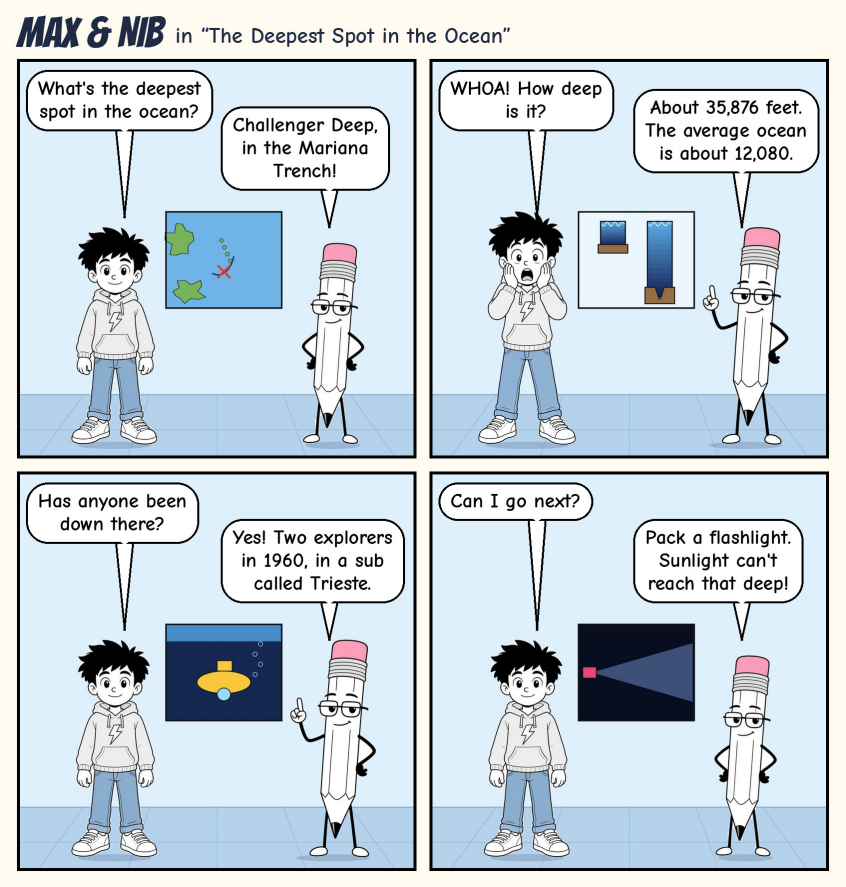


Name: _____ Date: _____

What's the Deepest Part of the Ocean?

Earth Science · Grades 3–6 · About 15 minutes · Max & Nib

Cool facts

What is the deepest part of the ocean? It is a place called Challenger Deep, at the southern end of the Mariana Trench in the western Pacific Ocean. NOAA says Challenger Deep is about 35,876 feet deep, almost 7 miles! The average depth of the whole ocean is about 12,080 feet, so Challenger Deep is almost 3 times as deep as the average ocean. It is pitch dark down there, because sunlight fades out long before that depth. In 1960, two explorers, Jacques Piccard and Don Walsh, became the first people to reach the bottom, riding in a deep-sea vessel called Trieste. (Depths are estimates.)

Cool Fact Only about **26%** of the seafloor is mapped in detail. (NOAA, 2024)

Questions

1. What is the deepest known spot in the ocean, and which ocean is it in?

2. About how deep is Challenger Deep? About how deep is the average ocean?

3. Why is it so dark at the bottom of Challenger Deep?

4. Challenger Deep is about 35,876 feet deep. The average ocean is about 12,080 feet deep. About how many feet deeper is Challenger Deep?

   Show your work

Write about it

Imagine you are riding in a deep-sea vessel all the way down to Challenger Deep. What would you want to see or study at the bottom? Explain why.

Word Record **Trench**: a long, narrow, very deep valley in the seafloor.

What's the Deepest Part of the Ocean? — Answer Key

Grades 3–6 · For teacher or parent use

Answers

1. What is the deepest known spot in the ocean, and which ocean is it in?

   Challenger Deep, in the Mariana Trench. It is in the Pacific Ocean.

2. About how deep is Challenger Deep? About how deep is the average ocean?

   Challenger Deep is about 35,876 feet deep. The average ocean is about 12,080 feet deep.

3. Why is it so dark at the bottom of Challenger Deep?

   Sunlight fades out long before it gets that deep, so no sunlight reaches the bottom.

4. Challenger Deep is about 35,876 feet deep. The average ocean is about 12,080 feet deep. About how many feet deeper is Challenger Deep?

   About 23,796 feet (35,876 − 12,080 = 23,796).

Writing prompt: Imagine you are riding in a deep-sea vessel all the way down to Challenger Deep. What would you want to see or study at the bottom? Explain why.
Accept any reasoned answer for the writing prompt. For adults: NOAA Ocean Exploration lists Challenger Deep at about 10,935 m (35,876 ft) and the average ocean depth at about 3,682 m (12,080 ft); 35,876 ÷ 12,080 ≈ 2.97. Other surveys range from about 35,760 to 36,200 ft. Piccard and Lt. Don Walsh reached the bottom in the bathyscaphe Trieste on January 23, 1960 (U.S. Navy). NOAA: no sunlight below about 1,000 m (3,280 ft).

Sources

- NOAA Ocean Exploration: How deep is the ocean? — https://oceanexplorer.noaa.gov/ocean-fact/ocean-depth/
- Royal Museums Greenwich: Challenger Deep — https://www.rmg.co.uk/stories/ocean/challenger-deep-deepest-point-ocean
- Naval History and Heritage Command: Bathyscaphe Trieste — https://www.history.navy.mil/browse-by-topic/exploration-and-innovation/bathyscaph-trieste.html
- NOAA Ocean Service: How far does light travel in the ocean? — https://oceanservice.noaa.gov/facts/light_travel.html

Word Record **Average**: add up all the numbers, then divide by how many numbers there are.

Cool Fact Below about **3,280 feet** (1,000 meters), no sunlight reaches at all. Scientists call the deep, dark water there the midnight zone. (NOAA)