



Tracking & Locating

The wind could carry the balloon 150 miles from the launch site so we will be using GPS to track and locate the package along with a loud buzzer as a low tech back-up locator.



Description

- The package could end up in some hard to find areas like on top of a hill, deep in a forest or even on a lake! A GPS transmitter will allow us to follow the package as it travels and when it comes to a stop give us to the final position. As a simple backup to the GPS, the package will also have a loud buzzer attached to the outside. Our chase team will use the signal from the GPS to track the package, then when close, hone in on the sound of the buzzer to make the recovery.

Task

This experiment will show us how to use a GPS to track and find a hidden package.

Process

- 1) Hiding group chooses a location to hide the package
 - 2) Hiding group will mark it on the GPS
 - 3) Hiding group gives GPS to the Tracking group
 - 4) Tracking group will then use the GPS to navigate to the hidden package
 - 5) Tracking group then becomes the Hiding group and rehides the package in a new location and gives the GPS back to the other group so they can try to find the package
- A simple map hand drawn map can be substituted for the GPS and the buzzer can be located with the package so the students can hone in on the sound when they get close.

Materials

- 1 GPS and/or buzzer (alarm/timer or watch alarm)
- 1 Object to be used as lost package

Conclusions/Results

Could you have found the package without the GPS or map?

Were all the hidden packages found?

Did the buzzer help the tracking team find the package?

