1.00 Mole = 22.4 L at STP
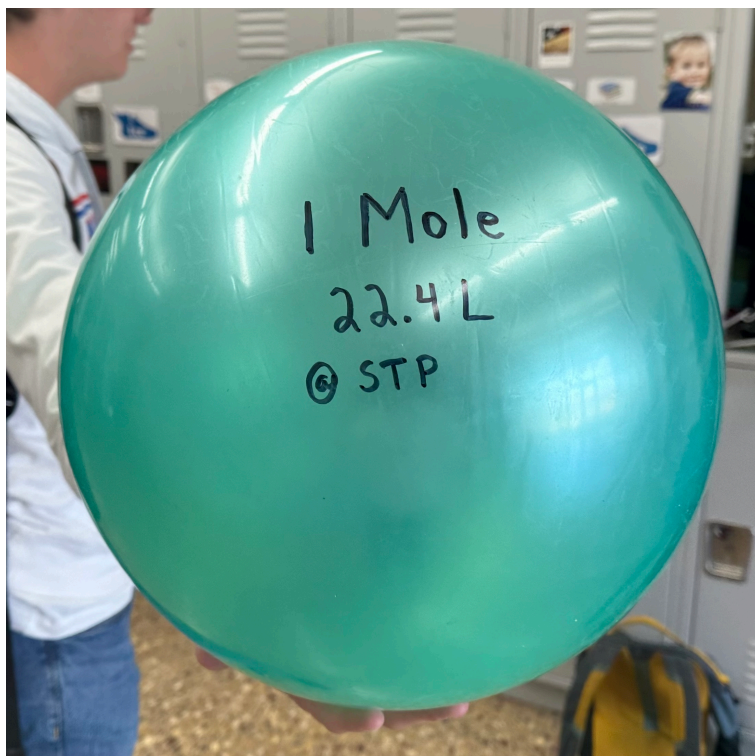For a sphere: $V = 4/3 \, \pi \, r^3$
22400 cm^3 = $4/3 \, \pi \, r^3$
r = 17.5 cm
d (diameter) = 35 cm
(13.8 inches, which happens to be the approximate size of a toy ball at Walmart). I use this model to explain that one mole of every gas occupies the same volume (22.4L) at STP.

Model of Avogadro's Hypothesis: Equal volumes of a gas contain equal number of particles.

Two one liter bottles, each with 5 particles inside. One bottle has smaller monatomic particles (left), one bottle has larger diatomic particles (right).