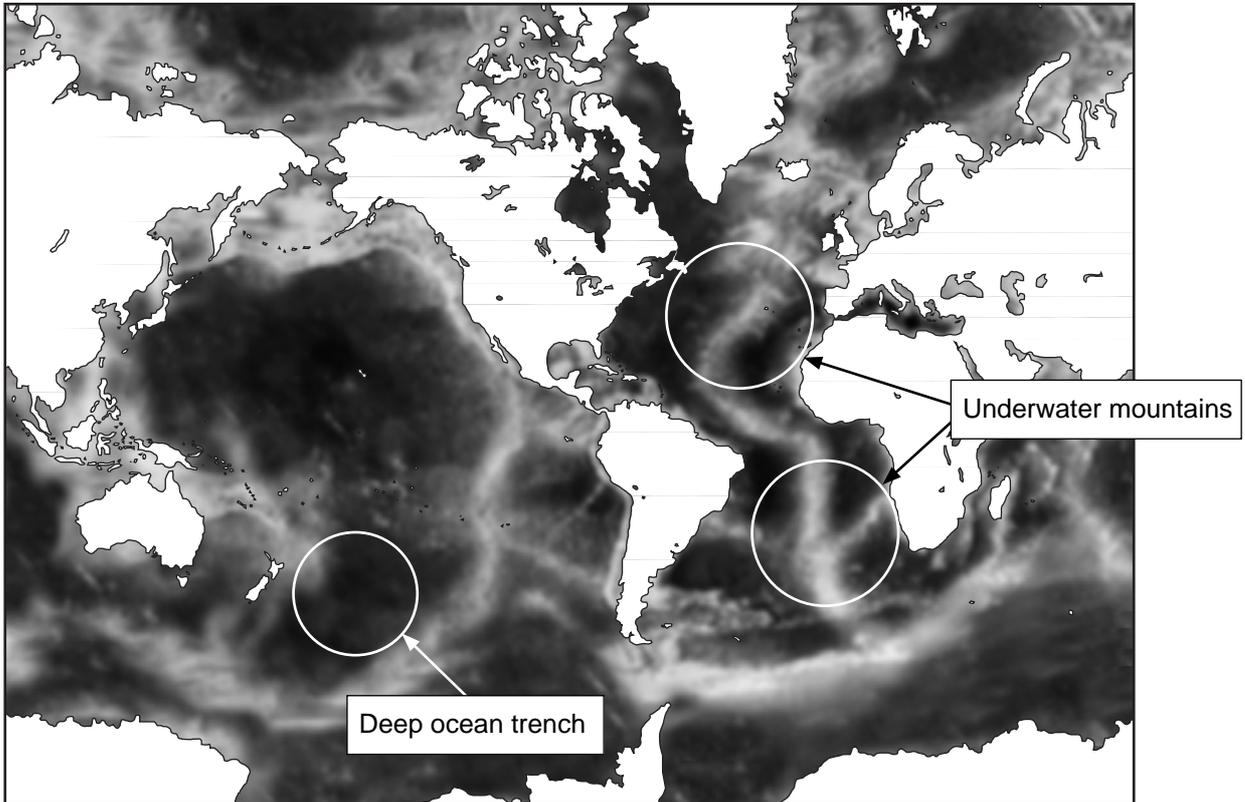


Research Field **Oceanography**

Definition

Oceanography is the scientific study of the ocean. An oceanographer is a person who studies in this field.

World map showing underwater mountains and deep ocean trenches



Source: <http://www.ngdc.noaa.gov/mgg/image/mggd.gif>

Observations

As oceanographers began to map the ocean floor they noticed patterns of huge underwater mountain chains and deep sea trenches.

Off the East Coast of New Zealand's North Island is the 10,000 metre deep Kermadec Trench (that's as deep as 30 Auckland Sky Towers stacked on top of each other).

Oceanographers explain their observations by suggesting that the underwater mountains are found where the ocean floor is being pushed up, and the deep ocean trenches appear at points where the ocean floor is being forced down.

Questions

1. Can you explain what could cause the sea floor to get pushed up, or forced down?
2. How does the study of oceanography relate to plate tectonic theory?

References

Plate Tectonics – Earth Like a Puzzle

Interactive map and plate tectonic information

http://sio.ucsd.edu/voyager/earth_puzzle/recycling_plates.html

National Oceanography Centre, Southampton

Ocean and earth science resources for schools

http://www.soc.soton.ac.uk/index.php?pagetype=schools_resources

NIWA Science

Posters and other resources (for teachers to order)

<http://www.niwascience.co.nz/pubs/posters/>