Text: ***The Puzzle Under the Sea: Marie Tharp Maps the Ocean Floor***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Science Practices** | **DOK Level 1**  **Recall &**  **Reproduction** | **DOK Level 2**  **Basic Skills**  **Concepts** | **DOK Level 3**  **Strategic**  **Thinking & Reasoning** | **DOK Level 4**  **Extended**  **Thinking** |
| **Asking Questions** | ***Identify*** the problem that needed to be solved in this book. | ***Identify*** the phenomena questioned by Marie Tharp and her colleague, Bruce. |  |  |
| **Developing and Using Models** |  | ***Describe*** what Marie Tharp was trying to simulate. |  |  |
| **Planning and carrying out investigations** | ***Provide details about*** the engineering practices that were attempted by people who sought to measure the depths of the oceans. | ***Identify*** a variable that might affect the measurement of a sounding of the ocean’s depth at various points. |  |  |
| **Analyzing and Interpreting Data** |  | ***Describe*** what data led to the theory of the ***Continental Drift.*** |  |  |
| **Using Mathematics and computational thinking** | ***Explain*** how Marie accounted for different measurements within the ocean’s depth at different points. |  |  |  |
| **Constructing Explanations** |  | ***Explain*** the theory of the ***Continental Drift*** using a cause and effect text structure. | ***Speculate*** why it was beneficial for Marie to create a visual map of the bottom of the ocean. |  |
| **Engaging in argument for evidence** |  | ***Describe*** the line of evidence that Marie Tharp provides for the ***Continental Drift Theory.*** |  |  |
| **Obtaining, evaluating, and communicating information** |  |  |  | ***Write*** an informative/explanatory essay on how Marie Tharp utilized science & engineering practices to map the ocean floor. |