# Mission 1

The first mission is to collect satellite telemetry upon re-entry and be able to visualise the data. This will be modelled by your satellite being dropped from a height, once with a parachute and once without. Your satellite should be ruggedised to avoid damage to the system. The satellite should be able to capture appropriate data locally for both falls. This data should then be taken off the micro:bit and turned into a visualisation to compare the drop vs the parachute drop.

## Success criteria

* Design and build a rugged micro:sat body no bigger than 30cm x 30cm that can hold 4 x micro:bits, batteries and control:bit, motors and wires
* Create a team brand and ensure this brand is shown on your micro:sat. The branding should include:
  + A name and logo
  + A colour palette (no more than 3 colours)
* Design and build a suitable parachute for the micro:sat, the micro:sat needs to be able to survive a drop from a height (TBC ~10m from balcony onto a bean bag)
* Program a micro:bit to collect appropriate data during the 2 drops
* Collect the data from the micro:bit and create a visualisation to compare the 2 drops
  + Use a suitable chart/graph to represent the data visually
  + Write a short report comparing the data you gathered that describes how the parachute changed the way the micro:sat fell (this needs to be presented later!)