

# Muscle Testing for Massage Therapists Home Study Course

10 CE Hours  
Online Study Guide

Presented by the:  
*Center for Massage Therapy Continuing Education*

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It is the responsibility of the practitioner to determine the appropriateness of the principles presented in terms within the scope of practice. This information is in no way meant to diagnose or treat medical conditions. This course is not meant to teach advanced hands-on massage techniques. Written medical opinions are always the best way to resolve any questions regarding contra-indications to massage therapy and/or muscle testing.

**PLEASE CAREFULLY READ THE DIRECTIONS ON PAGE 3**

## **Instructions for the Muscle Testing for Massage Therapists Home Study Course**

Thank you for investing in the Muscle Testing for Massage Therapists home study course, a 10 CE hour course designed to further your knowledge of the principle and practice of muscle testing in functional assessment of muscles. The following will give instructions on what you will need to do to complete this course. This is a 10 CE hour course, so that means it should take you approximately 10 hours read the text, watch the online videos, and complete the exam and evaluation.

### **The following are steps to follow in completing this course:**

- 1. Read the instructions and review the textbook and exam.**
- 2. As you are reading, scan the QR codes to be taken to the video demonstration. There are about 70 video clips (totaling 1 hour 30 minutes) demonstrating muscle testing techniques for each muscle covered.**
- 3. Access the online examination in your account at [www.massagetherapyceu.com](http://www.massagetherapyceu.com).**
- 4. Complete your examination and download/print your certificate. The exam is open book and there is no time limit for completion.**

You must pass the exam with a 70% or better to pass this home study course. You are allowed to access and take the exam up to 3 times if needed. There is no time limit when taking the exam. This course uses the textbook *Muscle Testing, A Concise Manual*, by Earle Abrahamson and Jane Langston. Feel free to review the text and videos while completing the exam. There are no trick questions on the exam. All of the answers are clearly found in the text or the videos.

It is advised to answer the exam questions in the study guide before testing online. That way, when you are testing you do not have go back and forth through the online exam.

Good luck as you complete this course. If you have any question please feel free to contact us at 866-784-5940, 712-490-8245 or by email at [info@massagetherapyceu.com](mailto:info@massagetherapyceu.com). Most state boards require that you keep your “proof of completion” certificates for at least four years in case of audit. Thank you for taking our Muscle Testing for Massage Therapists home study course.

# Muscle Testing for Massage Therapists Exam

## Section 1

1. What is resisted movement?
  - a. Movement where the client performs the movement unaided
  - b. Movement where the examiner moves the limb into a final position
  - c. Movement where the examiner applies resistance whilst the client moves the limb
  - d. Movement where the client performs the movement aided by the examiner
  
2. Which of the following refers to a group of tests that include any strength test evaluation where the examiner applies resistance?
  - a. Manual muscle tests
  - b. Kinesiology muscle tests
  - c. Palpation tests
  - d. Isokinetic tests
  
3. Which of the following is an advantage of isometric muscle tests?
  - a. Measures strength of a specific joint position and not necessarily the function through a ROM
  - b. Useful when moving a joint is difficult or contraindicated
  - c. Allows examination in closed-chain, weight bearing positions
  - d. Limits maximal strength examination to the weakest point of the range
  
4. What is palpation?
  - a. Tests that examine strength using applied resistance against gravity through a full or partial ROM
  - b. Tests that are relatively quick and efficient and are performed in a neutral and midrange joint position
  - c. Testing that examines and monitors muscle function throughout the ROM
  - d. Seeing through feeling and being able to identify different tissues and changes within tissue structure and tone

## Section 2

5. Which of the following is NOT an action of the sternocleidomastoid (SCM) muscle?
  - a. Rotation of head and neck to the contralateral side
  - b. Lateral flexion of head and neck to the ipsilateral side
  - c. Bilaterally the muscle aids in forward flexion of the neck and assists elevation of the ribs during inhalation
  - d. Elevation of the scapula coupled with extension and lateral flexion of the neck

6. Which of the following muscles is used when taking a deep breath into the upper chest and to hold a phone between the ear and shoulder?
  - a. Sternocleidomastoid
  - b. Splenius capitis
  - c. Scalenes
  - d. Levator scapulae
  
7. Which artery supplies the splenius capitis muscle?
  - a. Occipital artery
  - b. Inferior thyroid artery
  - c. Superior thyroid artery
  - d. Dorsal scapular artery
  
8. How should the client be positioned when performing a kinesiology muscle test on the levator scapulae muscle?
  - a. Seated or prone
  - b. Seated with head laterally flexed, rotated and slightly extended to the ipsilateral side
  - c. Seated or supine
  - d. Fowler's position
  
9. Where should the examiner's hands be placed on the client when performing manual muscle testing on the upper fibers of the trapezius?
  - a. One hand over the lateral aspect of the frontal bone with the other hand on the sternum
  - b. One hand on the lateral side of the head with the other hand crossed over and placed on the shoulder
  - c. One hand on the posterior surface of the client's head
  - d. One hand on the posterior surface of the client's head with the other on the upper portion of the thoracic spine
  
10. Which muscle is clinically divided into three distinct fibers (upper, middle, and lower) and is most active during the last 50-60° of shoulder flexion and abduction?
  - a. Levator scapulae
  - b. Splenius capitis
  - c. Supraspinatus
  - d. Trapezius
  
11. What four muscles make up the rotator cuff group?
  - a. Supraspinatus, infraspinatus, teres minor, and subscapularis
  - b. Supraspinatus, infraspinatus, trapezius, and levator scapulae
  - c. Scalenes, splenius capitis, teres minor, and subscapularis
  - d. Scalenes, splenius capitis, trapezius, and levator scapulae

12. Which muscle originates at the infraspinous fossa of the scapula and inferior portion of the spine of the scapula and inserts on the middle facet of the greater tubercle of the humerus?
- Infraspinatus
  - Supraspinatus
  - Teres minor
  - Subscapularis
13. How should the client be positioned when performing a kinesiology muscle test on the infraspinatus muscle?
- Prone with shoulder abducted to 120°
  - Prone with arm abducted to 90° and externally rotated
  - Supine with humerus abducted to 90° with 90° elbow flexion
  - Supine or seated with arm abducted approximately 15° with 15° flexion of the glenohumeral joint
14. Which of the following nerves supply the subscapularis muscle?
- Axillary nerve, C5, C6
  - Upper and lower subscapular nerves, C5, C6
  - Suprascapular nerve, C2-C4
  - Spinal accessory nerve (CN XI), ventral rami C2-C4
15. What muscle is a synergist for the latissimus dorsi and is sometimes remembered as “Lat’s little helper”?
- Deltoid
  - Subscapularis
  - Teres minor
  - Teres major
16. In what direction should the examiner apply a resistance force when performing a manual muscle test on the anterior fibers of the deltoid muscle?
- Toward abduction of the shoulder
  - Inferiorly toward the floor
  - On the forearm toward internal rotation of the humerus
  - Diagonally toward adduction and slight extension of the shoulder
17. Which of the following is NOT an action of the posterior fibers of the deltoid muscle?
- Shoulder extension
  - Elevation and retraction of the scapula
  - Shoulder horizontal abduction
  - Shoulder external rotation

18. How should the client be positioned when palpating the coracobrachialis muscle?
- Seated or supine with shoulder laterally rotated and abducted to roughly 45°
  - Supine with glenohumeral joint/shoulder complex abducted to 90° with elbow flexed to 90°
  - Prone with arm externally rotated and flexed with dorsum of the hand resting on lumbar spine
  - Prone with arm abducted to 120-150°
19. Which artery supplies the biceps brachii muscle?
- Thoracoacromial artery
  - Dorsal scapular artery
  - Muscular branches of brachial artery
  - Anterior humeral circumflex artery
20. In what direction should the examiner apply a resistance force when performing a manual muscle test on the triceps brachii?
- In the direction of elbow extension and slight forearm pronation
  - Diagonally toward extension and slight glenohumeral abduction
  - On the arm toward the ceiling, encouraging horizontal adduction
  - Toward elbow flexion, being careful not to flex the shoulder
21. What is the action of the supinator muscle?
- Pronation of the forearm at the radioulnar joint
  - Extension of elbow
  - Supination of the forearm at the proximal radioulnar joint
  - Extension and adduction of the shoulder
22. How should the client be positioned when performing a kinesiology muscle test on the pronator teres?
- Seated or supine with shoulder flexed to 90° and elbow flexed to 135°
  - Seated or supine with humerus in adduction, forearm in pronation, and elbow flexed to 60°
  - Prone with shoulder abducted to 90°
  - Seated or standing with hand carefully positioned over the lumbar spine
23. What muscle originates at the trapezium tubercle and flexor retinaculum and inserts on the anterolateral side of the 1st metacarpal (thumb)?
- Opponens pollicis
  - Pronator quadratus
  - Pronator teres
  - Opponens digiti minimi

24. What muscle is the largest of the hypothenar muscles?
- Abductor digiti minimi
  - Flexor digiti minimi
  - Opponens pollicis
  - Opponens digiti minimi
25. What muscle in the torso is a powerful horizontal adductor and is used to stabilize the torso during exercises such as push-ups, bench press, throwing, and punching movements?
- Pectoralis major
  - Pectoralis minor
  - Rectus abdominis
  - Transverse abdominis
26. Which of the following is NOT an action of the pectoralis minor muscle?
- Depresses, abducts, and inferiorly rotates the scapula
  - Aids in scapular protraction from a semi-retracted position
  - Flexion of the shoulder at the glenohumeral joint
  - Assists in elevation of 3rd, 4th, and 5th ribs during forced inhalation
27. What muscle of the trunk is divided into segments by tendinous intersections and fascial slings and is divided into left and right sides by the linea alba?
- Pectoralis major
  - Quadratus lumborum
  - Rectus abdominis
  - Transverse abdominis
28. Which of the following nerves does NOT supply the transverse abdominis muscle?
- Intercostal nerves
  - Medial and lateral pectoral nerve
  - Ventral division of iliohypogastric and ilioinguinal nerves
  - T7-L1
29. How should the client be positioned when performing a manual muscle test on the quadratus lumborum?
- Side lying with upper body flexed laterally and ipsilateral hip slightly raised
  - Supine with both legs held together and moved to one side, causing lateral flexion of the lumbar spine
  - Supine with knees and hip flexed to 90° with arms across chest
  - Prone with back extended

30. What key anatomical landmarks should you palpate when palpating the erector spinae group (sacrospinalis)?
- Sternum, coracoid process, and medial half of the clavicle
  - Xiphoid process and pubic symphysis
  - Iliac crest, lower ribs, coracoid process, and lateral border of the scapula
  - Posterior iliac crest, sacrum, lumbar, thoracic, and cervical spines
31. What muscle is sometimes called the “hand-cuff muscle” as its primary action can be likened to the position obtained when someone is being hand-cuffed?
- Quadratus lumborum
  - Latissimus dorsi
  - Serratus (anterior)
  - Pectoralis minor
32. What muscle is nicknamed “boxer’s muscle” because it enables an individual to power through a punch action?
- Pectoralis major
  - Pectoralis minor
  - Serratus (anterior)
  - Rhomboid group
33. What artery supplies the psoas major and minor muscles?
- Iliolumbar artery
  - Deep branch of transverse cervical artery
  - Subcostal and lumbar arteries
  - Epigastric artery
34. What muscle together with the psoas major joins to form the iliopsoas which is the prime mover for hip flexion?
- Psoas minor
  - Piriformis
  - Gluteus maximus
  - Iliacus
35. What muscle originates on the anterior surface of the sacrum and inserts on the greater trochanter of the femur?
- Piriformis
  - Iliacus
  - Gluteus maximus
  - Psoas major

36. What is the largest muscle in the body by weight?
- Psoas major
  - Gluteus maximus
  - Latissimus dorsi
  - Biceps brachii
37. In what direction should the examiner apply a resistance force to the leg when performing a manual muscle test on the gluteus medius?
- Downward into the treatment couch to encourage hip flexion
  - Diagonally toward the opposite ankle to encourage hip adduction
  - Upward toward the ceiling to encourage hip flexion
  - Laterally to encourage hip extension
38. What muscle can clearly be seen when sprinters are positioned on the starting blocks ready to run and is used for sitting, running, cycling, squatting, and in side-kicking movements such as karate?
- Piriformis
  - Tensor fasciae latae
  - Rectus femoris
  - Vastus lateralis
39. Which of the following nerves supply the rectus femoris muscle?
- Superior gluteal nerve, L4, L5, and S1
  - Inferior gluteal nerve, L5, S1, and S2
  - Lumbosacral plexus, L5, and S1
  - Femoral nerve, L2, L3, and L4
40. What are the actions of the vastus medialis muscle?
- Extension and lateral rotation of the hip
  - Flexion of the knee and extension of the hip
  - Extension of the knee and helps to control knee flexion when eccentrically contracted
  - Flexion, abduction, and internal rotation of the hip
41. What four muscles comprise the quadriceps femoris group?
- Adductor magnus, adductor longus, adductor brevis, and biceps femoris
  - Adductor longus, adductor brevis, semitendinosus, and semimembranosus
  - Rectus femoris, semitendinosus, semimembranosus, and biceps femoris
  - Rectus femoris, vastus medialis, vastus intermedius, and vastus lateralis

42. What three muscles comprise the hamstring group?
- Biceps femoris, semitendinosus, and semimembranosus
  - Vastus medialis, vastus intermedius, and vastus lateralis
  - Adductor magnus, adductor longus, and adductor brevis
  - Rectus femoris, biceps femoris, and gluteus medius
43. What position should the client be in when palpating the biceps femoris muscle and how should the examiner instruct the client to move?
- Supine, instructing the client to flex the knee
  - Supine, instructing the client to extend the knee
  - Prone, instructing the client to flex the knee
  - Prone, instructing the client to extend the knee
44. Which of the following arteries supply the adductor magnus muscle?
- Internal iliac and femoral artery
  - Femoral and deep femoral arteries
  - Inferior gluteal and deep femoral arteries
  - Inferior and superior gluteal arteries
45. A “pulled groin” often refers to an injury within what muscle/muscles?
- Biceps femoris
  - Vastus medialis
  - Semitendinosus and/or semimembranosus
  - Adductor longus and/or brevis
46. What muscle is the most medial thigh muscle and is the second longest muscle in the body next to the sartorius?
- Gracilis
  - Adductor magnus
  - Semitendinosus
  - Semimembranosus
47. What muscle helps stabilize the knee posteriorly and is nicknamed “the key that unlocks the knee” as it initiates knee flexion by laterally rotating the femur on the tibia?
- Adductor longus
  - Popliteus
  - Adductor brevis
  - Gracilis

48. Which muscle is commonly referred to as the tailor's muscle, named for the action it produces when crossing the legs, the traditional position used by tailors when they are sewing?
- Popliteus
  - Gastrocnemius
  - Biceps femoris
  - Sartorius
49. What muscle originates on the soleal line of the tibia and proximal aspect of the head of the fibula and inserts on the calcaneus via the calcaneal tendon (Achilles)?
- Gastrocnemius
  - Tibialis anterior
  - Tibialis posterior
  - Soleus
50. Which of the following nerves does NOT supply the tibialis anterior muscle?
- Deep peroneal nerve
  - L4
  - Tibial nerve
  - L5
51. What position should the client be in when performing a kinesiology muscle test on the tibialis posterior muscle?
- Supine with foot fully plantarflexed and inverted
  - Supine with foot fully dorsiflexed and inverted
  - Prone with foot fully plantarflexed and inverted
  - Prone with foot fully dorsiflexed and inverted
52. What is the action of the extensor hallucis longus muscle?
- Plantarflexes the foot and helps to control inversion of the foot
  - Extends the big toe and assists with foot dorsiflexion and inversion
  - Inverts and plantarflexes the foot
  - Dorsiflexes the ankle
53. When palpating the flexor hallucis longus muscle, how should the examiner instruct the client to move?
- Instruct the client to flex the big toe
  - Instruct the client to extend the big toe
  - Instruct the client to invert the ankle
  - Instruct the client to evert the ankle

54. What artery supplies the extensor digitorum brevis muscle?
- a. Posterior tibial artery
  - b. Anterior tibial artery
  - c. Peroneal artery
  - d. Dorsalis pedis artery

### Section 3

55. What is the goal of gait testing?
- a. To identify all voluntary muscles involved in gait and locomotion activities
  - b. To identify all involuntary muscles involved in gait and locomotion activities
  - c. To identify dysfunctional areas of the gait mechanisms and to allow clarification of the combinations of muscles which appear not to be working optimally
  - d. To identify functional areas of the gait mechanisms and to allow clarification of the combinations of muscles which appear to be working optimally
56. How should the client be positioned when performing a contralateral shoulder and hip extensor gait test?
- a. Prone with knees and elbows fully extended
  - b. Prone with knees and elbows partially flexed
  - c. Supine with knees and elbows fully extended
  - d. Supine with knees and elbows partially flexed
57. Which of the following is considered to be a weak gait test?
- a. If the contralateral muscles test strong individually, yet weak in combination
  - b. If the contralateral muscles test strong individually and in combination
  - c. If the contralateral muscles test weak individually, yet strong in combination
  - d. If the contralateral muscles test weak individually and in combination

This completes the Muscle Testing for Massage Therapists Exam.