

# Introduction to GPS

## Summary

Educational Technology

## Time Frame

2 class periods of 45 minutes each

## Group Size

Pairs

## Life Skills

Communication

## Materials

GPS, Computer, Topographical Map, GPS Video Clip

## Background for Teachers

Knowledge of GPS, find and set waypoints

## Student Prior Knowledge

Basic computer skills

## Intended Learning Outcomes

Basic knowledge of GPS, how it works, setting waypoints and using the GPS.

## Instructional Procedures

1. Students will fill out the K and W portion of a KWL sheet about the GPS
2. Students will use a GPS Webquest to answer questions about a GPS
3. Students will draw a GPS and label the buttons and each buttons' functions as the teacher describes the GPS. Students will take turns finding the button and function being discussed. Students can use the Garmin's eTrex Legend Basics handout as a reference.
3. Students will practice using the GPS viewing each screen.
4. Students will set a waypoint on campus

### **SECOND CLASS PERIOD**

The Teacher will pre-mark a waypoint on campus.

5. Review GPS procedures.  
Students will set new waypoint.
6. Students will go outside and obtain satellites.
7. Students will proceed to a predetermined location

## Strategies for Diverse Learners

For those students needing extra help, they could be paired with a partner to help research and point out only the necessary functions to set the waypoint. A partner could assist in setting the waypoint and showing the different screens.

## Extensions

Students could locate their latitude and longitude on a globe and local area topographical map.

### Assessment Plan

Students will be assessed using the attached rubric on their drawings of how a GPS works, the GPS and its functions, setting waypoints, and finding a location. The drawings will be checked for accuracy and will be graded on correctness.

### Rubrics

[Introduction to GPS](#)

### Bibliography

<http://www.ncrel.org/sdrs/areas/issues/students/learning/lr2kwl.htm>

<http://www.trimble.com/gps/whatgps.shtml>

<http://electronics.howstuffworks.com/gps.htm>

<http://www.worldbookonline.com/wb/Article?id=ar314580&st=latitude>  
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### Authors

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