PhD SCIENCE®

GREAT MINDS™

Leveraging Instructional Shifts in Science: The art of *doing* science

Participant Handout

bit.ly/3RWfC5r

Works Cited

Great Minds®. 2020. *PhD Science*®. Washington, DC: Great Minds. https://greatminds.org/science.

Credits

First Minute Reflection:

Last Minute Reflection:

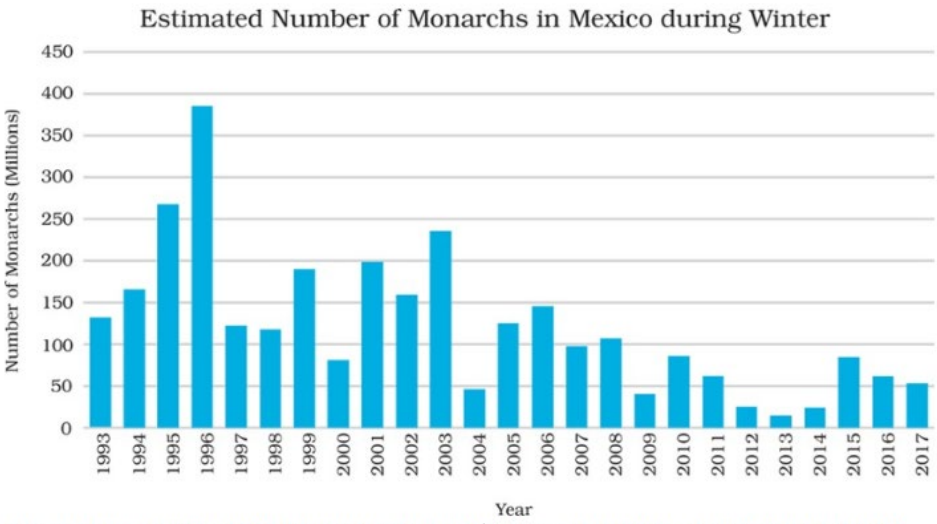
Stop and Jot:

Level 1: What are some of the ways students were engaging with content in the investigation?

Stop and Jot:

Level 3: What are some of the ways students were engaging with content in the investigation?

Monarchs Graph



Source: Adapted from World Wildlife Fund Mexico (Rendón-Salinas et al. 2018) and Thogmartin et al. (2017)

Science and Engineering Practices	Level 1	Level 3
1. Asking questions and defining problems	☐	☐
2. Developing and using models	☐	☐
3. Planning and carrying out investigations	☐	☐
4. Analyzing and interpreting data	☐	☐
5. Using mathematics and computational thinking	☐	☐
6. Constructing explanations and designing solutions	☐	☐
7. Engaging in argument from evidence	☐	☐
8. Obtaining, evaluating, and communicating information	☐	☐

Notes: