Explore Phase

Student Activity Instructions

- **1.** With your parent's/guardian's, or teacher's, permission, use a computer to visit Anatomy Arcade's Poke-A-Muscle game (http://www.anatomyarcade.com/games/PAM/PAM.html)
- **2.** If you are working around other people you may want to wear headphones so the music associated with the video does not disrupt others. If you do not have headphones you can mute your speakers instead.
- **3.** Prior to starting any stage, you may want to take notes on the muscles and their locations as these notes can be used later in the month if you chose to participate in the STEM Showdown.
 - a. It is recommended that you follow whatever note-taking strategy you normally would whether it comes from a teacher or it is one you developed yourself.
 - b. If you are looking for a note-taking strategy you can Google the topic and find dozens of them. One particular strategy that we often recommend at Science Olympiad is Cornell Notes.



4. On the Poke-a-Muscle website, click anywhere on the anatomical figure that shows the muscles as shown in the picture above to start the game. It is circled in the picture so you can get an idea of where it is located. DO NOT click on the green "Start Now" covered by the RED Don't Symbol. This is click bait to take you to an advertisement.



Explore Phase

Student Activity Instructions



5. Clicking on the anatomical figure will open up the game, see the picture above, and allow you to read the instructions for the game, circled in blue, as well as open up the first stage of the game, circled in green.



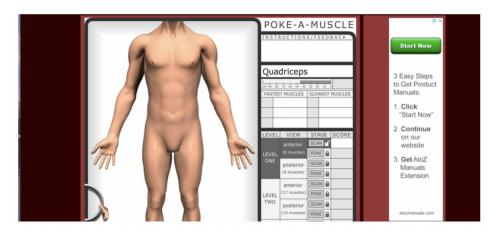
- **6.** Open you click on the first stage to open it, the anatomical figure's image will change and a 'BEGIN" button will appear in the upper right-hand corner, see the picture above.
- **7.** Before you click "BEGIN", you will want to study the names, locations, and colors of the muscles being presented to you. You may decide to write this information down as part of your notes. You can take as much time as you need at this point.



Science Olympiad, Inc. (c) 2021

Explore Phase

Student Activity Instructions



- **8.** After you click "BEGIN", you will start a countdown clock, change image so that all the muscles are now covered by skin, and be presented with a muscle for you to locate. An image of what this looks like is shown above.
- **9.** You identify the muscles by moving the cursor over their location and clicking on them. If you correctly identify the muscle you will then be given another one to locate. If you identify all the muscles with an average time faster than 80 "seconds" you will unlock the next stage where you have to identify the same muscles in a different order with their colorations removed. Once you pass this stage, you will be presented with a Posterior view and new muscles.
- **10.** At Levels 2 and 3 you will be given more complex muscles as well as new poses in which to identify the muscles. You should work through all the levels to complete this activity.
- **11.** At any point if you want to take a break, it is recommended that you at least complete both the "scan" and "Poke" stage for that particular anatomical orientation.



Explain Phase

Student Activity Instructions

- **1.** With your parent's or guardian's permission download the **MY SO** Anatomy & Physiology Slide Show from <u>soinc.org/MYSO</u>.
- **2.** You may want to download and print out the PowerPoint to take notes on and write down import ideas. If you do choose to print them out consider printing in Black & White to preserve your toner cartridge.
- **3.** Find a quiet place to sit and review the slide show taking notes on the material that you feel is important. These notes can be used later in the month if you chose to participate in the STEM Showdown.
- **4.** It is recommended that you follow whatever note-taking strategy you normally would whether it comes from a teacher or it is one you developed yourself.
- **5.** If you are looking for a note-taking strategy you can Google the topic and find dozens of them. One particular strategy that we often recommend at Science Olympiad is Cornell Notes.
- **6.** Take as long as you need to go through the Slide Show. If you have questions or don't quite understand something write it down and you can try and answer that question or focus on learning more about the topic in the **ELABORATE** phase.

