

# GPS & the 5 Themes of Geography

## Summary

Students will use a GPS receiver to mark the geographic coordinates of sites of interest in the community and write a description of it.

## Time Frame

2 class periods of 60 minutes each

## Group Size

Small Groups

## Life Skills

Communication, Social & Civic Responsibility

## Materials

GPS Receivers

Paper and pencil for interviews

Digital camera (optional)

## Background for Teachers

The following websites have some great explanations and graphics of how GPS systems work and what they are commonly used for-

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

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

[http://www.garmin.com/manuals/GPSGuideforBeginners\\_Manual.pdf](http://www.garmin.com/manuals/GPSGuideforBeginners_Manual.pdf)

<http://www.the-gps-place.com/downloads/BasicsofGPS-V18.pdf>

<http://www.geocaching.com>

## Student Prior Knowledge

Latitude and Longitude.

How to navigate using a GPS receiver.

The 5 Themes of Geography.

## Intended Learning Outcomes

1. Students will use GPS receivers to acquire geographic data about sites within their communities.
2. Students will analyze the characteristics of a place using the 5 themes of Geography.
3. Students will create a description for the site they have researched and ready it for submission.

## Instructional Procedures

1. Assign groups of students by community or neighborhood.
2. Students will interview people in their community or neighborhood about some aspect of the community.
3. Students will mark a waypoint of the aspect they interviewed about and take a digital photo of the area.
4. Students will write a description of their site, including information from their interview, using the 5 Themes of Geography.

5. Students create a multimedia presentation using their written description.
6. Students submit the presentations about their sites to the [www.utahpedia.com](http://www.utahpedia.com) website.

### Strategies for Diverse Learners

Group learners according to ability where possible.

### Extensions

1. Students will ready their description for submission using the guidelines at [www.geocaching.com](http://www.geocaching.com) and place a geocache. 2. Students use ArcView GIS software to map the locations of their waypoints.

### Assessment Plan

Students will present their [www.utahpedia.com](http://www.utahpedia.com) submissions to the class. They will be assessed using the associated rubric.

### Rubrics

[Multimedia Presentation Rubric](#)

### Bibliography

"<http://www.the-gps-place.com/downloads/BasicsofGPS-V18.pdf>"  
"<http://electronics.howstuffworks.com/gps.htm>"  
"[http://www.garmin.com/manuals/GPSGuideforBeginners\\_Manual.pdf](http://www.garmin.com/manuals/GPSGuideforBeginners_Manual.pdf)"  
"<http://www.trimble.com/gps/index.shtml>"

### Authors

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