

## Lower Leg Muscles Quiz Answer Key PDF

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**Which artery supplies blood to the posterior compartment of the lower leg?**

- A. Anterior tibialis artery
- B. Posterior tibialis artery ✓**
- C. Fibular artery
- D. Popliteal artery

**Which muscle is NOT part of the lateral compartment of the lower leg?**

- A. Fibularis Longus
- B. Fibularis Brevis
- C. Tibialis Anterior ✓**
- D. Fibularis Tertius

**Which muscle is primarily responsible for dorsiflexions of the foot?**

- A. Gastrocnemius
- B. Tibialis Anterior ✓**
- C. Soleus
- D. Fibularis Longus

**Describe the functional differences between the anterior and posterior compartments of the lower leg.**

- A. Anterior compartment dorsiflexes, posterior plantarflexes ✓**
- B. Anterior compartment plantarflexes, posterior dorsiflexes
- C. Both compartments plantarflex
- D. Both compartments dorsiflex

**Which conditions can result from overuse or injury to the lower leg muscles? (Select all that apply)**

- A. Compartment syndrome ✓**
- B. Achilles tendinitis ✓**
- C. Carpal tunnel syndrome
- D. Shin splints ✓**

**Describe the role of the fibularis longus muscle in foot movement.**

- A. Eversion and arch stabilization ✓**
- B. Dorsiflexions
- C. Plantarflexions
- D. Toe flexions

**Which of the following muscles are innervated by the tibialis nerve? (Select all that apply)**

- A. Soleus ✓**
- B. Fibularis Brevis
- C. Gastrocnemius ✓**
- D. Tibialis Anterior

**Which muscles contribute to the flexions of the toes? (Select all that apply)**

- A. Flexor Digitorum Longus ✓**
- B. Extensor Hallux Longus
- C. Flexor Hallux Longus ✓**
- D. Tibialis Posterior

**Discuss how the tibialis anterior muscle contributes to balance and movement.**

- A. Assists in dorsiflexions ✓**
- B. Aids in plantarflexions
- C. Stabilizes the knee
- D. Flexes the toes

**Which condition is commonly associated with overuse of the tibialis anterior muscle?**

- A. Achilles tendinitis
- B. Plantar fasciitis

**C. Shin splints ✓**

D. Compartment syndrome

**Which muscles are located in the anterior compartment of the lower leg? (Select all that apply)**

**A. Extensor Digitorum Longus ✓**

B. Fibularis Longus

**C. Tibialis Anterior ✓**

D. Flexor Hallux Longus

**What are the potential consequences of an injury to the Achilles tendon?**

**A. Pain and swelling ✓**

B. Increased flexibility

C. Improved balance

D. Enhanced strength

**Which of the following muscles are part of the posterior compartment of the lower leg? (Select all that apply)**

**A. Gastrocnemius ✓**

B. Tibialis Anterior

**C. Soleus ✓**

D. Fibularis Brevis

**Explain the symptoms and potential causes of compartment syndrome in the lower leg.**

**A. Severe pain and swelling ✓**

**B. Numbness and tingling ✓**

C. Muscle atrophy

D. Joint dislocation

**Which muscle assists in knee flexions?**

A. Soleus

B. Plantaris

**C. Gastrocnemius ✓**

D. Tibialis Posterior

**Identify the muscles involved in dorsiflexions and explain their importance in walking.**

**A. Tibialis anterior ✓**

B. Soleus

C. Gastrocnemius

D. Flexor Hallux Longus

**Explain how the posterior tibialis artery supports the function of the lower leg muscles.**

A. Supplies blood to the anterior compartment

**B. Supplies blood to the posterior compartment ✓**

C. Supplies blood to the lateral compartment

D. Supplies blood to the foot

**Which muscles are responsible for plantarflexions of the foot? (Select all that apply)**

A. Tibialis Anterior

**B. Soleus ✓**

**C. Gastrocnemius ✓**

D. Extensor Digitorum Longus

**Which nerve innervates the anterior compartment of the lower leg?**

A. Tibia nerve

B. Superficially fibular nerve

**C. Deep fibular nerve ✓**

D. Sural nerve

**What is the primary function of the gastrocnemius muscle?**

A. Dorsiflexions of the foot

**B. Plantarflexions of the foot ✓**

C. Eversion of the foot

D. Flexions of the toes