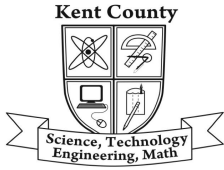


## STEM Geometry Summer Project



Welcome to STEM Geometry!

This project is due: **The first day of school NO EXCEPTIONS!**

The objective for your summer project is to answer the question, “Why do we have to know this?” As an adult, you will need a career. In the best possible scenario, you will have a well-paying job that you love to do. Preparation for getting that job begins early, and the STEM program is the first step.

You will need access to a computer. If you do not have one at home, you will need to make arrangements to use one at the library. **DO NOT WAIT UNTIL THE LAST MINUTE – COMPUTER PROBLEMS ARE NOT AN ACCEPTABLE REASON FOR LATE WORK.**

By the end of the summer, you will have written a research report that details the education required to prepare yourself for a STEM occupation. For example, a STEM occupation could be an Environmental Engineer, a Pathologist, a Research Mathematician, or any other STEM career.

To write your report, complete the following steps:

1. Read this packet all the way through.
2. Arrange for computer time (either at home or at the library). Plan to spend at least three hours researching, two hours writing, and two hours proofreading.
3. Do a web search and think about a STEM occupation that you might consider in the future.
4. Fill out the Note Sheets that come after this page. These do not need to be in complete sentences.
5. Follow the Directions to write your report. Type it.
6. Make sure that you have a reference page that cites any source that you used. **DO NOT COPY DIRECTLY FROM THE INTERNET – COPYING IS CHEATING.** If you need to quote, use quotations marks, and cite it using MLA format. (If you do not know how to do this, look it up. Google: Owl Purdue)
7. Proofread. Correct any mistakes. Proof read again.
8. Complete the Rubric by circling the grade for each category that you feel you deserve.
9. Staple together:
  - a. Cover Sheet
  - b. Report
  - c. Reference Page
  - d. Note Sheets
  - e. Rubric
10. Turn it in on the first day of school. This counts as your first quiz grade.

# STEM Geometry Summer Project

## Note Sheet #1

Web Site (I suggest [www.bls.gov/oco](http://www.bls.gov/oco)): \_\_\_\_\_

Specific Job Title (ex: Structural Engineer, Surgeon, Archeologist, etc.) \_\_\_\_\_

Reasons for choosing this particular job: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Job Training Required: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Summary of statistics related to job: (ex. how many doctors are there in the U.S, what percent of them are the type that you would like to be, etc.) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Summary of job prospects and potential job earnings: (will there be job openings, and how much money do most people who have that job make) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Two other interesting things about your career that you find interesting: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# STEM Geometry Summer Project

## Note Sheet #2

### How to get the job I want.

Suggested website: [www.umd.edu](http://www.umd.edu) (You will be looking as a “prospective high school student”)

Major that you need to get the job you want: \_\_\_\_\_

Math classes that you need to take in order to be admitted to the school (Admission Requirements): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

“School” at the University where you can find your major: \_\_\_\_\_

\_\_\_\_\_

Required Math Courses for your major: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Three Required Courses from your major that sound interesting to you (include the abbreviation and the title ex: MAT001, Non-Credit College Algebra) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## STEM Geometry Summer Project

### Directions for Writing Your Report

Write a 5 to 7-paragraph report detailing your research. Each Paragraph should contain at least 5 complex sentences. It is okay to use first person for this report (“I”), although in science and math you will rarely do so. The following outline is offered *as a suggestion* for how to organize your report. If yours differs, it MUST cover the same material in order to get full credit.

- I. Introduction Paragraph
  - a. STEM is?
  - b. Find info about careers where?
- II. Job Choice
  - a. Job Title and description
  - b. Reasons for choosing
- III. Job Details
  - a. Training/Education Required for Job
  - b. # of people currently in the job
  - c. potential salary
  - d. any other interesting statistics
- IV. Interesting items about job
  - a. Why are they interesting?
  - b. Details about the interesting item
  - c. Any additional information
- V. University of MD
  - a. Admission requirements
  - b. School & Major
  - c. If available, requirements to acceptance into the major
  - d. Other interesting and pertinent facts about the major, school, or University
- VI. Interesting Courses
  - a. Title & Description of each
  - b. Why those particular courses appeal to you
- VII. Conclusion Paragraph
  - a. The information you will be learning this year is necessary to learn because?
  - b. Conclusion statement

*\*An example of a **simple** sentence:* STEM stands for Science, Technology, Engineering, and Math.

*\*An example of a **complex** sentence:* Science, Technology, Engineering, and Math programs (STEM) include rigorous classes that will prepare me for a career in Health Care.

## STEM Geometry Summer Project

### RUBRIC

For each category, circle the score that you believe you have earned.

Category	4	3	2	1	0
Cover Sheet & References	Pages are included, all sources are cited	Pages are included, most sources are cited	Pages are not included, but an attempt is made to cite sources	Pages are not included, most sources are not cited	Pages are not included, no attempt was made to cite sources
Note Sheet #1	Filled out with many details	Filled out with few details	Less than 75% filled out	Less than 50% filled out	Not filled out or missing
Note Sheet #2	Filled out with many details	Filled out with few details	Less than 75% filled out	Less than 50% filled out	Not filled out or missing
Paragraphs	At least 7 paragraphs are written with complex sentences	7 paragraphs are written, however the sentences are not complex	Less than 7 paragraphs are written; some sentences are complex, some are simple	Less than 7 paragraphs are written with mostly simple sentences	Less than three paragraphs with simple sentences
Introduction & Conclusion	Includes all information from outline	Includes most information from outline	Includes some information from outline	Includes very little information from outline	Missing.
Body of Report	Includes all information from outline	Includes most information from outline	Includes some information from outline	Includes very little information from outline	Missing.
This Rubric	Only 1 point is available for this item.			Rubric has each block circled based on what the student feels he or she has earned.	Rubric is missing or not filled in.
TOTAL:	Your score will be the number of points that you earn (from above) over the total number of points possible.				