

## AP1, Exam 2, Vocabulary & Essay Questions

Having command of these terms and being able to thoroughly respond to these questions should help you do well on Exam 2

Extracellular (ECF)  
Intracellular (ICF)  
Resting membrane potential (RMP)  
Neuromuscular junction  
Chemical Synapse  
Neuron  
Synaptic knob  
Synaptic vesicles  
Neurotransmitter  
Acetylcholine  
Voltage gated calcium channels  
Exocytosis  
Synaptic cleft  
Postsynaptic membrane  
Ligand gated (LG) sodium channels  
Depolarize, depolarization  
Threshold  
Voltage gated (VG) sodium channels  
Voltage gated (VG) potassium channels  
Action potential (AP)  
Repolarization  
“All or none” principle  
Hyperpolarize, hyperpolarization  
Absolute refractory period  
Relative refractory period  
Graded potential

Local inflammatory response  
Systemic inflammatory response  
Histamine  
Prostaglandins  
Kinins  
Regeneration  
Fibrosis  
Primary union  
Secondary union

Where is ECF and what electrolytes (relevant to membrane potential) are normally present here in abundance?

Where is ICF and what electrolytes (relevant to membrane potential) are normally present here in abundance?

How permeable are most cell membranes to  $\text{Na}^+$  and  $\text{K}^+$  and how does this influence RMP?

What is the ‘cardinal rule’ about RMPs? In other words... “What is the single most significant factor establishing RMP?”

List the sequence of events at a chemical synapse leading to the creation of an action potential.

Distinguish between a threshold stimulus and a sub-threshold stimulus.

Explain the sequence of events in a local inflammatory response.

How is it that a local inflammatory response can be thought of as a good thing?

Distinguish between regeneration and fibrosis.

Name several tissues that regenerate well, several that regenerate poorly, and several that do not regenerate at all.