

A graduated cylinder contains 23.0 mL of water. What is the new water level after 36.2 g of silver metal with a density of 10.5 g/mL is submerged in the water?

Solution

$d = m/V$; $V = m/d$; where: d – density, m – mass, V – volume.

So, $V = 36.2/10.5 = 3.45$ mL of silver

A new water level will be $23+3.45 = 26.45$ mL