



# MISSION 2 the sky

## Landing

After the balloon rises 100,000ft into the sky it will burst and the package will fall back to earth. If we let it fall, the package would crash into the ground at full speed and our equipment would break! We will use a parachute and padding to slow it down and cushion the equipment.



### Description

- Some of our equipment is fragile and if not protected will crack and break much like an egg. If we want to get the equipment back safely, we will have to determine what the best way to cushion the equipment is. We will be using a parachute to slow us down, so the impact will be similar to dropping an egg from 10ft or near the ceiling which is about 17mph.

### Task

- This experiment will help determine what material type and amount is the most effective at cushioning impact from approx 10ft.

### Materials

- Dozen eggs & Styrofoam container
- Various materials to test as cushions (ex. paper towels, tissues, towels, foam, bubble wrap)
- Ladder & Tape

### Process

- 1) Create Teams & Team Name
- 2) Add material and egg to container
- 3) Secure top of container with tape
- 4) Place container in Styrofoam box
- 5) Replace cover of box
- 6) Drop box from approx 10ft
- 7) Open, inspect & record results

### Conclusions/Results

Which material type did you use?

Which type performed best?

