Title:	PRE-EXCAVATION SURVEY
Grade and Subject:	8 <sup>th</sup> -12 <sup>th</sup> grades
Number of Days for	1.5 - 2
Completion of the	
Project:	
Overarching Project	Students become the scientist!
Goals/Outcomes:	
	Students will go out into the field and collect data, including surface finds and mapping of the surrounding area. An important part of scientific research is to make records, which can be understood by another scientist who does not have first hand experience with the initial data recording and collecting; a second scientist needs to be able to go out into the field and find the exact locations where initial finds were observed. Recording locations of trees, buildings, and streets serve this purpose and make students more aware of the bigger picture of their surroundings.
	Focus will be given to mapping skills and the decisions made when designing their maps.
Materials:	<ul> <li>Graph Paper / Paper</li> <li>Pens/Pencils/Colored Writing Utensils</li> <li>Rubber gloves (optional)</li> <li>Camera (optional)</li> <li>Measuring Tape/Rulers</li> </ul>
Introduction:	<ul> <li>Discussion on what data is important to a scientist:</li> <li>1. Introductory PPT on what archaeologists do</li> <li>2. Discussion on mapping and considerations of map design (accompanying PPT on bad maps)</li> </ul>
Instruction/Direct	1. Students will be outside, in the field
Experience:	2. Collecting and recording data
Independent Activities:	Class will be broken up into teams with each team designing a map which will include surface finds and the surrounding area.
Assessment:	Student's fieldwork and data collection.
Follow-up	The following week there will be a class discussion on surface finds and conclusions as well as field location, i.e. green space. Discussion on potential class projects!

Discussion notes in preparation for pre-excavation survey

Discussion will begin with PPT on what an archaeologist does!

- What can potentially be found?

-Newspapers – they have dates!!!

-Bottle Caps

-Food wrappers (with or without expiration dates)

#### IT'S NOT JUST "GARBAGE" REMAINS... WHAT ABOUT NATURAL REMAINS FROM HUMAN ACTIVITIES?!

-Charcoal

-Fire pit

-A pile of leaves (children playing or someone cleaning up an area)

-Animal bones (chicken bones) could indicate a meal that had been consumed

- What can different types of finds tell us about the people who left them?

-The dates of the event (or a general timeline).

-Over how long did the deposition take place (one season, one year, multiple seasons/years).

-What activities were the space being used?

-What was the diet of the users of the space?

-Did people cook?

- How do we record our findings? (maps, graphs, tables, etc.)

- What is important in designing a map?

### What's Wrong With This Map?!

## What Makes a Good Map?

- Title: What are we looking at?
- A Reference to North
- Scale: Defines the relationship between actual distance and map distances.
- Grid: Intersecting lines to determine exact location on the map.
- Legend/Key: Defines the symbols used on the map.
- Date: When was the map made? What may have changed since the map was created?





Starbucks per capita



Wal-Marts per capita



# No Leaend?!



Wal-Marts per capita



Starbucks per capita













### References

- "Geologic Map Making ~ What Makes a Good Map." <a href="http://naturebytesvideo.com/bytes\_G-J/geomap-good\_map.html">http://naturebytesvideo.com/bytes\_G-J/geomap-good\_map.html</a> 14 September 2011.
- <http://geographer-at-large.blogspot.com/2011/02/wtfis-this-bad-maps.html> 14 September 2011.
- "What Makes a Good Map?" <http://www.fcpsteach.org/docs/map.pdf> 14
   September 2011.

# A Good Map... ACCORDING TO A GEOLOGIST!!

http://naturebytesvideo.com/bytes\_G-J/geomap-good\_map.html