



# TALCOTT MOUNTAIN SCIENCE CENTER & ACADEMY

## Homeschool Program

<b>Topic</b>	Marine Science
<b>Instructor</b>	Dr. Zacharczenko
<b>Date</b>	April 25, 2025

Here's some information about the activities your student did with us. Links at the bottom will help you explore further. Thanks!

### What did we do?

- Bathymetry lesson and activity
- Horseshoe crab lesson and bioluminescence activity
- "Blacklight party"
- Deep sea creatures - adaptations

### How did we do it?

- Bathymetry activity: We learned about different deep sea formations, like seamounts and trenches. We used shoeboxes with different formations inside, holes in the lid, skewers, and rulers to simulate sonar. We measured the "depth" of each hole, charted the numbers, and color coded them to estimate what type of formation was in each box.
- Horseshoe crabs: They're not really crabs! They are arachnids, related to scorpions. And like scorpions, they glow under a blacklight. So do highlighters - so we created little paper 3D horseshoe crabs, and decorated them with highlighters. Then we had a "blacklight party" with the lights off, and a bunch of small UV flashlights, to see our creatures glow!
- Deep sea creatures: In pairs, students evaluated a toy deep sea creature, and hypothesized its adaptations for living in such an extreme environment. Then everyone shared their thoughts with the class.

### Where can we find out more?

- <https://www.gebco.net/> To learn more about bathymetry and the ocean floor
- <https://thesmallmajority.com/2013/05/14/the-greatest-show-on-earth-happening-now/> A great blog post about horseshoe crabs
- <https://www.montereybayaquarium.org/stories/deep-sea-animal-adaptation> Some amazing deep sea adaptations



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