



***The Deepest Map* by Laura Trethewey**

Discussion Questions for Chapters 1-3

Chapters
<u>Part 1: (pages 1-64)</u> <i>Prologue</i> <i>Chapter 1: An Expedition into the Deep</i> <i>Chapter 2: Looking for a Ship</i> <i>Chapter 3: To the Bottom of the Atlantic</i>
<u>Part 2: (pages 65-129)</u> <i>Chapter 4: Marie Tharp and the Map that Changed the World</i> <i>Chapter 5: The Loneliest Ocean on Earth</i> <i>Chapter 6: Naming and Claiming the Seafloor</i>
<u>Part 3: (pages 130-191)</u> <i>Chapter 7: Crowdsourcing a Map of the Arctic</i> <i>Chapter 8: The Robot Revolution at Sea</i> <i>Chapter 9: Buried History</i>
<u>Part 4: (pages 192-241)</u> <i>Chapter 10: Mining the Deep</i> <i>Chapter 11: To the Bottom and Beyond</i> <i>Epilogue</i>

WHOLE GROUP

In the chat: Would you dive in a submersible if given the opportunity?

Introductions:

- Name, City & State
- TAS Ship and general mission/location
- If you sailed on a hydrography cruise, what area was being mapped and was there anything of particular interest discovered?
- If you didn't sail on a hydrography cruise, did hydrographic information play a role in the work?

BREAKOUT GROUPS

Discussion Questions: choose your discussion question breakout group based on your preference.

1. If you read *The Underworld* (this was our Fall 2024 read), reflect on the differences and similarities between how *The Underworld* and *The Deepest Map* portray the exploration efforts of Victor Vescovo and his team. Was there anything that this book uncovered about the [Five Deeps Expedition](#) that surprised you? Was there anything about deep ocean exploration and/or seafloor mapping, in general, that surprised you or that you found particularly interesting?
2. What are the advantages and disadvantages of the wealthiest humans spearheading exploration efforts in the deep ocean (and space)? What are examples from this book that depict the issues at hand? What could be the consequences of the field of exploration being dominated by the wealthy?
3. How do we balance our need to “see” the ocean with sound against the need to protect marine ecosystems that depend on sound? Discuss the complicated tradeoffs around managing sound in the ocean. What are some of the issues with using sound in underwater environments and how might these issues be mitigated?
4. There is a line in the book that says that we need to map more than 8 moons worth of seafloor over the next decade to meet the Seabed 2030 goal. As of 2019, only about 15% of the seafloor was mapped at an acceptable resolution. In 2021, NOAA’s budget was \$5.4 billion dollars, while NASA’s was \$25.2 billion dollars.

What reasons does the author provide for the difference in human interest about space and deep ocean exploration? Why is there a need for deep ocean exploration and mapping? What are the global challenges in mapping the whole ocean? Why might space exploration be more heavily funded?

5. Do you teach about ocean exploration? If so, what are your favorite teaching materials/resources? Have these first chapters inspired you to add something new to your curriculum? If so, what?