

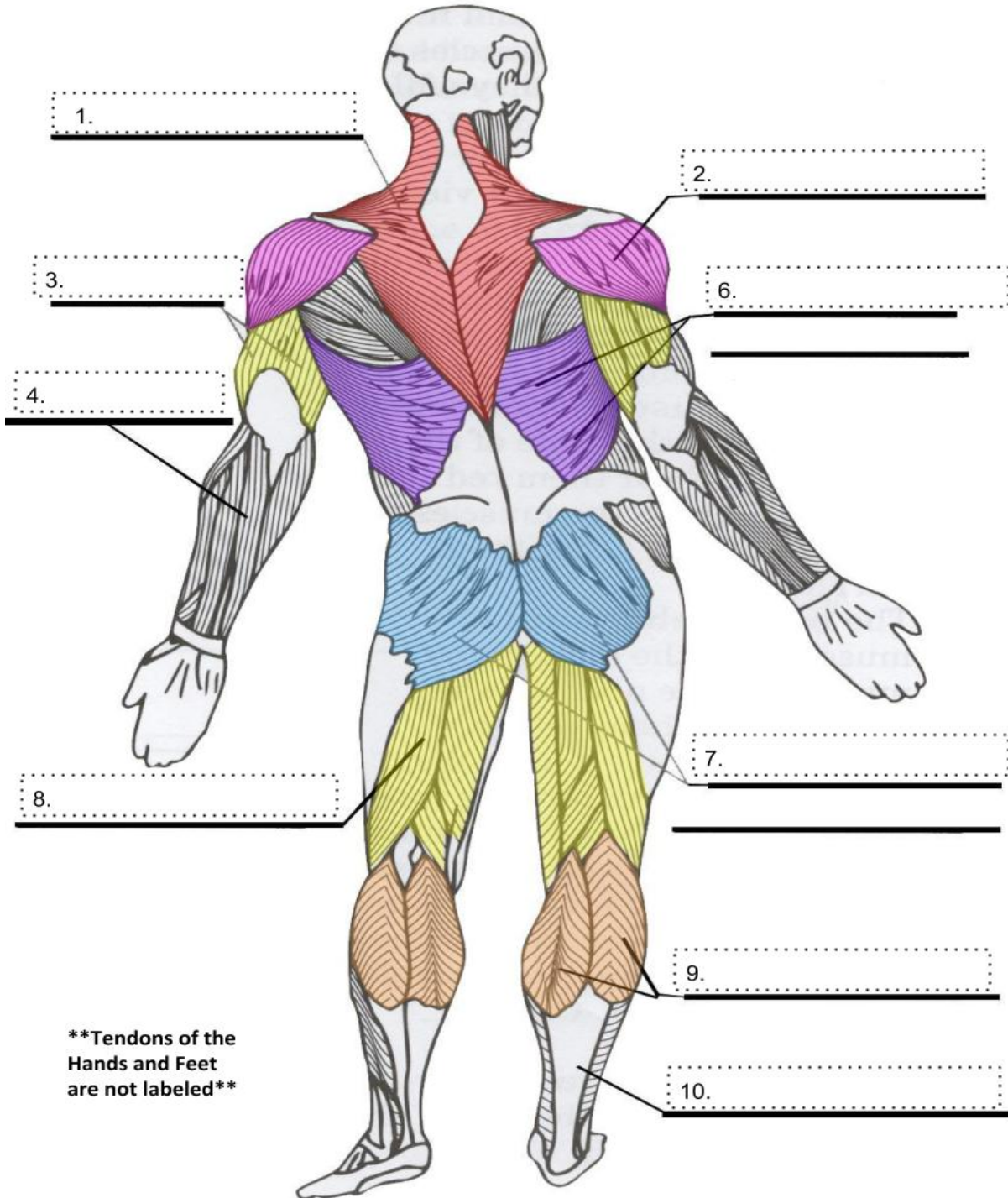
### The Muscular System - Posterior

1. **Trapezius:** The trapezius muscles are large muscles, which raise the shoulders. Their origin is on the neck and chest vertebrae, and the base of the skull. They insert on the collarbone and shoulder blade. These muscles are used to shrug the shoulders.
2. **Deltoid:** The origin of the deltoid muscles is on the collarbone and shoulder blade. The insertion is on the upper arm bone. Deltoids aid in flexing and extending the upper arm. The shape of these muscles is like an upside down triangle as they form the caps of the shoulder
3. **Triceps:** These muscles extend the lower arm. Their origin is on the shoulder blade and upper arm bone. Their insertion is on the *ulna* of the lower arm. These muscles oppose the biceps and are located on the back of the arm. They are sometimes called “The Boxer’s Muscle”, as they straighten the elbow when a blow is delivered.
4. **Forearm Extensors:** This is a series of muscles that extend the hand. Their origins are on the humerus, or upper arm bone. The insertions are on the *metacarpals*.
5. **Tendons of the Hand:** These long tendons connect the many muscles of the forearm to the wrist and fingers, permitting a wide range of movement.
6. **Latissimus Dorsi:** These muscles of the lower back originate on the lower half of the vertebral column and the hip. They insert on the ribs. These muscles are used to bring the arm down – as in swimming. They are also used to help maintain good posture.
7. **Gluteus maximus muscles:** These large muscles are located at the top of the hips. Their action is to extend the thighs. Their origin is on the hips, while the insertion is on the femur or thighbone. These muscles, often called buttocks, are needed to stand erect, walk, or run.
8. **Biceps femoris muscle:** These are one of three (3) muscles that are often referred to as hamstrings. Their origin is on the hip and femur. Their insertion is on the two (2) lower leg bones. The action of these muscles is to flex the knees. They also extend and rotate the thighs. Sprinting without properly warming up can injure these muscles.
9. **Gastrocnemius muscle:** There are two (2) large muscles, which form each calf. The largest of these is the gastrocnemius muscle. Its origin is on the femur. Its insertion is on the heel bone. It points the toes. Ballet dancers use it extensively.
10. **Achilles Tendon:** These heavy tendons connect the calf muscles, or *gastrocnemius* muscles to the heel bones. They are the largest tendons in the body
11. **Tendons of the foot:** These tendons connect the muscles of the lower leg to the ankles and toes. They permit the wide range of motion associated with the human foot.

### Questions

1. The \_\_\_\_\_ muscles raise the shoulders.
2. The shape of the \_\_\_\_\_ is similar to an upside down triangle.

3. The \_\_\_\_\_ have their insertion point on the ulna of the lower arm.
4. The \_\_\_\_\_ of the hand are what gives the hands their versatility.
5. The \_\_\_\_\_ is often called the buttocks.
6. The \_\_\_\_\_ is one of three muscles called hamstrings.
7. The \_\_\_\_\_ is commonly called the calf.
8. The Achilles tendon connects the \_\_\_\_\_ muscle to the heel bone.
9. The \_\_\_\_\_ of the foot connects the muscles of the lower leg to the ankles and toes.



**\*\*Tendons of the Hands and Feet are not labeled\*\***