

Name: \_\_\_\_\_ Period: \_\_\_\_\_ Date: \_\_\_\_\_

**Ms. Randall Marine Science**

**Activity: Can You Calculate?**

**Background:**

To help you see how extraordinary the ocean is, here are some facts and figures you can use to solve some very interesting math problems. Used with permission from the Center for Marine Conservation 1998.

**Did you know?**

- The deepest place in the ocean is, the Mariana Trench: 35,827 feet.
- The highest place on land is Mount Everest: 29,029 feet.
- The average depth of the ocean is 12,237 feet.
- The average height of dry land is 2,854 feet.
- The biggest animals: the 90-foot-long blue whale, the 57-foot-long giant squid, the 19-foot giraffe and the 10.5-foot elephant.
- The tallest plants: the 330 foot giant kelp seaweed and the 360 foot giant Sequoia redwood tree.
- The tallest building in the world is the Sears Tower in Chicago: 1,559 feet. The Empire State Building in New York City is 1,473 feet.
- The average human is 5.5 feet.
- The deepest dive from the surface by a human without breathing equipment: 417 feet.
- The deepest dive from the surface by a marine animal: 7,381 feet (sperm whale).

**Task:** *Using the information from the above, can you calculate the following?*

1. How many humans would you need to make a chain going from the surface to the average depth of the ocean? How many to make a tower the average height of dry land?
2. How many Empire State Buildings could fit end to end in the Mariana Trench? How many humans could fit into a giant squid?
3. How tall is Mt. Everest in giraffes rather than feet? How tall in blue whales? Could Mt. Everest fit into the Mariana Trench?
4. How many elephants would have to stand on top of each other to reach the height of giant kelp seaweed?
5. How much farther would the best human diver have to swim to get to the average ocean bottom? How much further would the best-diving sperm whale have to go?