

Unit Plan: Creating a Geocache

Grade Level: 8

Subject: Communications

Unit Timeline: Varies, but Lesson Plan 1 and 2 will take a total of 2 hours

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Unit Summary - Students will learn about Geocaching and create their own cache. Cache data collection and analysis will be combined with various forms of technology and software applications. Technology and software applications will then be used in conjunction with website exploration and material research to achieve the desired outcome of creating a classroom cache.

Unit Description - Students learn how to use handheld computers as data-collection tools to learn about <u>Geocaching</u>. Research over Geocaching will be conducted using <u>FlingIt for Palm</u> and a concept map will be created using <u>Inspiration for Palm</u>. Cache concept maps will then be "beamed" to the teacher and other students for further analysis and review. Students will also be briefly introduced to a Garmin Handheld Global Positioning System and how it is a key tool used in geocaching.

After the Geocaching research and concept maps are complete students will then create a classroom weather proof cache that will then be filled with information about this project and placed in a location on city property. The gps coordinates will then be uploaded and listed on the Geocaching website, so other cache hunters who are in the area can locate, explore the contents of the cache, and review the students learning experiences over the course of completing this instructional unit.

There are many other resources available for use with handheld computers to collect Geocaching data efficiently and accurately. After learning the basics of Geocaching, students can learn to use other software available to assist them in learning more about Geocaching. Other software packages available to students to expand learning can be located below under <u>Handheld Productivity Tools</u> and <u>Desktop Productivity Tools</u>.

Throughout this unit students will can create their own learning experiences by collecting data from various sources in order to find answers to newly formed questions. The handheld devices will help foster independent learning and build student interest in exploring the world around them and the technology within it.

As a result of completing this unit, I hope students will learn responsibility when using the technological devices in the classroom. In addition to becoming more responsible, I am anticipating an increase in student collaboration because they will be sharing their research, concept maps, and the project with their peers, others throughout the community, and future cache hunters who locate our cache.

Essential Unit Questions Answered - What is Geocaching, how is the game played, what is required to play, how are caches created, and how do you track caches when found?

Unit Lesson Plans

Lesson Plan 1	<u>Lesson Plan 2</u>

Unit Research Resources

Unit Effectiveness Journal	Handheld Technology Blog

Handheld Productivity Tools

GSAK Geocaching Management Tool	Plucker Web and E-book Viewer
FlingIT for Palm	Inspiration for Palm
GPX Spinner	MobiPocket Reader
<u>Mapadvisor</u>	Adobe Palm Reader
<u>CacheMate</u>	Cetus GPS

Desktop Productivity Tools

Google Earth	Pluker Desktop
<u>Quakemap</u>	Adobe Reader

Purchase Additional Unit Reading Resources

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Idiot's Cuide to Georgehing	The Georgehing Handbook
<u>Idiot's duide to deceaching</u>	<u>The deceating Handbook</u>
Idiot's Guide to Geocaching	The Geocaching Handbook

