Testing the Parachute

Description of problem

The payload has to return to earth safely once the balloon has burst. A will slow the rate of descent.

Activity

The group undertaking the investigation Balloon Altitude and Flight Time recommended the size of the parachute.

1. What size was this?

You have been provided with a 1m approx. parachute for testing purposes.

2. What is the difference in surface area between the two parachutes?

3. What mass should you use to testing parachute?

Mock up a CubeSat of the calculated mass, using ice-cream sticks for example.

4. Test the parachute to see if it deploys successfully and if the payload lands without damage. Your teacher will advise on an appropriate location for parachute testing.

5. How is the actual CubeSat designed to minimize damage on landing?

Conclusions

Present your findings and recommendations on the effectiveness of the parachute.