5th-grade - FOSS: Human Body, Investigation #3 Muscles, Part 1: Making a Leg Model

by Schmitt, Spaulding, and Stauffer

Timing: 40-50 minutes

Big Idea/Science Concepts:

* main function of muscles is to provide movement
* muscle tissue contracts when it works
* muscles provide coordination and structure for the body
* muscles attach to the bones with tissues called tendons

Hook:

- have students move arm and/or leg and feel the muscle contract

- have students do a standing long jump

- discuss body parts needed for the jump

Necessary prior knowledge/experience:

* basic knowledge that the body has muscles
* knowledge that bones do not move themselves

Suggested improvements:

* instead of referring back to same jump rope activity from first investigation, use new activity
* better diagrams and examples for building “leg”

Lesson Extension:

* build 2 legs and have students problem solve how they could connect them in a realistic way – such as a hip
* measure jumps and graph results of jumps – from hook

Other Materials – needed for extensions:

* graph paper
* yard sticks or tape measure

Reflections:

Team feels students would enjoy the hands on aspect of this lesson and have a better understanding of how the leg muscles work.