



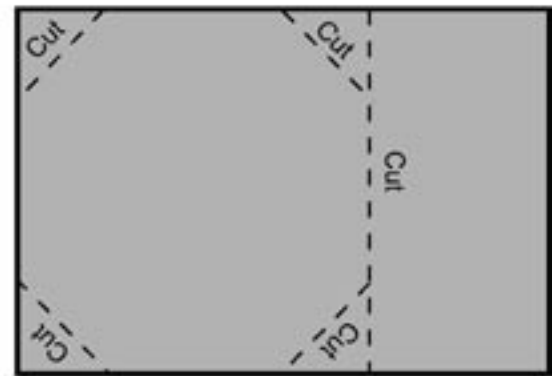
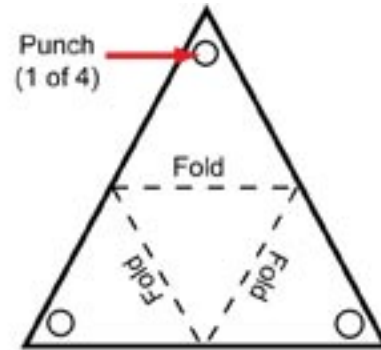
Mars Exploration Rover (MER) Egg Drop and Landing (EDL)

Materials

- 1 cereal box, 4 balloons, 5 m of string, newspaper,
- 1 egg, tape, scissors, ruler, pencil, hole punch

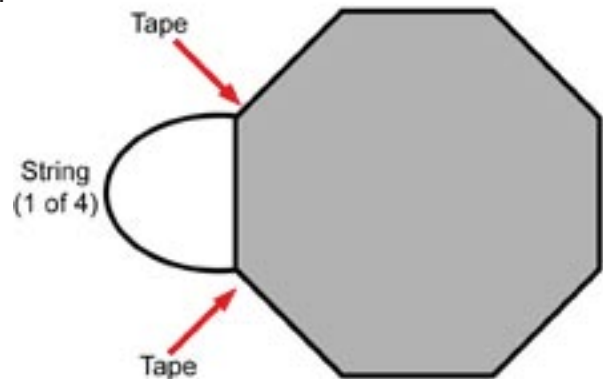
Lander

1. Starting with a cereal box, unfold the box
2. On one side of the box, trace an equilateral triangle, 22 cm (8.5 in) on a side.
3. Cut out the triangle and punch a single hole near each vertex
4. Fold the triangle into a tetrahedron to form the “lander”.
5. Place the egg inside the tetrahedron and tape closed along each seam.
6. Tie a 1-m (40 in) piece of string through the holes at the vertices.



Parachute

1. Unfold a large piece of newspaper.
2. Cut off the edge of the newspaper sheet to form a square
3. Cut off each corner of the square to form an octagon
4. Using four 1-m (40 in) piece of string, tape each end of each string to adjacent corners of the octagon parachute.



Air Bags

1. Inflate four 25-cm (10 in) balloons
2. Using tape rolled back on itself, tape each balloon to each face of the lander
3. Gather the four strings on the parachute and tie them to the string on the lander.

Entry, Descent and Landing (EDL)

Drop your Mars Exploration Rover from a high place and see if your payload (egg) survives!

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