



# Sequencing Rationale

GPS CLUB

The sequencing pattern for GPS Club is utilization-related. The students must be trained to use a GPS receiver as a discovery tool. This is very procedural, much like following steps in a science lab. Students must be taught how to use the device sequentially before the contextual applications are introduced later. For example, the students must learn how to turn the unit on, initialize satellites, use the FIND feature, follow compass bearings and input longitude/latitude coordinates to reach a destination.

When the students have learned all of the procedural steps and practiced them in combination several times, they can then use this tool within the context of what they are learning in math and/or science. For example, they'll then use the GPS to plot waypoints of a large rectangle in the schoolyard, then calculate area/perimeter for the figure. As students build upon their knowledge of using a GPS receiver, they will also be practicing communication and teamwork, problem-solving, and decision-making. These outcomes are follow naturally in the sequential order and are necessary in order to complete the final project. The culmination of the sequence involves a final student-created scavenger hunt utilizing the students' mastery of all the subroutines and skills.

