

TEMPLATE FOR CMAP PROJECT

**Project Title: Beacon Heights Playground Rules**

**Created By: Amanda Lau – 3<sup>rd</sup> grade**

**Class: UEN 2009**

Project Description	Students will use <i>GPS</i> units to mark playground areas including playground equipment, black top, and grassy areas. This information will be used to create an accurate map of the school's playground. Students will also create posters and a public announcement stating the rules and regulations appropriate for each area of the school's playground.
Community Issue or Problem Selected -How project evolved?	The Beacon Heights school community needs clarification on the appropriate usage of playground equipment and areas.
Community Partner(s)	The principal at Beacon Heights.
Project Objectives	

	<p>Students will learn the basics of using <i>GPS</i> units. They will also use the <i>ARCMAP</i> Program to create a map of the school playground areas and equipments. They will also create multi-media projects to share their information with students, teachers, and parents.</p>
<p>Utah Core Standards/Objectives</p>	<p><u>Math Core</u> -Standard 3: Describe and analyze Attributes of 2 dimensional shapes.          -Standard 4: Select and choose appropriate units and measurement tools for problem solving.</p> <p><u>Language Arts Core</u> - Standard 1: Develop language for the purpose of effectively communicating through listening, speaking, viewing, and presenting.</p> <p><u>Social Studies Core</u> - Standard 3: Understand the principles of civic responsibility in classroom, community, and country.</p>
<p>Essential Question(s)          -Spatial Issue</p>	<p>How can students at Beacon Heights safely play on the school's playground areas and equipment?</p>
<p>Assessments (rubrics, scoring guides)</p>	<p>Teacher observations and project rubric.</p>

Project Products	<p>Students in small groups will create a poster with a map and rules of the playground areas and equipment. As a class project, the students will create a public announcement displaying playground areas, equipment, and rules.</p>
Project Timeline (include a step by step Procedures)	<ol style="list-style-type: none"> <li>1. Review working cooperatively in partner pairs.</li> <li>2. Discuss our school playground rules and regulations.</li> <li>3. Discuss our project to create a playground map with rules.</li> <li>4. Review mapping skills</li> <li>5. Introduce how to use GPS units</li> <li>6. Create waypoints of playground equipment and areas.</li> <li>7. Use mapping software to download waypoints to create a map of the playground equipment and areas.</li> <li>8. Write rules to go with each playground equipment and areas.</li> <li>9. Share playground posters with parents and other classes.</li> <li>10. Create a Public Announcement (PI) to share the information.</li> </ol>
Resources Needed	<p>GPS units, mapping software (ArcGIS, Google Earth...), school supplies, and computers</p>
Skills Required	<ol style="list-style-type: none"> <li>1. Mapping skills</li> </ol>

	<ol style="list-style-type: none"> <li>2. Use of GPS units (marking waypoints)</li> <li>3. Use of computer programs such as ArcGIS that use maps and data.</li> <li>4. Use of multi-media programs such as Powerpoint, Photostory, Windows Movie Maker...)</li> </ol>
Project Team Member Roles	<p>Teacher: <u>Amanda Lau</u>: Teaching, modeling, supervising, and setting up appropriate software for mapping programs.</p> <p>Students: <u>3<sup>rd</sup> Graders</u>: Listening and following directions, working cooperatively with a partner, using the loaned GPS units carefully, and creating and sharing their maps and P.A.</p> <p>Partner(s): <u>Principal</u>: Supporting and giving feedback.</p>
Celebration/Presentation	Students will share their maps (with rules) and P.A. to other classes and parents.
Project Evaluation	Project Rubric
Project Bibliography	Community Mapping Binder, Garmin GPS Units and ArcGIS Program
Plans for Future CMaP Activities	Students can make waypoints for the surrounding community and write safety rules for these features.

--	--

- Optional:
- Lesson Plans
  - Student Artifacts
  - Publicity