



INTRODUCTION

So, what is a “Map Attack”? Well, here’s a definition:

Definition (*noun*)

1. A sudden urge to spend hours exploring online maps, scanning through satellite images of the earth.

If you have never experienced a map attack before, you better start getting used to the idea. Throughout this project, we will explore the amazing world of GIS including satellite imagery, interactive online maps, and demographics.

As you work, reflect on how environmental science, technology, sociology, and mathematics all converge in this fascinating field of study.



Niagara Falls from space

Project Description

Your community has set aside \$25,000 for the creation of a new sports park. As the local GIS expert, you have been tasked with:

- **Using demographic information to identify the best location for a sports park in your community.**
- **Creating a map of the proposed location, shape, and size of the park.**
- **Putting your analysis together in an online map presentation.**

The final project will include:

- **A 3-slide presentation created with ArcGIS Explorer Online, which shows the location of the proposed park and relevant demographic information.**
- **A written description of why you placed the park in that location.**
- **Written answers to the four essential questions below.**

Map Attack

MODULAR



ESSENTIAL QUESTIONS

To successfully complete this project, you will need to be able to answer the following questions:

EQ 1: What is a GIS Map?

- Watch this brief video for an introduction to GIS. (<http://bit.ly/PCu02O>)
- Find your address and try changing the “basemap” with this online GIS. (<http://bit.ly/TcHxiH>)
- Explore a GIS map with a data layer showing population change. (<http://bit.ly/OJplVp>)

EQ 2: How do we determine locations on a map?

- Review this interactive webpage for information about coordinates. (<http://bit.ly/OAMjUh>)
- Use this simulation to learn about the coordinates on Earth’s surface. (<http://bit.ly/NBor09>)
- Watch this video describing how GPS can find your location anywhere. (<http://bit.ly/QsysOJ>)

EQ 3: What does demographic information tell us?

- Watch this 1940s video describing why demographic data is collected. (<http://bit.ly/QXAp59>)
- Explore what can be learned from this GIS map of mobile phone usage. (<http://bit.ly/MwqHIW>)
- Use this tool to explore your neighborhood’s demographic information. (<http://bit.ly/NCGeTa>)

EQ 4: How does one make an online map presentation?

- Explore some of the existing maps created with ArcGIS Explorer Online. (<http://bit.ly/yyowYu>)
- Watch this video for a tutorial on making an online map presentation. (<http://bit.ly/T0ZleF>)
- Return to this page and select “New Map” to try making a presentation. (<http://bit.ly/yyowYu>)

GOING FURTHER

You may choose to explore some of these resources to gain a deeper understanding of the topic.

- Watch this video to see a day in the life of a GIS analyst (<http://bit.ly/Wopabg>)
- Explore this page to learn about the “Lifestyles Tapestry Segmentation” (<http://bit.ly/PGnMg0>)
- Use one of these ready to go map-making tools. (<http://bit.ly/hjnZwv>)
- Experiment with some of these other web mapping apps from ESRI. (<http://bit.ly/9BJoms>)