

Muscle Memory Cheat Sheet

This cheat sheet covers two aspects of Muscle Memory hacking in preparation for your level 3 Anatomy and Physiology Exam:

1. Muscle Groups
2. Learning (and remembering) Muscle Detail – Visual Process

This cheat sheet will give you some hints and reminders about the processes we followed, as well as a few relevant mock questions.

PART 1:

Muscle Groups

You need to know the following muscle names and identify them as being part of the correct muscle group. As a bonus, identify the key responsibility of that muscle action and any key differences within the group.

Quadriceps:

Rectus Femoris – (longest, crosses knee and hip)

Vastus Medialis

Vastus Lateralis

Vastus Intermedialis

Key Responsibility: Knee Extension

Hamstrings:

Biceps Femoris – (longest, crosses knee and hip)

Semitendinosus

Semimembranosus

Key Responsibility: Knee Flexion

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Adductors:

Adductor Magnus
Adductor Longus
Adductor Brevis
Pectineus
Gracilis
Key Responsibility: Hip Adduction

Abductors:

Gluteus Minimus
Gluteus Medius
Piriformis
Tensor Fascia Latae
Key Responsibility: Hip Abduction
NOTE: Gluteus maximus does abduct the hip, but isn't a major abductor

Rotator Cuff:

Infraspinatus
Supraspinatus
Subscapularis
Teres Minor
Key Responsibility: Shoulder Stability.
NOTE: Teres Major is NOT a rotator cuff muscle as it does major joint actions.

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Inner Core Unit:

Diaphragm

Transversus Abdominus (TVA)

Pelvic Floor – (hammock like muscle running front to back in the pelvis)

Multifidus

Key Responsibility: Spine Stability, posture, reduce tension on the bones and ligaments of the spine.

NOTE: Rectus Abdominus is NOT part of Inner Core Unit

PART 2:

Learning Muscle Detail – Visual Process

Using your [flashcards](#) (either electronically or printed out) select one image to work with at a time.

For foundational knowledge – use just the first 3 steps

For exceptional knowledge – do all 6 steps

You may need to go through some of these steps multiple times, and some muscles will feel easier to remember than the others.

1. Look at the [flashcard](#) and just pay attention to the name and location of the muscle including the shape of the muscle. Is it on the front or back of the body? What shape is it? Is the shape consistent or are there a few part of it that particularly eye catching?

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Close your eyes, or turn over the flashcard and recall the name, location and shape of the muscle. Test yourself by looking at the flashcard again.

2. Look at the flashcard and just pay attention to the muscle fibre direction. Is it diagonal, is it vertical, is it horizontal?

Close your eyes, or turn over the flashcard and recall the muscle fibre direction. Can you see it in your mind's eye? Can you also still see the shape of the muscle and the name? Test yourself by looking at the flashcard again. Repeat this if you need to until it looks clear in your head?

3. This time look at the flashcard and notice where the muscle stops and starts – the image has an O for origin and an I for Insertion. In your own words give a name or description to the area it attaches to bone for both Origin and Insertion. Usually the Origin is closest to the Heart, but watch out for the core muscles when it changes around.

Close your eyes, or turn over the flashcard and recall the origin and insertion in your words. Test yourself by looking at the flashcard again.

4. Now you can recall the origin and insertion in your own words, look at the official names of the origin and insertion points, and relate these to what you saw. So if you said back of pelvis, but it says iliac crest, relate these two phrases together to help you remember where that bony landmark is and which is origin and insertion.

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Close your eyes, or turn over the flashcard and recall the origin and insertion in the official terms. Test yourself by looking at the flashcard again.

5. Looking at the flashcard, now notice what joint(s) this muscle crosses. This is important as it will help you remember the joint actions later.

Close your eyes, or turn over the flashcard and recall the joints crossed. Whilst you are here, also recall the origins and insertions of the muscle one more time.

6. The final step – look at the flashcard and read the joint actions. As you read the joint actions imagine the line of fibre on the muscle shortening, imagine the origin and insertion getting closer together to create that joint action. Then physically do those actions, ideally touching the muscle that you are working so you can feel it concentrically contract (get shorter) to create that joint action.

Close your eyes, or turn over the flashcard and recall the joint actions.

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MOCK QUESTIONS:

Check your knowledge using these mock questions. Answers are on the last page:

1. Which muscle is on the posterior thigh and crosses both Knee and Hip?
2. Which muscle attaches the humerus to the scapula?
 - a. Triceps Brachii
 - b. Transversus Abdominus
 - c. Subscapularis
 - d. Rhomboids
3. Which muscle group is responsible for knee extension?
 - a. Hamstring
 - b. Quadriceps
 - c. Adductors
 - d. Gastrocnemius
4. What is the role of the infraspinatus?
5. Which of the following is not a rotator cuff muscle:
 - a. Teres Minor
 - b. Teres Major
 - c. Supraspinatus
 - d. Subscapularis

Answers are on the following page:

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Answers:

1 = Bicep Femoris

2 = C

3 = B

4 = Shoulder Stability

5 = A