Muscular System Study Questions II  
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1. A neural stimulation causes the release of _______ from the sarcoplasmic reticulum and ______ from the mitochondria within the muscle fiber to make the contraction of the sarcomere possible.

2. ______-twitch skeletal muscle fiber is best suited for walking at a slow pace to the grocery store.

3. In the triceps muscle, the ulna serves as the attachment point called the ____________.

4. The corners of the mouth are lifted while smiling by using the ____________ muscle.

5. The ____________ muscle is most active when your raise your arms out laterally.

6. The thicker myofilament is called ____________.

7. Due to the generation of heat, our muscles only work at a ____% efficiency.

8. Aerobic respiration in the mitochondria results in the production of ____ ATPs.

9. Muscle soreness following vigorous exercise is due to an accumulation of a chemical substance called ______________________________.

10. The forehead can be wrinkled using the ________________ muscle.

11. Lifting the knee is made possible due to the work of the ____________________ muscle.

12. The connective tissue wrap surrounding a fascicle is called the ________________.

13. Of the three types of muscle tissue, only _________ muscle does not have striations.

14. The muscle that allows you to close and pucker your lips. is called the __________________________ muscle.

15. This muscle has been called the toe dancer’s muscle. _______________________

16. These two facial muscles become noticeably fatigued following prolonged periods of gum chewing. ____________________ and _____________________
1. A neural stimulation causes the release of **calcium** from the sarcoplasmic reticulum and **ATP** from the mitochondria within the muscle fiber to make the contraction of the sarcomere possible.

2. **Slow**-twitch skeletal muscle fiber is best suited for walking at a slow pace to the grocery store.

3. In the triceps muscle, the ulna serves as the attachment point called the **insertion**.

4. The corners of the mouth are lifted while smiling by using the **zygomaticus** muscle.

5. The **deltoid or latissimus dorsi** muscle is most active when your raise your arms out laterally.

6. The **thicker** myofilament is called **myosin**.

7. Due to the generation of heat, our muscles only work at **25%** efficiency.

8. Aerobic respiration in the mitochondria results in the production of **36** ATPs.

9. Muscle soreness following vigorous exercise is due to an accumulation of a chemical substance called **lactic acid (lactate)**.

10. The forehead can be wrinkled using the **frontalis** muscle.

11. Lifting the knee is made possible due to the work of the **quadriceps** muscle.

12. The connective tissue wrap surrounding a fascicle is called the **perimysium**.

13. Of the three types of muscle tissue, only **smooth** muscle does not have striations.

14. The muscle that allows you to close and pucker your lips. is called the **orbicularis oris** muscle.

15. This muscle has been called the toe dancer’s muscle. **gastrocnemius**

16. These two facial muscles become noticeably fatigued following prolonged periods of gum chewing. **temporalis and masseter**