

## Unit 1 - Learning about Scientists' Lives

*Start off the curriculum by anchoring students' conceptions of inequality in the lived experiences of real scientists.*

NGSS connections: **Practices:** Asking Questions and Defining Problems; Obtaining, Evaluating, and Communicating Information; **CCCs:** Influence of Science Engineering and Technology on Society and the Natural World.

### Starting point for instructors

- Do [Unit 0 - Setting the Stage](#) before this, and review norms if needed
- We suggest focusing on Black scientists in this lesson for most classrooms in the United States of America, but it may be appropriate to adapt this lesson for other contexts.
- The first activity in this lesson may be assigned as homework to be completed before this lesson, or it may be done during class if students have devices and internet access.

### In-Class Investigations

*Writing, either as previous homework or individually at the start of the class [10-20 minutes]*

Present students with the following prompt:

Learn about at least one Black scientist\* who did their work before 1950, and one working today. Be sure to use several sources in your research, and document your sources. For at least one, write short answers in your own words to the following, to be handed in:

- What search terms did you use? What websites did you use?  
Compare internet searches for “physicist” and “black physicist”
- What was the path that brought each to physics? What inspired/motivated them?
- Were there obstacles they say they overcame in their career path? (You may not find an answer to this. If you look closely but can't find one, say this.)
- Summarize their research in your own words in a few sentences. Look up anything you don't understand!

#### **Instructor Note:**

Instead of “scientist”, consider using “physicist”, “chemist”, “biologist”, etc depending on your discipline.



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## Reporting and Reflecting on Scientists' Lives

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Have students share their findings, but aim to focus the class discussion on “meta” topics like the search terms they used and similar obstacles or experiences. You could ask students to report:

- a. Who did you find?
- b. What search terms did you use? What does that tell us?  
*Compare web searches for “[physicist](#)” with “[Black physicist](#)”*
- c. What are the effects on each group?  
*How does being only a ‘Black physicist’ affect Black physicists? How does being only ‘just a physicist’ affect white physicists?'*



### **Instructor Note:**

At this point, students may want to start theorizing about the causes of these differences. If this happens, point out that they have not yet collected enough data, and encourage them to do more research.

## Resources

- [Lesson Plan Resources](#)

## Notes from the Authors

1. Shakil Choudry believes that difficult conversations must include not only ideas but space for emotions to bring about change. I [survey my students about their emotions](#) before and after this unit, and share the results, as a result.
2. A [sliddeck](#) I used for this lesson



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