

## ELECTROMOTIVE FORCE OF A CONCENTRATION CELL

Name: .....

Group: .....

Date: .....

1. Goal of the experiment: .....

2. Measurement of the electrode potentials

concentration $c$	$EMF$	electrode potential $\Delta V_e$
mole/dm <sup>3</sup>	mV	mV

3. Calculated value of the electromotive force ( $EMF$ ) of the concentration cell for concentrations  $c_1$  and  $c_2$  of the same values as in the table above:

$EMF = \dots\dots\dots$

4. Measurements of the  $EMF$  of the concentration cell without transference as a function of the concentration  $c_2$  in the right half-cell.

Concentration  $c_1$  in the left half-cell is equal to 0.1 mole/dm<sup>3</sup>.

	$c_2$	$EMF$ (experimental value)	$\ln \frac{c_1}{c_2}$	$EMF$ (theoretical value)
	mole/dm <sup>3</sup>	mV		mV
1				
2				
3				

Prepare a graph of the function:  $EMF = f\left(\ln \frac{c_1}{c_2}\right)$  for both: experimental and theoretical values.

