**Naked Egg Drop--Designing an Egg Catcher**

May 10, 2014 Adapted from an activity created by Peter Wu, Physics

Kids for about an hour in each rotation.

**Doing the Naked Egg drop**

We will separate the kids into 5-6 groups (about 3-4 youth each) with their parents.

**Design Goal**

Their goal is to build a landing pad for a falling egg from a certain height. The designs that will keep an egg from breaking are the winning team.

We provide all materials:

- Various types of paper cups.

- Tape--could be clear masking and duct

- A small piece of bubble wrap.

- Various kinds of paper

- Popsicle sticks.

- Rubber bands

- Drinking straws

- Pipe cleaner

- String, yarn, whatever

- Plumb line to aim with before dropping

- Eggs

**Time management**

5 min Introduction and simple demonstration

15 min Build the first model

10 min Each group take a minute to explain their design and strategies

10 Min Test the first model

First Drop ideas/criteria

First will be an egg into it target/catcher from 5 ft high.

Teams should learn from each other’s design.

15 min Build and Test second model

15 min Test the second model

Second drop criteria

As high as possible will keep

Increasing the height until a winning design is determined.

Total time: about an 1 hour.