

## DIFFUSION ACROSS THE MEMBRANE

Name: .....

Group: .....

Date: .....

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

.....

2. Refractive index of water:  $n_w =$  .....

Refractive index of the solution:  $n_0 =$  .....

Initial concentration of the solution:  $c_0 =$  .....

Volume of the solution in each compartment:  $V =$  .....

3. Results of measurements of the solution concentrations:

	time	refractive index		Percentage concentration of the solution		$\frac{c_0}{c_0 - 2c_B}$	$\ln\left(\frac{c_0}{c_0 - 2c_B}\right)$
		$n_A$	$n_B$	$c_A$	$c_B$		
1							
2							
3							
4							
5							
6							
7							

Make a graph of the function  $\ln\left(\frac{c_0}{c_0 - 2c_B}\right) = f(t)$

4. Value of the proportionality coefficient  $a$ :

$a =$  .....

5. The membrane thickness  $dx =$  .....

6. The constant of the measuring system  $C =$  .....

7. The diffusion coefficient  $D =$  .....

8. The membrane permeability  $P =$  .....

