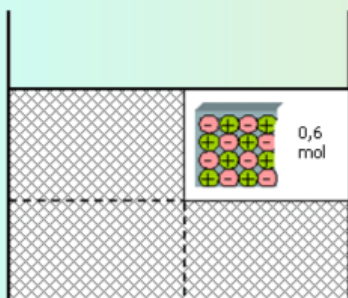


MOLARITY



1st. Exercise

Calculate the number of moles and the mass (in grams) of NaCl.

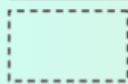
Volume of the solution: 4 L

Concentration: 0,6 mol NaCl/L dis

Meaning of the symbols:



this is the container



here the volume is $V=1\text{ L}$



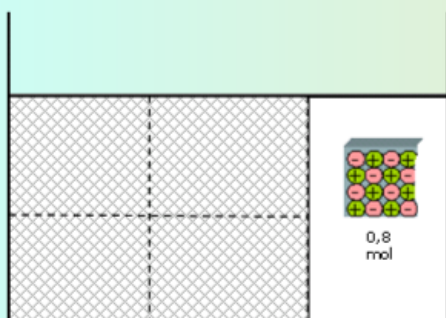
we cannot see the amount of solute



here, the concentration is 1 mol/L



Molar mass = 58 g/mol
1 mole NaCl = 58 g

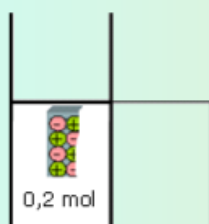


2nd exercise

Calculate the concentration in mol/L and the amount of moles of NaCl.

Volume of the solution: 6L

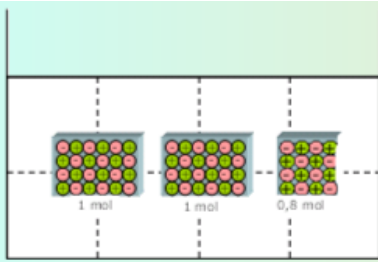
We know that there are 0,8 mol NaCl in each volume of 2 liters.



3rd exercise

Calculate the concentration in M and in g/L and the amount of NaCl (in moles and in grams).

Volume of this solution $V=0.5\text{ L}$

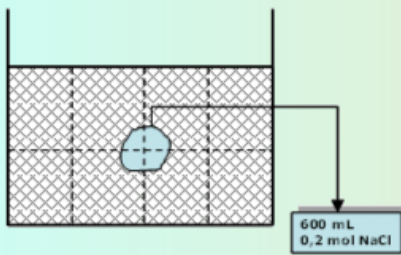


4th exercise

Calculate the concentration in M and in g/L .

Volume of this solution $V = 8\text{ L}$

The amount of solute is 2,8 moles NaCl

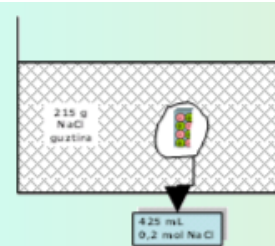


5th exercise

Calculate the concentrations (M and g/L) and the amount of solute (in moles and in grams). The volume of this solution is 8 L.

We know that in a sample of 600 mL the amount of NaCl is 0.2 mol.

REMEMBER: the concentration of the sample and of the whole solution is the same.



6th exercise

In a sample of 0.425 mL we have 0.2 g of NaCl.

The solution has 215 g of NaCl. Calculate the volume of this solution.