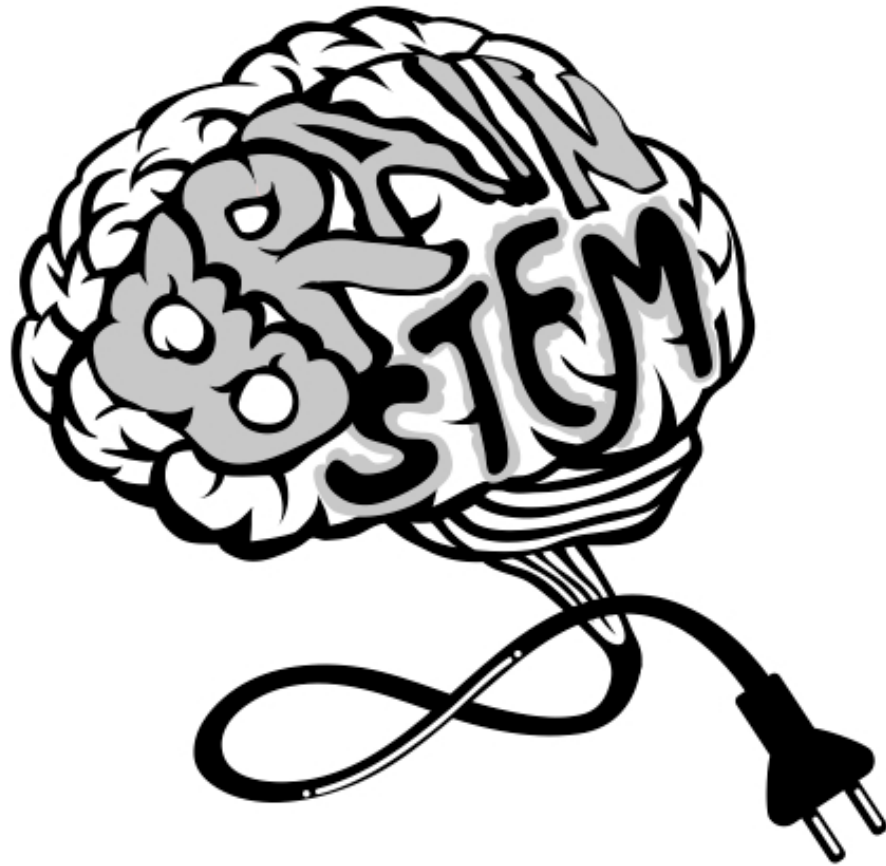


BrainSTEM

Review of the basics



Why do we study
electricity to
understand the
brain?

A negatively charged ion has a surplus of

_____.

A positively charged ion has a surplus of

_____.

What four ions are crucial to the functioning of nerves and muscles?

Do you know their respective charges?

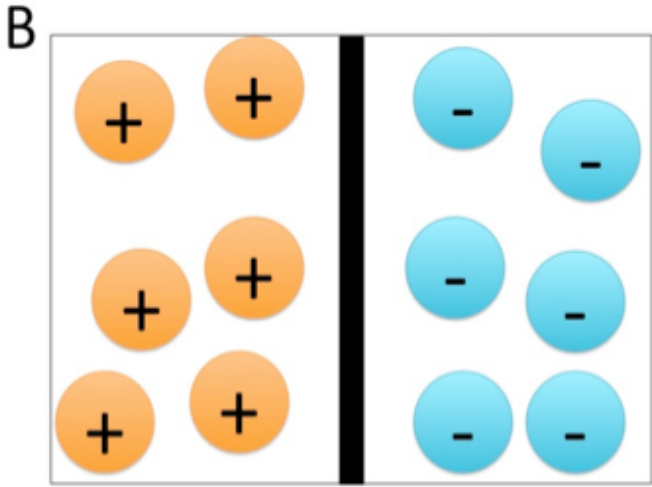
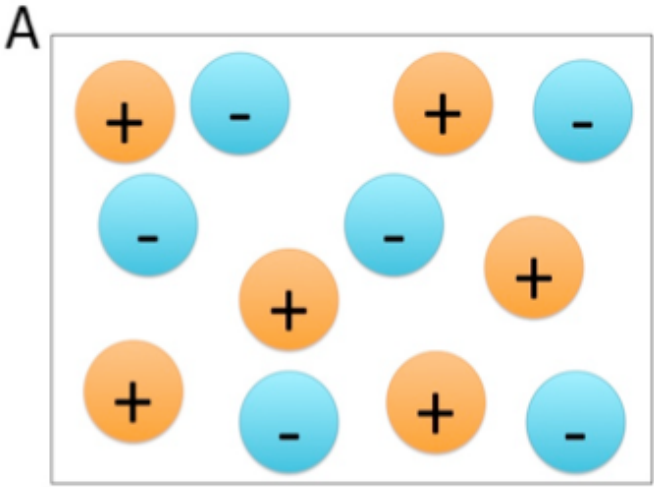
Sodium (Na^+)

Potassium (K^+)

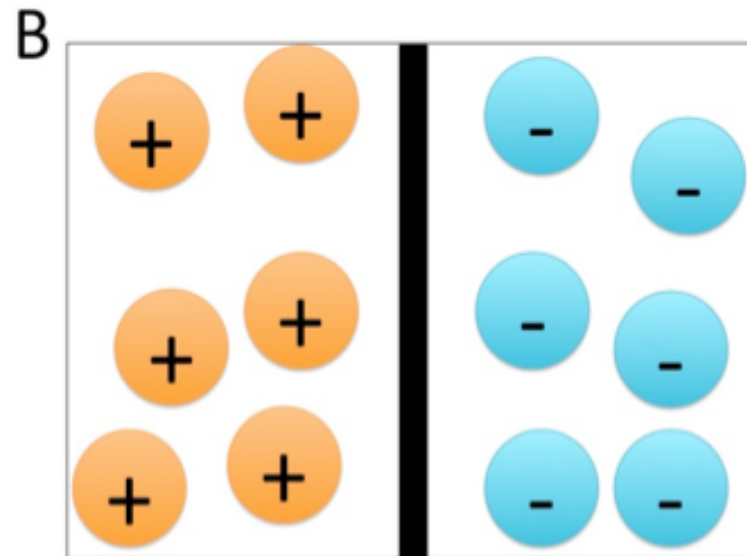
Calcium (Ca^{2+})

Chloride (Cl^-)

In which scenario is there higher electrical potential? Why?



If we remove the barrier in the “cell” below, what would happen?



Why would a cell want to maintain a particular balance of ions (on the inside and on the outside)?

What would happen when that balance of ions was disturbed?