, Styrofoam cup, pint ice cream container, cardboard box, tissue box. etc.

Cushioning materials such as cotton balls, bubblewrap, newspaper, foam, etc.

Binding materials such as tape, string, rubber bands, etc.

Structural materials such pipe cleaners, Popsicle sticks, straws , bamboo skewers, etc

**Procedure:**

Build your device, drop the device from at least 10 feet – PLEASE BE SAFE! Get your parent’s permission (especially if you are dropping IN your house!) You must video the loading, dropping, and unloading of your device. Make sure to show the condition of the egg. You will then post your video to the padlet for your block!