

Changing the Face of Science: STEM Biography Research Assignment

Final Research DUE DATE: _____APRIL 29_____

Final Media Presentation DUE DATE: ____May 2 – May 13_____

Presentations for peers, faculty, administration:____May 2 – May 13_____

Student curiosity, choice, and creativity will drive this project as they connect to the diverse people that contribute to the varied fields of science! Students will research fields of study and persons of interest, in some cases conduct personal interviews, to share the experiences of accomplished professionals. Final presentations are completely up to the student and will be shared with an audience of their peers and faculty.

By sharing these stories, students learn about our world, see themselves reflected, and are inspired to learn more. They hear great lessons of wonder, compassion, challenge, resilience, perseverance, and success. All this inspires the next generation of problem-solvers!

Project Objectives:

- Recognize that the great contributors to the knowledge and achievement in STEM fields include all genders, races, cultures, religions, ages, and socioeconomic backgrounds.
- Explore various career fields in STEM
- Share the story of a professional from the past or present.
- Digital Citizenship

Short term goals	DUE Date
Scientist (or field of science) to study: Science Buddies Career Fields	April 13
Computer Lab 212: Internet safety, netiquette, and evaluating web content	April 13 Lab grade
Computer Lab 212: Research	April 13 Lab grade
Computer Lab 212: Copyright and plagiarism; citation machine	TBD Lab grade
Answers to introduction and Learning about the Scientist questions	April 15
Computer Lab 212: Draft interview or research questions	April 20
Complete the Conclusion and Edit questions to tell scientist's story	April 25
Answers to All Questions: Learning about the Scientist's story	April 29 TEST GRADE
Presentation format selection is student's choice	April 25
Computer Lab work to format presentations	April 25 & 26
FINAL Presentations to class and teachers/ administrators TBD	Approximately May 2 – May 13

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RESEARCH-

- Research a scientist that you identify with *racially, ethnically, religiously, culturally, by gender or learning ability*.** The professional (one in any **STEM** field-science, technology, engineering, and math) you research can be from the PAST or PRESENT, in your family or a professional somewhere around the globe. *Include your identifying factor in the introduction to the assignment.*
- You can begin your research by looking through the vast array of career options on this link: [Science Buddies Career Fields](#)
- Define** the field of science in which your scientist is involved. Many 7th graders don't know the meaning of the professional's title or a description of what they do.
- The project should answer essential information based on the questions attached (page 3).
- If you choose a current scientist, you may try to contact them for authentic feedback by using their professional work email **from your school email or interview in person with parental permission** (*hey! It could be your parents!*). *Want to bring them into school for a live interview?? Rehearse your role beforehand.*
- Cite resources, including images, using the online Citation Machine or Bibme (Links in Biography Resource folder on Edline or on our science web site).

PRESENTATION-

- Your final research can be presented in the format of your choice.** However, **avoid** using PowerPoint unless you learn PPT design for presentations. Again, be sure all Introduction questions have been addressed.
- Include a *minimum of 5* images relating to the scientist, where they grew up, or went to school, their work, their time period, etc. Embed video clips if available and format allows.
- Be creative to communicate your scientist's career path! Use web applications, create a video, voice thread, timeline, graphs, graphics, or other pictures and details. There are more presentation options on our web site.
- Check for grammar and spelling errors. Some work will be published to our science site.
- If you choose to interview a family friend or relative, include their picture and use the MLA personal interview citation method found on citationmachine.net.

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Guiding Questions

Introduction

1. Introduce the scientist by their full name (include their title). Where were they born? Where did they grow up? Where did they go to school? Where are they now?
2. What field of study did your scientist choose? Provide a definition of that particular field of study.
3. Why did you choose this scientist? How do you **identify** (race, gender, ethnicity, culture, learning ability...) with this scientist?

Learning about the scientist

1. What events early in the scientist's life might indicate or have sparked an interest in science?
2. What role did mentor(s) play in developing this person's talents/interests?
3. What were the major accomplishments/success stories for the scientist?
4. What were some personal challenges (i.e. grades, money, family support, racial or gender inequality) that the professional may have had to overcome?

Telling their story....

What do you want to know about the person and their life experience? Use StoryCorp.com for Great Question ideas or Draft interview or research questions.

- a.) **Extra Credit**-Use a graph to show the statistics of the demographics in the field you are studying: *how many women, people of color, or graduates are staying in their field... what are the pay differences among people groups?*

If interviewing, other questions you may want to ask....

- b.) What are your recommendations to others who may want to succeed in this field?
- c.) What progress would you like to see in your field?

Conclusion Summarize the challenges overcome, the successes made, and how we all can relate to the scientist's story.