Egg Drop Lander

When NASA planned to take a rover to Mars they had to design something that wouldn’t break when it landed on the surface. I would like you to attempt to create something to protect a raw egg from breaking as it falls to the ground.

You will need:

* A raw egg
* Parachute material (e.g. plastic bags)
* Packing material (e.g. popcorn, foam, bubble wrap)
* Masking/cellotape

If you want to complete acceleration calculations:

* A tape measure
* A stopwatch

Method

1. Choose the parachute and packaging material to use around the egg.
2. Design and build your lander and attach the parachute.
3. Create a landing site (a 1 x 1ft target/A3 paper).
4. From a height (out of a window/from some stairs/steps) drop your lander (with the egg inside!).
5. If you want to calculate acceleration – record the distance and time it takes for the egg lander to reach the ground.
6. Examine and record the lander. Has your lander been successful or has there been a crack to the egg?

Results

1. List the packaging material used. Which material and packing technique worked the best?
2. Draw your design

If you have chosen to calculate acceleration:

1. Time of the fall = s
2. Distance of the fall = m
3. At what speed did the box hit the ground? (speed=distance/time)