

MATC9 Ch3.2 Key Concepts 3 Converting Cubic Metres to Litres Worked Example

Example: A water truck has a tank holding 20.4 m^3 of water. How many litres does it hold?

Solution: The relation is $1 \text{ m}^3 = 1000 \text{ L}$.

$$\begin{aligned} 20.4 \text{ m}^3 &= 20.4 \times 1000 \\ &= 20\,400 \text{ L} \end{aligned}$$

The volume of the truck is 20 400 L.

Note: To convert litres to m^3 , divide by 1000.

Practice:

1. The fuel tank for a passenger aircraft hold 10.6 m^3 of kerosene. How many litres does it hold?

2. Sally's Marine Services pumped 23 400 L of water into the water tank of a yacht. What was the volume in m^3 ?

Answers: 1. 10 600 L 2. 23.4 m^3