GPS

Subject Area	Earth's Changing Surface
Age or Grade	8th
Estimated Length	2 class periods
Prerequisite knowledge/skills	Students have some experience with Cardinal directions, mapping, and latitude and longitude.
Description of New Content	The students will be learning the new technology of GPS units. They will also be reviewing mapping in more detail.
Goals	Students will use a GPS unit to map a path assigned to them.
Materials Needed	Maps, compasses, GPS units
Procedure	**Opener-** Students will review latitude and longitude with various mapping exercises. **Development-**(Class period 1) Students will handle compasses and GPS units in the classroom. Have a class discussion about how GPS units work and how they are more effective that compasses. Review locating latitude and longitude on maps with a simple mapping exercise. (Class period 2) GPS Mapping Activity: Outside, students are divided into groups and each group is assigned a unique starting point. From their prospective starting points, students must map out a path to the front of the school. Students will create a set of directions noting the point of latitude/longitude, and direction with each turn. **Closure-** Groups can swap directions and students can follow their new directions. If there is extra time, create a

	scavenger hunt with various latitudinal/longitudinal checkpoints that the students must follow.
Evaluation	Students will write a 1-page research paper on the uses of GPS units and how they are changing the world of mapping.