(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 $V_w \simeq 10^{18}$ m^3. Avogadro's number of water molecules, 6×10^{23}, occupy 18 cm^3; therefore the "volume" of a water molecule is 3×10^{-29} $m^3 = V_m$.

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