



Impact Statement

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Digital Art

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Unsung Hero: Marie Tharp

Marie Tharp was a persistent and intelligent woman who changed the way we understand the Earth's oceans. I chose her as my Unsung Hero because her story shows how determination can overcome discrimination. What I admire most about Marie is her strength and confidence. Even when others dismissed her ideas simply because she was a woman, she trusted her work and kept going. That resilience is what makes her so inspiring to me. Instead of quitting when people put her work down, she kept pushing forward. Marie serves as a great role model, especially for girls who face gender discrimination or feel underestimated. She proves that intelligence, curiosity, and persistence matter more than other people's opinions.

I think Marie Tharp's impact on science is incredibly important, and it's surprising she isn't more well known considering what her work led to. She grew up working alongside her father, who introduced her to mapmaking and careful observation at a young age. Those early experiences helped shape her future career. Later, she studied cartography and geology and began working with oceanographic data. At the time, women were not allowed on research ships due to outdated superstitions, so Marie had to stay on land while male scientists collected the data. Instead of letting that limit her, she helped create the first detailed maps of the ocean floor.

Through her careful analysis, Marie made one of the most important discoveries in modern geology, the Mid-Atlantic Ridge and the rift valley running through it. This provided evidence for the unpopular theory of plate tectonics, which explains how continents move over time. However, according to the Lamont-Doherty Earth Observatory, "Her early evidence of seafloor spreading was dismissed as 'girl talk'" ("About Marie Tharp | Lamont-Doherty Earth Observatory"). She did not let that bias stop her. Over time, her findings were proven correct and became essential to modern science. Her work changed how scientists understood the Earth's structure. Her persistence not only advanced science but also helped challenge gender barriers in STEM fields.

In the piece, she's sitting at a desk made of rock, working on her maps while surrounded by the ocean. She's slightly smirking toward the viewer, showing her confidence in her work despite the doubt she faced. In the background, the ocean floor is shown cracking and shifting, demonstrating the phenomenon she discovered. The cracks are an important detail because they visually represent the scientific breakthrough she contributed to. The background uses deep blues and greens to create depth and a sense of isolation, reflecting what she experienced on land. The lighting focuses on Marie, making her and her maps the brightest part of the image.

and drawing the viewer's attention to her. Overall, my piece is meant to reflect her intelligence and lasting impact by placing her underwater, showing her calm confidence, and elements of tectonic movement.

Marie Tharp's story influences how I think about challenges and my own future. She reminds me that just because people doubt you does not mean you are wrong. Her determination encourages me to keep going, especially in situations where I might feel underestimated or overlooked. She shows me the importance of trusting my own work and not giving up when things become difficult. Her mindset is something I hope to carry with me during the rest of my schooling and beyond.

Through my artwork, I hope to share Marie Tharp's story and bring more attention to her contributions. Many people may not know who she is, even though her work had such a major impact on science. By presenting her story visually, I want to make it more engaging and memorable for viewers. I plan to share my artwork in class and possibly online, such as through school platforms or social media, so that more people can learn about her.

Overall, this project has helped me better understand the importance of perseverance. Marie Tharp's story is not just about science—it's about pushing through barriers and believing in yourself even when others doubt you. By sharing her story, I hope to inspire others the same way she inspired me.

References:

"About Marie Tharp | Lamont-Doherty Earth Observatory." [Columbia.edu](https://columbia.edu/marietharp.ideo.columbia.edu/about-marie-tharp), 2012, [marietharp.ideo.columbia.edu/about-marie-tharp](https://columbia.edu/marietharp.ideo.columbia.edu/about-marie-tharp).

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