

You need to find diameter first:

1.9 A in radius = 3.9 A in diameter.

A = 1×10^{-10} meters

1.0 mm = 0.001 meters

A) $1.0 \text{ mm} * (1 \text{ m} / 1000 \text{ mm}) * (1 \times 10^{10} \text{ A} / \text{m}) * (1 \text{ atom} / 3.8 \text{ A}) = 2.6 * 10^6 \text{ atoms.}$

B) $V = 4/3 * \pi * r^3 = 4/3 * 3.1416 * (1.9 \text{ A})^3 * (1 \text{ m} / 10^{10} \text{ A})^3 * (100 \text{ cm} / 1 \text{ m})^3 = 2.9 * 10^{-23} \text{ cm}^3$