

Muscle stimulation lab journal essay sample



**ASSIGN
BUSTER**

1. Based on the results of your investigation, what conclusions can you draw about the relationship between a muscle's workload and its threshold of stimulation? When the workload doubles, the threshold of stimulation will increase by 1. The muscles that have a higher threshold of stimulation can take on a high workload if it originally had no workload.

2.. Why would a muscle's threshold of stimulation change as its Workload changes? The muscle will need a higher stimulation and work harder to be able to contract.

3. Which muscles were able to contract under the greatest loads? What does this suggest about the role these muscles play in frog movement? The thigh and calf contracted under the greatest loads. These muscles help the frog jump high by bearing their weight on these muscles and pushing, jumping, up fast.

4. Describe an experiment you might perform to determine which leg muscles of a frog are important for jumping long distances. An experiment would be to find a live frog and observe their jumping to see which muscles are being used for jumping. The frog should not be harmed in this experiment, it is just an observation. The jumping can be recorded by video and can be replayed in slow motion to carefully see which muscles are being used.

5. What are some advantages of performing this experiment in a simulated environment? Some advantages of this experiment are that you have a controlled environment where you can make sure your observations are correct. As well as no live animals being harmed.