

The Mathematician Project!

Biographical history, as taught in our public schools, is still largely a history of boneheads: ridiculous kings and queens, paranoid political leaders, compulsive voyagers, ignorant generals -- the flotsam and jetsam of historical currents. The men who radically altered history, the great scientists and mathematicians, are seldom mentioned, if at all.

-Martin Gardner, 1992

The assignment:

Research the life and times as well as the scholarly contributions of one mathematician. You will:

- Gather at least 20 facts about your mathematician's life and at least 5 facts about their math.
- Analyze how your mathematician's identity shaped their history.
- Write and deliver a first-person monologue and dress up as your mathematician for our mathematician wax museum / mingle.
- Make an artifact/visual aid to illustrate your person's contribution to math.
- Connect your mathematician's life and contributions with other mathematicians.
- Write a bibliography of all the sources you used.

Phases of the project:

1. Research phase – gather as much info as possible about the life and times and mathematical contribution(s) of your person. Life and times means their personal history should be put into the context of the time and place where they lived. How did your mathematician's gender, sexual identity, race, socioeconomic status, age, etc affect their life and ability to do math? Write each fact you learn in your own words on an index card. Keep track of your sources – each time you use a book or a website, take time to add to your bibliography. You must use at least two books as sources. (See the list of sources on Schoology to start).

Research and bibliography deadline: 12/6 - 25 index cards with facts about your mathematician (roughly 20 historical and 5 mathematical) in your own words; one-page bibliography filled out in the correct format.

2. Monologue writing phase – turn your note cards into a chronological speech about your mathematician.

3. Artifact creation - Create one artifact or visual to be used as you recite your monologue. This should be something that helps us visualize your person's math.

Monologue and artifact due: 12/12

4. Mathematician Mingle / Wax Museum: come in costume as your mathematician and meet some of the great men and women who built math through the ages.

Mathematician Mingle: 12/13 (be thinking of your costume!)

Deadlines and schedule of the project

(Final due dates in **bold**. Note: if you miss a deadline, it cannot be made up! It is crucial to stay caught up or the project will snowball towards the end.)

Monday	Wednesday	Thursday	Friday
11/26	11/28	11/29 Assign project Present possible sources Go over bibliography format Start research, citing sources as you go (5 facts for homework)	11/30 <u>Research Day</u> <u>Goal:</u> 10 more facts about your mathematician; cite sources, by the end of class!
12/3 <u>Research Day:</u> Check in with Liz about your person's math Goal: 5 facts about math (diagrams might be helpful) <u>Homework:</u> reflect on how your person's identity shaped their life	12/5 <u>Research Day:</u> finish index cards and bibliography	12/6 Due: index cards and bibliography Work on monologue and artifact	12/7 No class - musical theater performance Over the weekend: gather costume pieces
12/10 Work on monologue and artifact	12/12 Finish monologue and artifact; rehearse Bring your costume on Thursday!	12/13 Mathematician mingle and wax museum! Mingle = 10:30 - 11:00 Wax museum - 11:00 - 12:00	12/14 Chalk talk: was math created or discovered?

	PROJECT REQUIREMENTS CHECKLIST
	Twenty-five historical and mathematical facts about your person on index cards <i>in your own words</i>
	Notes from at least 2 books
	Bibliography is complete and follows the correct formatting
	Monologue highlights the main important pieces of your mathematician's life
	Monologue is documented electronically and shared with Liz
	Artifact or visual helps the visitor understand your person's math contribution(s)
	You have considered how different aspects of your person's identity affected their life and math ambitions
	All deadlines were met
	You came in costume to the Mathematician Mingle

Rubric!

Project Requirements	16 Exceeding Benchmark	12 Meeting Benchmark	8 Approaching Benchmark	4 Not Yet Meeting Benchmark
MP.8 Communicates understanding effectively by showing work and explaining thinking verbally, visually and numerically Are you able to demonstrate your understanding in different ways?	4 Exceeding Benchmark	3 Meeting Benchmark	2 Approaching Benchmark	1 Not Yet Meeting Benchmark
7U2.3 Demonstrates an understanding of and appreciation for mathematics in the context of history	4 Exceeding Benchmark	3 Meeting Benchmark	2 Approaching Benchmark	1 Not Yet Meeting Benchmark
Neatness and Organization	4 Exceeding Benchmark	3 Meeting Benchmark	2 Approaching Benchmark	1 Not Yet Meeting Benchmark
Time Management	4 Exceeding Benchmark	3 Meeting Benchmark	2 Approaching Benchmark	1 Not Yet Meeting Benchmark

BIBLIOGRAPHY

Once you select a source, add it to your bibliography before you make any notes. Then number your index cards according to which source you used. See attached page for more info on the [bibliography format](#).