

Gas Laws - converting units

Before you answer the puzzles below fill in the table using:

+ 273 x 100,000 ÷ 1,000,000

Non SI units	SI unit	Conversion into SI units
atm	Pa	
°C	K	
cm ³	m ³	
dm ³	m ³	÷ 1000

Gridlock 1

Each row, column and 2 x 2 box contains the first four different pressures: 1, 4, 0.8 and 0.1 atm. Use your problem solving skills and the answers in the table above to fill in the blank boxes.

pressure in atm		pressure in Pa	
4			100,000
			0.1
80,000			
pressure in Pa		pressure in atm	

gridlocks – can you unlock the grid?

Gridlock 2

Each row, column and 2 x 2 box contains the bottom four different volumes.

volume in cm^3		volume in m^3	
25			1×10^{-4}
	1.5×10^{-4}		40
volume in m^3		volume in cm^3	

Gridlock 3

Each row, column and 2 x 2 box contains four different temperatures, 25, 40, 10 and 100 °C.

temperature in $^{\circ}\text{C}$		temperature in K	
40			
		283	
		25	
	373		
temperature in K		temperature in $^{\circ}\text{C}$	