



NATURAL PLAY FEATURE PLANNING

TEACHER:	SUBJECT: Social Studies: Geography, Mathematics: Geometry
TOPIC: Planning the construction of a natural play feature using GPS units	FORMAT:

COMMON CORE STANDARDS:

Geography 6

3. Geographic tools can be used to gather, process and report information about people, places and environments. Cartographers decide which information to include and how it is displayed.
4. Latitude and longitude can be used to identify absolute location.
5. Regions can be determined, classified and compared using data related to various criteria including landform, climate, population, and cultural and economic characteristics.
6. The variety of physical environments within the Eastern Hemisphere influences human activities. Likewise, human activities modify the physical environment.

6.G.1 Through composition into rectangles or decomposition into triangles, find the area of right triangles, other triangles, special quadrilaterals, and polygons; apply these techniques in the context of solving real-world and mathematical problems.

6.G.2 Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = l w h$ and $V = B h$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.

6.G.3 Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.

ESSENTIAL QUESTIONS:

1. Can the GPS help me locate an area in my schoolyard?
2. Can my GPS measure distance?
3. How can a GPS be used in real-world scenarios?

I CAN STATEMENTS (LEARNING OBJECTIVES):

- I can use my GPS to identify the location for a potential natural play feature.
- I can measure an area with my GPS.
- I can use my GPS to plan the construction of a natural play feature.

MATERIALS:

GPS unit (provided by Park District), students' hand drawn map of schoolyard, blank paper

LINKS:**ACTIVITY:**

Students will use their hand drawn map of the schoolyard that they created in Lesson 2 to draw the addition of a natural play feature that they decided upon in Lesson 3. Students will use the GPS to gather coordinates and measurements to add to their drawing, making it as accurate as possible. Using a separate piece of paper students should draw a detailed schematic of their play feature using measurement.

EVIDENCE OF ACTIVITY (WHAT TO TURN IN):

Students will turn in their modified map and detailed drawing.