



What is the dielectric constant for air?

- A. Close to 0
- B. Between 0 and 1
- C. Close to 1
- D. Between 1 and HUGE
- E. HUGE



What is the dielectric constant for an insulator?

- A. Close to 0
- B. Between 0 and 1
- C. Close to 1
- D. Between 1 and HUGE
- E. HUGE



What is the dielectric constant for a conductor?

- A. Close to 0
- B. Between 0 and 1
- C. Close to 1
- D. Between 1 and HUGE
- E. HUGE

What is the Debye length in a vacuum?



- A. Zero
- B. 1 meter
- C. Infinity
- D. Something else



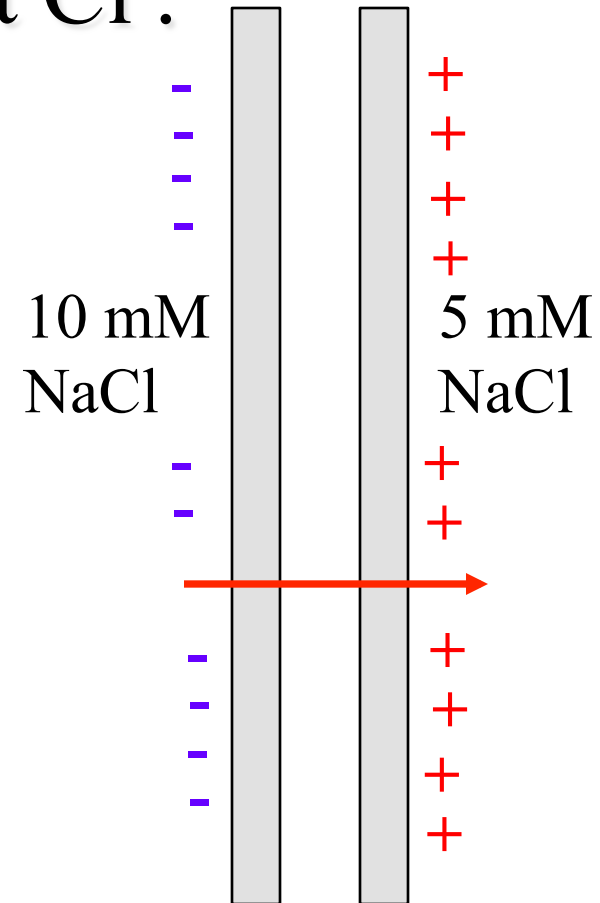
At low temperature
should the Debye length
be large or small?

- A. Large
- B. Small
- C. Debye length doesn't depend on temperature
- D. I don't know how to think about this



What if the membrane is permeable to some ions and not others? Let's say it's permeable to Na^+ but not Cl^- .
What will the result be?

- A. Excess + on the left.
- B. Excess + on the right
- C. Excess - on the left
- D. Excess - on the right
- E. A and D
- F. B and C.



At low temperature, should the Nernst potential be large or small?



- A. Large
- B. Small
- C. Nernst potential doesn't depend on temperature
- D. I don't know how to think about this