

Name \_\_\_\_\_ Date \_\_\_\_\_

## Calculating Pressure Answer Key

Use the rule-of-thumb figure of 0.445 psi per foot deep to calculate the water pressure at each location listed in the table below. Recall that there are 5,280 feet in one mile. Also be sure to add 14.7 psi—the standard air pressure at sea level—to each of your water pressure calculations. Record all your calculations in the table.

Location	Elevation	Pressure
Challenger Deep in the Mariana Trench	6.83 miles below sea level	16,062.47 psi
The wreckage of the Titanic	2.4 miles below sea level	5,653.74 psi
First recorded hydrothermal vent	1.6 miles below sea level	3,774.06 psi
Loihi submarine volcano summit	0.62 miles below sea level	1,471.45 psi
Museo Subacuático de Arte	0.002 miles below sea level	19.40 psi
Sea level	0 miles above sea level	14.7 psi
Mount Everest	5.5 miles above sea level	4.5 psi

*\*Note that air pressure is usually measured in Pascals (Pa), millibars, or standard atmospheres, but has been expressed here in pounds per square inch (psi) for ease of comparison.*



education 

natgeoed.org