

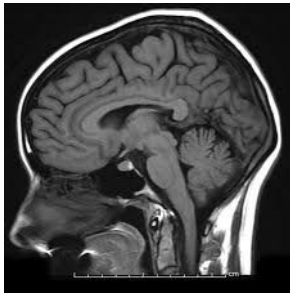
Cogs 17: Section

Tricia Ngoon
7.6.17

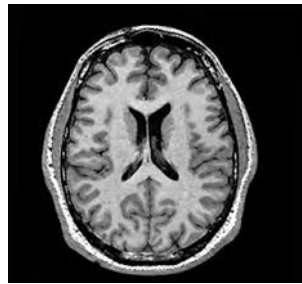
Contact me

- Section site: tngoan.github.io/cogs17_section/section_slides.html
- Email: tngoan@ucsd.edu
- Office Hours: Thursdays 11am-12pm in CSB 233

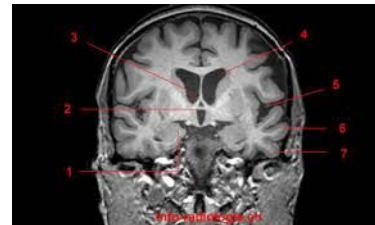
Which are these 3 planes?



A. _____

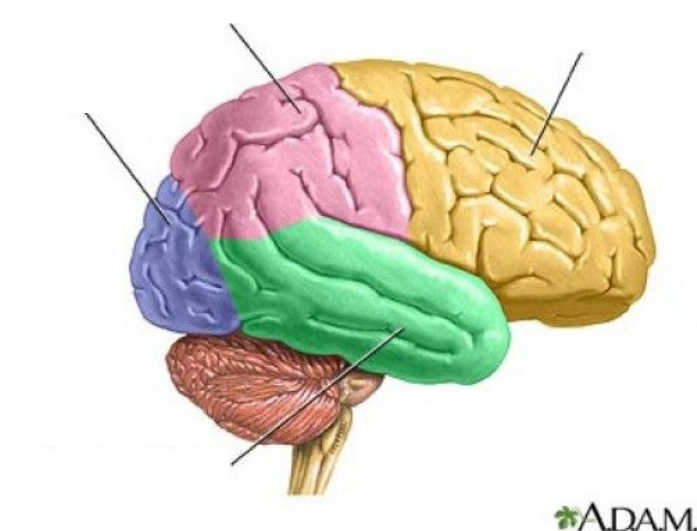


B. _____



C. _____

Label and describe the lobes of the brain



What do these terms mean?

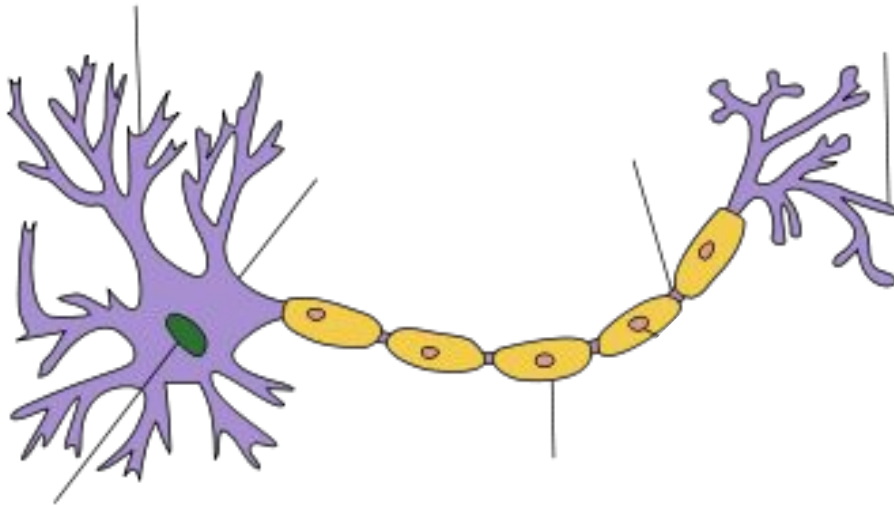
*"The visual cortex receives information directly from its **ipsilateral** LGN that receives signals from the **contralateral** visual field."*

- Ipsilateral -
- Contralateral -

What is the function of these cells?

- Neuron -
- Glia cell -

Label these neuron parts



How do cells maintain equilibrium in our bodies?

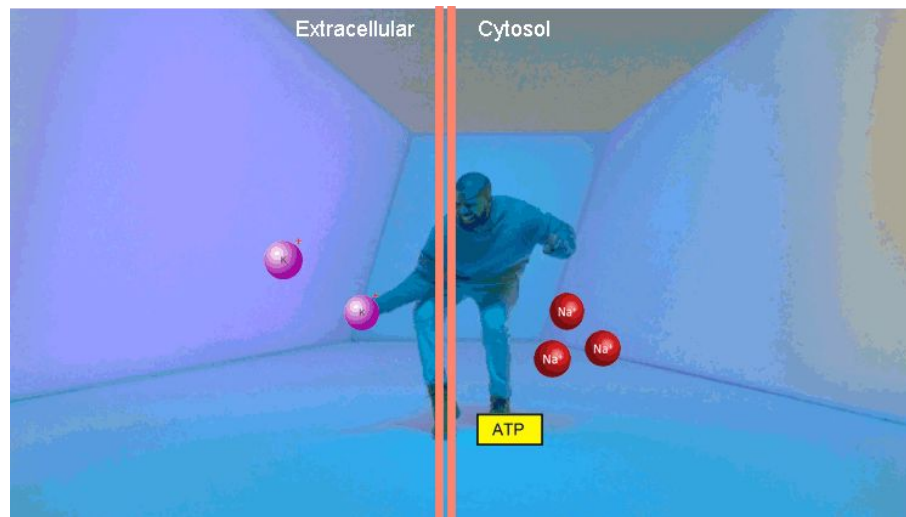
- _____ - Difference in amount of a given chemical inside/outside a cell
- _____ - Difference in charge inside/outside cell

What is the symbol for these ions?

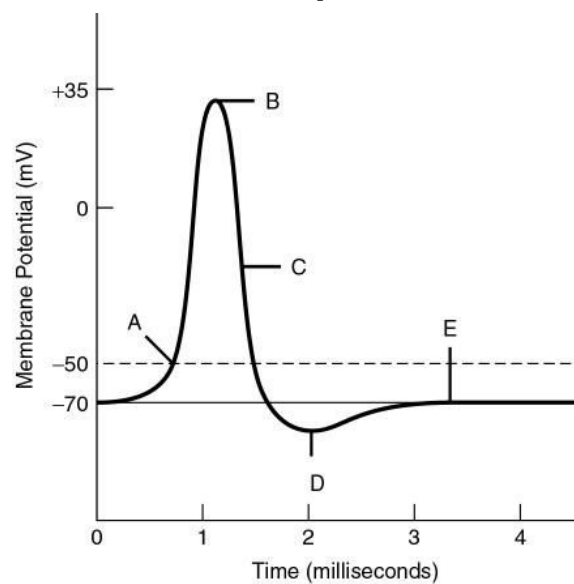
- Sodium:
- Potassium:
- Calcium:
- Chloride:

What is the Sodium-Potassium Pump?

3 Na⁺ OUT/2 K⁺ IN



Label and describe the steps of an action potential



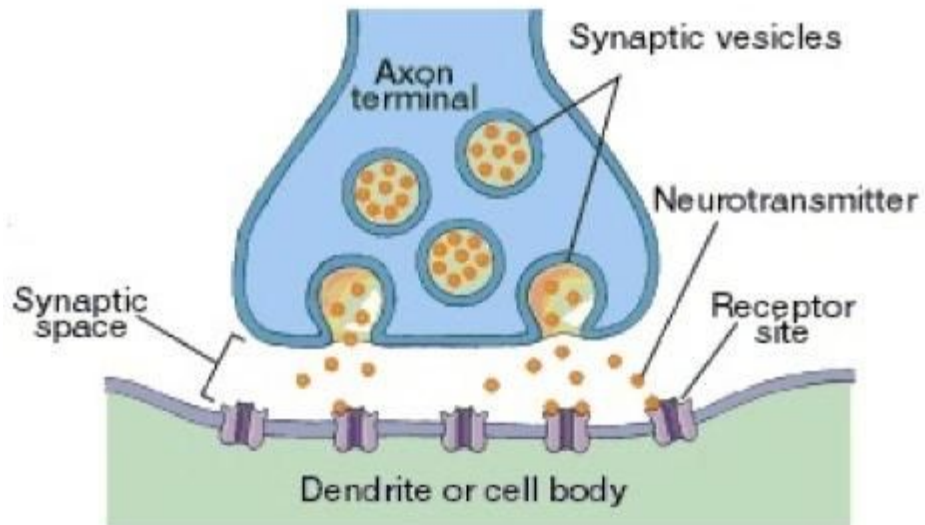
Other Key Terms and Concepts

- Refractory period -
- All-or-none law -

How does myelin aid in conduction velocity?

- Myelin sheath -
- Nodes of Ranvier -
- Saltatory Conduction -

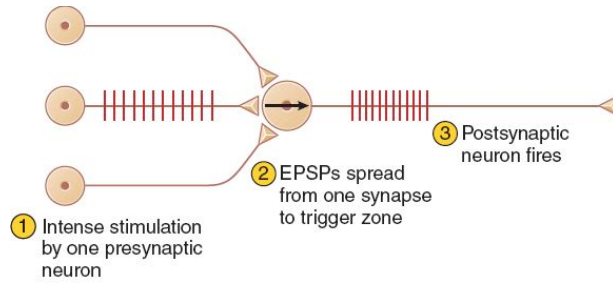
How are NTs transferred between neurons?



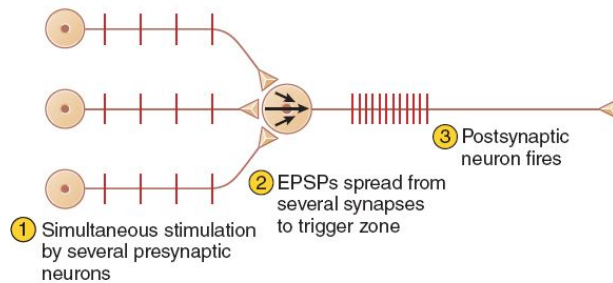
NTs can have 2 effects on postsynaptic cell

- EPSP -
- IPSP -

What is the difference between temporal and spatial summation?



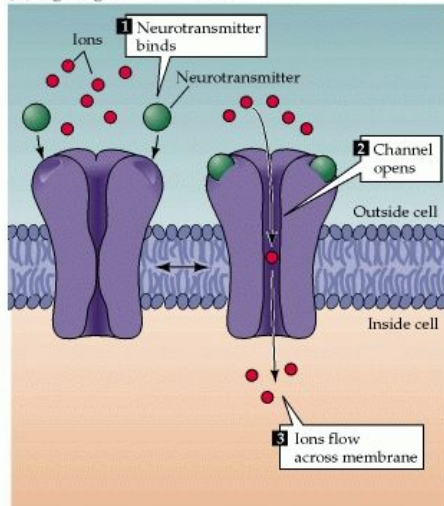
(a) Temporal summation



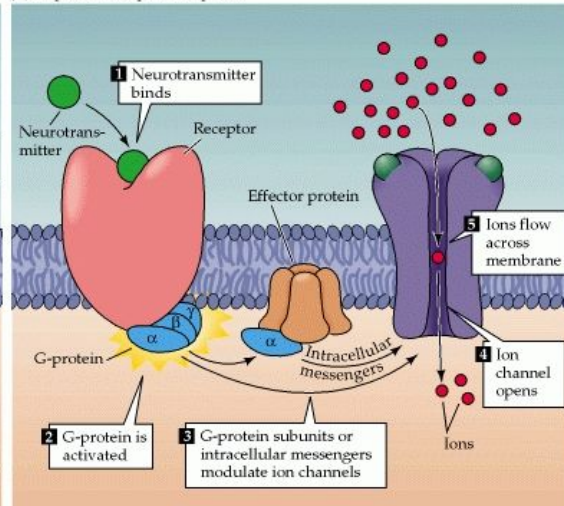
(b) Spatial summation

2 mechanisms for how NTs affect the postsynaptic cell

(A) Ligand-gated ion channels



(B) G-protein-coupled receptors



Main Neurotransmitters

- ACh - neuromuscular junction, arousal
- GABA - suppresses cortical activity, regulate anxiety
- Glutamate - learning, perception
- Serotonin (5-HT) - sleep, mood regulation
- Dopamine - reward, reinforcement
- Norepinephrine/Noradrenaline - arousal, attention
- Substance P - pain
- Endorphins - counteract substance P
- Hormones - e.g. oxytocin, insulin, cortisol

Memorization and Study Tips

- Print out a brain and label the parts
- Make flashcards
- Self-explanation