gridlocks – can you unlock the grid?

Concentration of solutions 2

Before you answer the puzzles below fill in the table of concentrations in mol/dm^3 using:

$$\text{concentration} = \frac{\text{moles}}{\text{volume (in dm}^3\text{)}}$$

moles	concentration of solution in mol/cm^3 when given number of moles is:			
	dissolved in 1000 cm^3	dissolved in 250 cm^3	dissolved in 500 cm^3	dissolved in 100 cm^3
1	1			
2			4	
0.5		2		
0.4			0.8	
0.1				1

Gridlock 1

Each row, column and 2 x 2 box contains concentrations when 0.4, 0.2, 0.5 and 0.1 moles are dissolved in the various volumes. Use your problem solving skills and the answers in the table above to fill in the blank boxes.

in 100 cm^3		in 250 cm^3	
	4		0.4
			1.6
0.4			0.5
in 500 cm^3		in 1000 cm^3	

gridlocks – can you unlock the grid?

Gridlock 2

Each row, column and 2 x 2 box contains concentrations when 0.4, 0.2, 0.5 and 0.1 moles are dissolved in the various volumes.

in 100 cm^3		in 250 cm^3	
2			1.6
			0.1
1			

in 500 cm^3 | in 1000 cm^3

Gridlock 3

Each row, column and 2 x 2 box contains concentrations when 0.4, 0.2, 0.8 and 0.05 moles are dissolved in the various volumes.

in 100 cm^3		in 250 cm^3	
2			1.6
	1.6		0.05

in 500 cm^3 | in 1000 cm^3