

# Report

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Course      PHSI2X05 - Integrated Physiology A  
Lesson      Skeletal Muscle – Pre-Practical  
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## Quiz

1. Which is true regarding skeletal muscle studied under conditions where the length is held constant?
  - ☐ It is said to be under isotonic conditions.
  - ☐ The total force generated will not be affected when the muscle is changed to a different fixed length.
  - ☒ It is said to be under isometric conditions.
  
2. Which statement is true regarding the strength of contraction of a whole skeletal muscle?
  - ☐ It is unaffected by stimulus frequency.
  - ☒ It is increased by stimulus strength up to some maximum.
  - ☐ It is not dependent on the total number of muscle fibers.
  
3. A contraction where the muscle becomes shorter is isometric :
  - ☒ False
  - ☐ True
  
4. Static exercise involves isometric contractions:
  - ☐ False
  - ☒ True
  
5. In an isotonic contraction the force generated remains the same throughout the movement of the load:
  - ☐ False
  - ☒ True

6. Active force is generated by the powerstroke:

- ☐ False
- ☒ True

7. Passive force is a by-product of the crossbridge cycle:

- ☒ False
- ☐ True

8. Passive force may be present even in the absence of a stimulus:

- ☐ False
- ☒ True

9. Active force is the reading of the force generated before stimulation:

- ☒ False
- ☐ True

10. Passive force is a combination of parallel and series elastic components:

- ☐ False
- ☒ True

11. Resting muscle length and optimal muscle length can be used interchangeably:

- ☒ False
- ☐ True

**12.** Following delivery of a maximal stimulation, the muscle set to optimal length will produce maximal force of contraction.

- ☐ False
- ☒ True

**13.** Passive force begins to be generated when the muscle is at resting length:

- ☐ False
- ☒ True

**14.** The sarcomere is the same as the sarcoplasmic reticulum:

- ☒ False
- ☐ True

**15.** Myosin proteins have ATPase activity in the head section of the molecule:

- ☐ False
- ☒ True

**16.** An ATPase is an enzyme that uses ATP as an energy source by hydrolysing it into ADP and inorganic phosphate:

- ☐ False
- ☒ True

## Evaluation

In a few words indicate what you most enjoyed in this Pre-Practical:

the reading and pictures

In a few words indicate what could be improved in this Pre-Practical:

more words, less pictures,  
i would also like a few extra journal articles referenced and linked in this  
just so i can lern mor hehe ^\_^

