

The Core

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Procedure

Pre-flight

1. Unfold the weather balloon and then securely attach it to the helium tank.
2. Replace batteries into Labpro.
3. Prepare pressure program on Labpro.
4. Attach calculator to Labpro.
5. Securely attach the barometer (glass Jar).
6. Open valve on helium tank.
7. Inflate the balloon until it can lift the barometer and an extra $\frac{1}{2}$ Kg. of weight.
8. Attach the line to the balloon and close the end of the balloon shut.

Flight

9. Release line slowly until the balloon is at 100 ft
10. Keep balloon up for one minute.
11. Mark line every 100 feet
12. Determine the height of balloon using trigonometry
13. Lower the balloon back down carefully to not interfere with one way valve

Data Acquisition

14. Attach a calculator to a LabPro.
15. Attach the LabPro. to the adjustable valve on the barometer.
16. Open the adjustable valve.
17. Write down pressure data.
18. Repeat steps 6 through 10 but let the balloon rise to 200, 300, 400, 500, 600, 700, 800, 900, and 1,000 feet.