(3) A _______ of water contains about as many molecules as there are _______s of water in all of the oceans. Is the correct substitution for the blank drop, teaspoon, tablespoon, cup, quart, gallon, barrel, or ton?

The oceans cover 3/4 of the Earth with an average depth of a few kilometers. The total volume of water $V_w \approx 10^{18}$ m$^3$. Avogadro's number of water molecules, $6 \times 10^{23}$, occupy 18 cm$^3$; therefore the "volume" of a water molecule is $3 \times 10^{-29}$ m$^3 = V_m$.

The unknown volume $V$ is defined so that $V_w/V = V/V_m$. Therefore, $V = \sqrt{V_w V_m} \approx 5 \times 10^{-6}$ m$^3 = 5$ cm$^3 = 1$ teaspoon.