Rucker, James
Slavinski, Sonia
Shaeffer, Jeremiah
Helberg, Jake
Carter, Alex

AJS Balloon Fest

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Mr. Kliewer
Per. 4

April 9

It's the future

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AJ^3S

Purpose- the purpose or reason that we are trying to find the altitude is so that we will know the exact height (around a few feet) of the balloon when it is in the sky.

Method- the way that we will find the altitude is by using simple trigonometry to calculate the height. Page two shows all the calculations. The only data that we will have to take in will be two different angle measurements on the ground that are looking up at the balloon. It doesn't matter where the angle measurements are except that they have to be in a straight line with the balloon.

Hypothesis- we think that we will be able to measure the height within a few feet because our instruments that measure the angles will not be exact.

Checklist

Launch

- Balloon
- Helium
- String
- Angle measurer
- Measuring tape
- Paper and Pencil
- Pen

Class Project

The class will hopefully fill up the balloon and launch it on a string when it reaches its top altitude then we will begin our project.

Personnel project

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For the project we will need two angle measurers and a measuring tape.

1. Walk away from the balloon a few hundred feet.
2. Measure the distance between the two people with the angle measurers.
3. Measure the angle of the balloon at the same time and record your results.
4. Take the two angle measurements and the distance between the points and plug them into the calculations page.
5. We will get the height from the calculations and compare it with all of the other groups.

Calculations

1. Take two angle measurements (A and B) (30, 50)
2. 180-D=B
3. 180-A-B=C
4. 180—E-D=F
5. Sin C/c =Sin A/a
6. Sin E/a = Sin D/d