**HS 1 - Muscular system study guide**:

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_\_\_\_

1. Be able to identify the location (head, upper arm, lower arm, upper leg, lower leg or upper back, lower back, upper chest, abdomen) of the following muscles:

* Gastrocnemius
* Frontalis
* Orbicularis oris
* Orbicularis Oculi
* Biceps Brachii
* Flexors of the Hand/Fingers
* Extensors of the Hand/Fingers
* Latissimus Dorsi
* Gluteus Maximus
* Tensor Fascia
* Soleus
* Achilles Tendon
* Patellar Tendon
* Tibialis Anterior
* Gluteus Medius
* Trapezius
* Triceps brachii
* Latissimus dorsi
* Pectoralis major
* Rectus femoris
* Sternocleidomastoid
* Rectus abdominus
* External abdominal obliques
* Biceps brachii
* Brachialis
* Masseter
* Sartorius
* Vastus medialis
* Vastus lateralis
* Deltoid
* Diaphragm
* Semitendinosus
* Semimembranosus

1. List the three main functions of the muscle system:

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Define the four characteristics of muscles and be able to give examples of each:
   * Contractility \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   * Elasticity \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   * Excitability /Irritability\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   * Extensibility \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Define and be able to recognize examples of (look in your book or on the pp)
   * Atrophy \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   * Hypertrophy \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   * Muscle fatigue \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. State the four main types of muscles and the distinctive qualities of each:
   * Cardiac \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   * Skeletal \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   * Smooth \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   * Sphincter \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What are the functional units of muscle movement?
5. Visceral means \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_and is used to describe smooth muscle.
6. What are sphincter muscles?
7. What is the purpose of fascia?
8. List 5 ways skeletal muscles can be named.
9. Contractibility: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ + \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. There are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (number) muscles in the body and they weigh approximately \_\_\_\_\_\_\_\_\_\_\_\_\_\_ the total body weight.
11. Define muscle tone: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
12. What causes muscle fatigue? Is it dangerous? Why or why not?
13. Exercising extensively without rest will cause \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ acid build up.
14. Failure to exercise or wearing a cast will make the muscle \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
15. Define the following skeletal muscle terms:
    * Prime mover
    * Origin
    * Insertion
    * Agonist
    * Antagonist
    * Synergist
16. Define the following types muscle injuries and where each occurs:
    * Tendonitis
    * Tennis elbow
    * Strain
    * Spasm (involuntary hypertonicity)
    * Hernia
17. Review the following muscular diseases:
    * Fibromyalgia
    * Myasthenia gravis
    * Muscular dystrophy
    * Tetanus
18. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is used to treat a strained muscle.
19. What is the body’s response to cold? How is this helpful?
20. Lockjaw, also called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is an infectious disease that causes spasms of the voluntary muscles and is life threatening.