Lowell Milken Center for Unsung Heroes
ARTEFFECT

Impact Statement

Emily Huang, Grade 8
From Girl Talk to World Talk, 2026
Colored pencil, graphite on paper, 11 x 17 inches
Jericho Middle School, Jericho, NY
Unsung Hero: Marie Tharp

I chose Marie Tharp because when I was looking through the lists of Unsung Heroes and reading her description, I was confused as to why I'd never heard her name. At the time, I had just learned about continental drift, the Mid-Atlantic Ridge, and seafloor spreading in Earth Science. Despite her clear influence in proving and discovering these topics, her name was nowhere to be found in any of the texts and materials we looked at. Even the teacher hadn't mentioned her name when speaking about the very discoveries she'd made. Additionally, I felt inspired by her strong will and determination. Although she faced gender inequality that kept her from research ships for over 20 years and was told her discovery was wrong, even though she arrived at the same conclusion numerous times, she persevered and helped complete a map that was the first of its kind. As a product of her resilience and hard work, scientists' old beliefs were transformed into the truth we know today.

As Marie Tharp grew up, she was exposed to her father's work as a soil surveyor and often went with him when he was doing fieldwork. While doing so, she began developing her understanding of land, soil, and the way Earth formed. Later, when she began working as a cartographer, her experience helped her visualize the data and make remarkably accurate inferences. When she was working on mapping the floor of the Atlantic Ocean, Tharp noticed a pattern in the data. In the middle of the floor of the Atlantic Ocean, there was a huge mountain range. This was the Mid-Atlantic Ridge. During this period, not much was known about what the sea floor looked like, and most scientists had assumed most of it was flat and featureless, so she was already pushing what was thought of as the norm in science. Furthermore, this was proof of seafloor spreading, which was evidence for plate tectonics and continental drift, a theory heavily opposed and criticized at the time. As a result of the dispute regarding her work and the gender bias she faced, her colleague initially dismissed her discovery as "girl talk," or "old wives' tale," but Heezen was eventually persuaded after half a year. Three years later, her discoveries were published as an abstract, yet the publication failed to credit her.

In my artwork, I depicted Marie Tharp unveiling a map and globe. The map drawn references Marie Tharp and Bruce Heezen's map, which was the first to depict the entire ocean floor and emphasizes the Mid-Atlantic Ridge, which she discovered. The globe is one of Pangea, not the modern-day arrangement of continents, representing the theory of plate tectonics. By having these two objects uncovered by Tharp, I was able to symbolize her work in proving continental drift, finding the Mid-Atlantic Ridge, and mapping the entire ocean floor. I drew Marie Tharp's

expression as one of determination and anger, to show how she fought to prove her discoveries in a male-dominated field where everyone was skeptical of what she was saying. I included a figurine of a boat on a shelf to show she was confined to land because she wasn't allowed to go on research boats to record data of the ocean depths herself. There is a clock at 7:07:07, which, if interpreted as being at 7 p.m. and translated into military time, would be 19:07:07. This references how her world map was completed in 1977. I drew Tharp and the cloth in color because I wanted to highlight her role in uncovering her discoveries. Although her work is widely known and recognized today, many people are unaware that she was the one behind it all.

Today, the theories she helped prove and the discoveries she made are talked about all over the world, including in other 8th-grade classes like mine, but her name is often left out of discussions. To share Marie Tharp's story and commemorate her, I wanted to illustrate her determination and innovation through my art to teach more people about her and inspire them to persevere like Tharp. In school, I will discuss her life and contributions with my classmates, and my artwork will be displayed in the lobby, with the hope that my community will come to recognize the important role she played.

References:

"About Marie Tharp." Lamont-Doherty Earth Observatory, marietharp.ldeo.columbia.edu/about-marie-tharp. Accessed 21 Apr. 2026.

Berann, Heinrich C, Bruce C Heezen, and Marie Tharp. Manuscript painting of Heezen-Tharp "World ocean floor" map by Berann. [?, 1977] Map. Retrieved from the Library of Congress, <www.loc.gov/item/2010586277/>.

"Marie Tharp." Britannica School, Encyclopædia Britannica, 12 Sep. 2023. school.eb.com/levels/middle/article/Marie-Tharp/633377. Accessed 21 Apr. 2026.