

Fill in the blanks in the table by **calculating** the missing values:

Mass of solute	Volume of liquid	Concentration mol / dm <sup>3</sup>	Concentration g/dm <sup>3</sup>
$\text{NaOH} = 40$ $\frac{50}{40} = 1.25$ 50 g of NaOH	4 dm <sup>3</sup>	$\text{NaOH} = 40$ $\frac{50}{40} = 1.25$	12.5 g/dm <sup>3</sup>
$\text{MgCl}_2 = 95$ $\frac{12}{95} = 0.1263...$ 12 g of MgCl <sub>2</sub>	0.084 dm <sup>3</sup> 8 dm <sup>3</sup>	1.5 mol / dm <sup>3</sup>	142.5 g/dm <sup>3</sup>
$\text{KCl} = 74.5$ $\frac{8}{74.5} = 0.10738...$ 8 g of KCl	0.13 dm <sup>3</sup> 10 dm <sup>3</sup>	0.8 mol / dm <sup>3</sup>	59.6 g/dm <sup>3</sup>
$\text{Mg(OH)}_2 = 58$ $\frac{98}{58} = 1.689...$ 98 g of Mg(OH) <sub>2</sub>	5 dm <sup>3</sup>	0.34 mol/dm <sup>3</sup>	19.6 g/dm <sup>3</sup>