Students' Intro to GPS

A) How to Start Up a GPS Receiver
All GPS units have an ON button. Hold it down for 2-3 seconds and watch the screen. Right away, it will search the sky for signals from the satellites above. This will take at least 5 minutes, so in the meantime …

B) Check Out the First Screen
The 1st PAGE on the screen gives you an idea of how many satellites the unit is tracking, and where they are above you (the rings you see put you in the middle).
   → Look for BARS which show how strong each signal is
      (move away from concrete buildings if the signal is weak).
   → Look for your ALTITUDE (elevation above sea level).

C) Check Out All the Buttons
The PAGE button shows about 5 different screens (like Map, Waypoints, Route, Navigation, Trip, Tracking or Satellite). Use the manual to see what all the abbreviations mean & what each page tells you (all models of GPS receivers are different).
A SCROLL toggle stick or button with arrows in all 4 directions will help you make selections on a certain page.
Return to the MAIN page now to see your LOCATION.

What do the COORDINATES mean?

If you were in Honolulu, your GPS receiver might give your location as:

<table>
<thead>
<tr>
<th>Latitude</th>
<th>21°18’32” N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longitude</td>
<td>157°49’34” W</td>
</tr>
<tr>
<td>Elevation</td>
<td>87 ft</td>
</tr>
</tbody>
</table>

The 1st number is in degrees, the 2nd number is in minutes & the 3rd is in seconds. This is not how long it takes you to go to this location … it just means that each degree is divided by 60 (like an hour) & each minute is divided by 60, too (like a minute). Easy, yah? ☺
D) MARK Your Current LOCATION & ALTITUDE
Once you get 3 strong satellite signals, your COORDINATES will appear on the MAIN PAGE. The GPS unit will memorize this for you if you MARK this WAYPOINT (either hold down MARK button, or hit twice ... see instructions as all units differ a bit). Your WAYPOINT will be given the number 001 (if that number is already taken, use the SCROLL button to DELETE all previous waypoints from the memory).

E) Enter and Go To a Given LOCATION
Enter the coordinates your teacher gives you into the receiver and wait for the screen to display a COMPASS image (use the PAGE button if this does not happen automatically). WALK in the direction the arrow tells you to (allow 10 seconds for the unit to adjust when you change direction quickly). Note your ALTITUDE and DISTANCE to target location which may be in points of a mile (0.03 Mi.) or meters (0.03m.). Note the RANGE of accuracy the unit can give you. The unit may only be able to help you get within several feet or meters of the location you seek, depending on how strong the signals are. When your DISTANCE to target is 0.00, the compass arrow points to the top of the screen and your altitude matches ... YOU FOUND IT! Return to your teacher & see if you're right!

F) Practice Some More!
ENTER A NEW WAYPOINT, find that campus LOCATION & WRITE 'EM DOWN.
Go to another campus location (building, large tree, etc.) and MARK the WAYPOINT. Give these coordinates & altitude to another group to find.
FIND COORDINATES other groups give you ... do as many as you can in the time given!