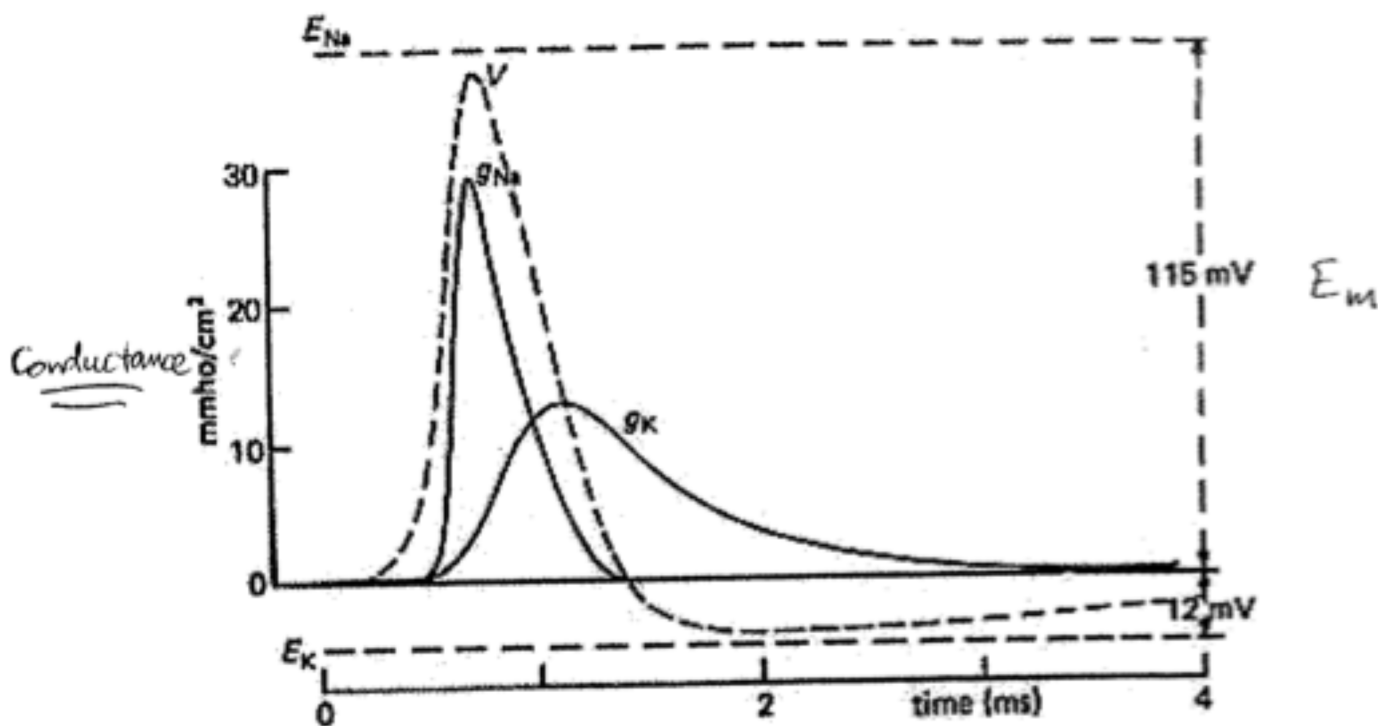


# Ionic Basis of Action Potential



To understand whether or not there is a particular ion current ( $I_{ion}$ ), that is a flow of ions use:

$$I_{ion} = g_{ion} \left| \overbrace{E_m - E_{ion}}^{\text{driving force}} \right|$$

$\downarrow$  voltage across membrane       $\downarrow$  diffusion potential of ion

$\downarrow$  ion current       $\downarrow$  conductance of membrane to ion