

HOW BIG IS A MOLE?

How many Allatoona Lakes can you fill with a mole of marbles?

Size of marble: 1 marble = 1.5 cm wide

Volume of Lake Allatoona = 43,560 ft³

1 mole of marbles = 6.02×10^{23} marbles

 $V = 4/3 \pi r^3 V_{marble} = (1.33)(3.14)(0.75)^3 = 1.77 cm^3$

1mol marbles	6.02 x 10 ²³ marbles	1.77cm ³	1in ³	1 ft ³	1 Lake Allatoona
1	1 mol	1 marble	16.39 cm ³	1728 in ³	43560 ft ³

= 8.6 x 10¹⁴ lake Allatoona



Sources:

Kfmaps.com

Carefreeboats.com

US Corp of Engineers