**What is an EMG? Post-Quiz Answer Key**

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| **Directions** |
| Answer the following questions the best you can. This is a graded assignment. |

1. What is an EMG? In 2-3 sentences, please explain what EMG stands for, how you would define it, and provide one example for why they are important.

EMG stands for electromyograph, and it is a measurement of the electrical activity of the muscles. EMG can help diagnose or monitor neuromuscular disorders, assess the health of a muscle, and be used in research to study muscular function. (Any **one** of these answers, along with any valid answer, should receive full credit.)

1. Fill in the blanks of the following sentence:

**Action potentials** are electrical signals generated by our neurons to convey information.

1. Please draw a picture of the waves an oscilloscope might display for a normal, healthy muscle at three different levels of contraction:

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| --- | --- | --- |
| Rest | Slight Contraction | Forceful Contraction |
| A close up of a logo  Description automatically generatedFlat line—little to no activity | A picture containing water, skiing, man, air  Description automatically generatedSingle, or few, spike(s) | A close up of a sign  Description automatically generatedSeveral spikes |

1. What are the two primary types of motor neurons? Use them to fill in the following statement:

**Upper** motor neurons originate in the brain and send information to… **lower** motor neurons, which are attached to our muscles.