MUSCLE MEMORY SPRINT

PARALLEL COACHING
ACCELERATING YOUR FITNESS KNOWLEDGE

50 Flashcards to Accelerate
Your Fitness Knowledge

MUSCLE MEMORY SPRINT

How-To Guide

There is no right or wrong way to use the cards, you could save them to your phone for quick reference, print them out, and/or cover your kitchen cabinets with them. However, visual memory is a very powerful method to retain and recall information.

Use this 5 step process for just one muscle at a time and then take some time out from muscles... go onto another part of revision or do something totally different.

No strategy or structure?

If you lack structure to your revision and how you are learning the muscles, it can feel very overwhelming.

We have recently developed our flashcards into the muscle memory sprint. It structures your learning for you, learning all muscles inside 28 days (15 mins per day), with a daily email.

And alongside these flashcards, you get audio descriptions for each muscles. So you can download them to your phone and listen on the go or use it as a backing track to using the flashcards.

If you want to upgrade to the muscle memory sprint then click this link to find out more and get an exclusive upgrade offer...

https://parallelcoachingacademy.com/muscle-memory-sprint-exclusive-upgrade/

1.) TAKE 15 MINS

Schedule 15 minute chunks spread out across your week. Use one slot per muscle rather than batching all muscles together.

2.) IMAGE AND NAME

Find a clear, and accurate, image of the muscle, with the name clearly printed. Look at it, and then close your eyes and test yourself; can you visualise it?

3.) YOUR OWN WORDS

In your own words describe the location, origin and insertion. Using your own words keeps it simple and easier to remember.

4.) FIBRE DIRECTION

Look at the direction of the muscle fibres, as this will help you understand the action the muscle creates.

5.) ACTIONS AND EXERCISES

Visualise the muscle concentrically contacting (fibres getting shorter), and name the joint action. Then pick an exercise that works this muscle and then do that exercise... feeling the muscle as it contracts.

MUSCLE MEMORY SPRINT

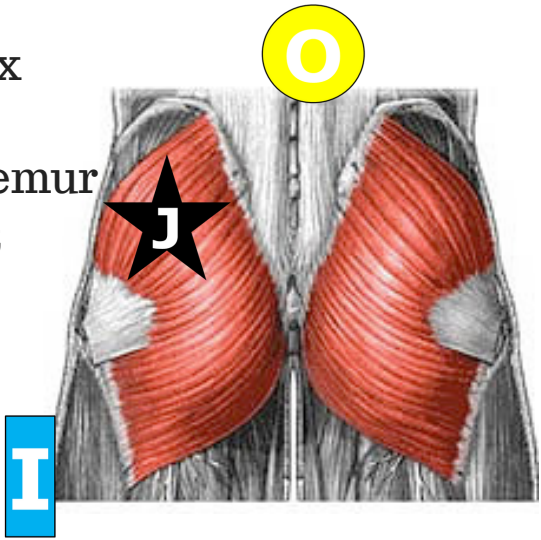
Gluteus Maximus

Level 2 3

O Origin: Iliac Crest, Sacrum and Coccyx

I Insertion: Upper Femur and Iliotibial Tract

J Joints Crossed: Hip



Hip Extension. External Rotation and Abduction

MUSCLE MEMORY SPRINT

Level 2 3

ILIOPSOAS MAJOR

Often known as "hip flexors" at level 2

O

Origin: Transverse processes of T12- L5

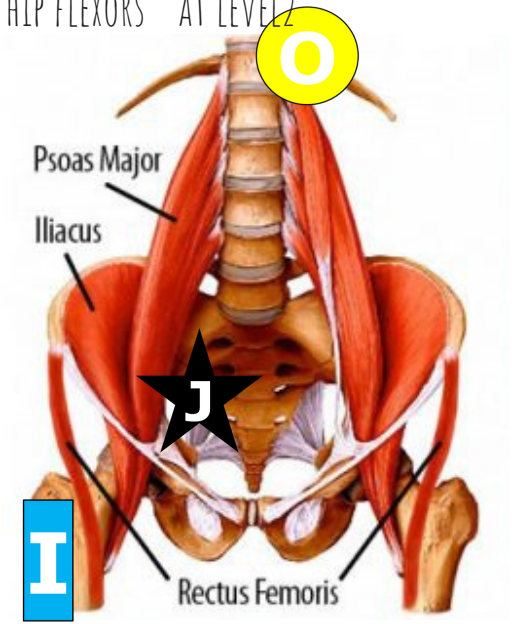
I

Insertion: Lesser Trochanter of the Femur

J

Joints Crossed: Hip

Hip Flexion, Lateral Flexion of the Spine, Anterior tilt of pelvis



MUSCLE MEMORY SPRINT

Iliacus

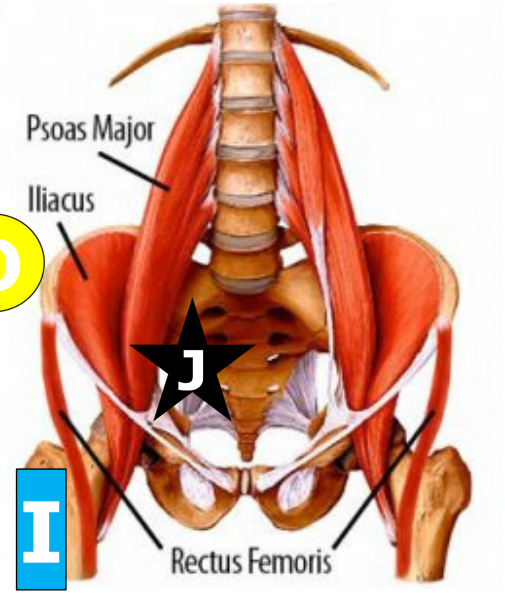
Level 3

O Origin: Iliac fossa

I Insertion: Lesser Trochanter of the Femur

J Joints Crossed: Hip

Hip Flexion, External Rotation of the Hip



MUSCLE MEMORY SPRINT

DIAPHRAGM

Level 2 3

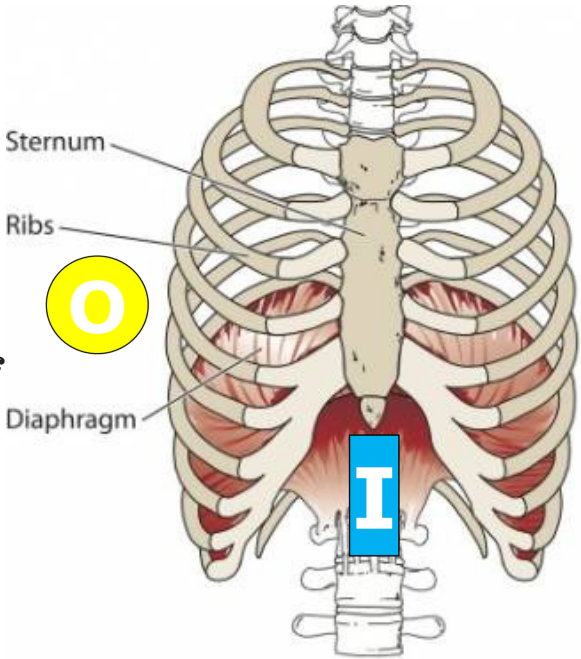
O

Origin: Base of the Sternum,Inner Surface of the Lower ribs, L1-L3

I

Insertion: Central Tendon of Diaphragm

Increases Volume of the Thorax



MUSCLE MEMORY SPRINT

Intercostals

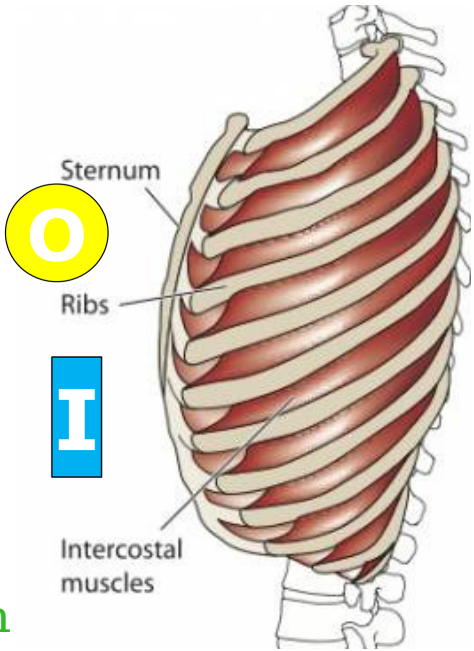
Level 2 3

O **Origin:** Inferior Border of the Ribs and Costal Cartilages

I **Insertion:** Superior Border of the Rib Below

Elevate Ribs = Inhalation

Depress Ribs = Exhalation



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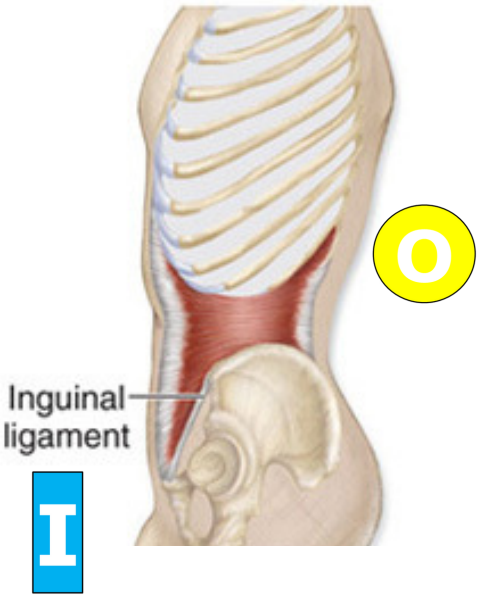
Transversus Abdominis

Level 2 3

O **Origin:** Iliac Crest, Thoracolumbar Fascia, Lower 6 Ribs

I **Insertion:** Pubis and Linea Alba

Compress and Support the Abdominal Contents



MUSCLE MEMORY SPRINT

External Obliques

Level 2 3

O

Origin: Outer Surface of 6th-12th Ribs

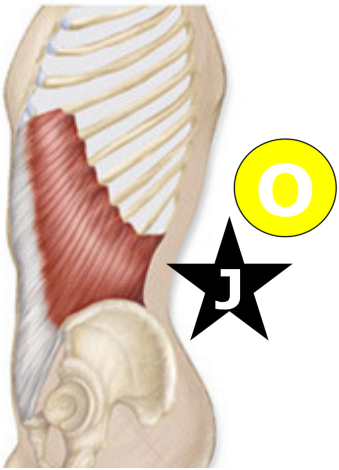
I

Insertion:
Iliac Crest, The Pubis and Linea Alba

J

Joints Crossed:
Spine

Rotation and Lateral Flexion of the Spine



MUSCLE MEMORY SPRINT

Internal Obliques

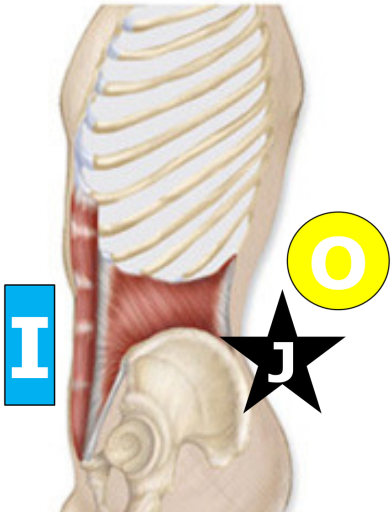
Level 2 3

O Origin: Iliac Crest and Thoracolumbar fascia

I Insertion: Lower 3 ribs and Linea Alba

J Joints Crossed: Spine

Rotation and Lateral Flexion of the Spine



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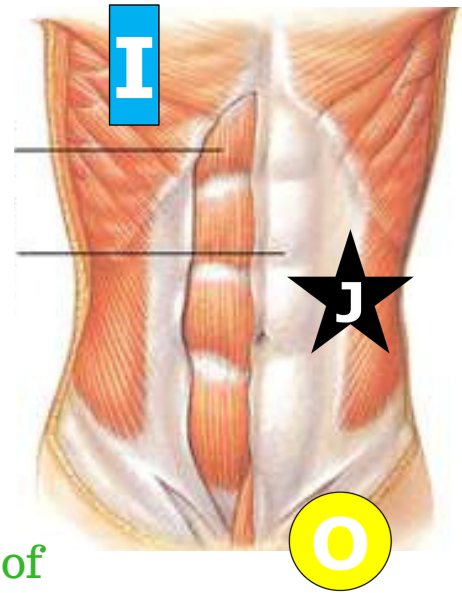
Rectus Abdominis

Level 2 3

O Origin: Pubis

I Insertion:
Cartilage of 5th-7th Rib and base of sternum

J Joints Crossed:
Spine



Flexion and Lateral Flexion of the Spine; Posterior Pelvic Tilt

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Gastrocnemius

Level 2 3

O **Origin:** Posterior Lower Femur

I **Insertion:** Calcaneus

J **Joints Crossed:** Knee and Ankle

Knee Flexion and Plantar Flexion

MUSCLE MEMORY SPRINT

SOLEUS

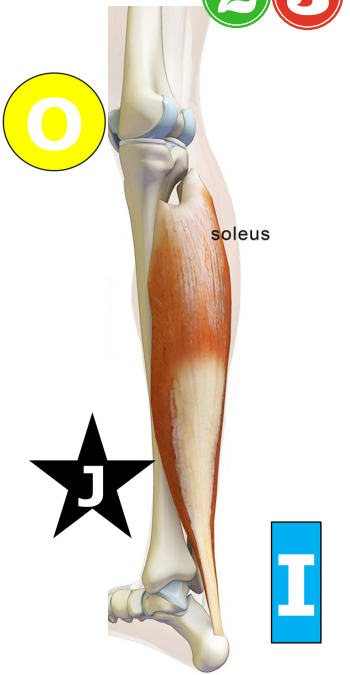
Level 2 3

O **Origin:** Posterior Upper Tibia

I **Insertion:** Calcaneus

J **Joints Crossed:** Ankle

Plantar Flexion



MUSCLE MEMORY SPRINT

Tibialis Anterior

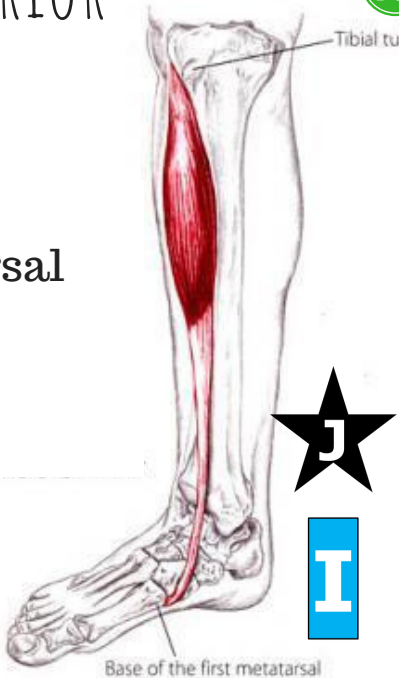
Level 2 3

O Origin: Lateral Upper Tibia

I Insertion: 1st Metatarsal and Medial Tarsal

J Joints Crossed: Ankle

Dorsiflexion and Inversion



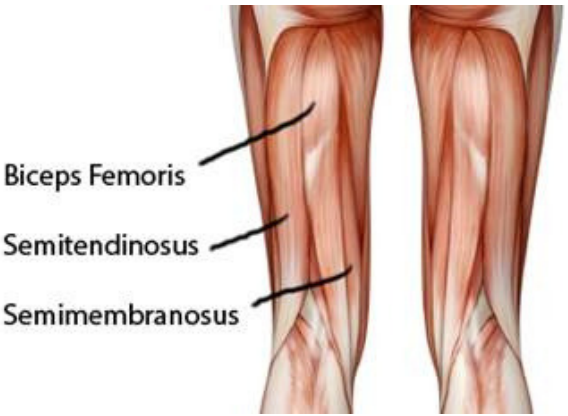
MUSCLE MEMORY SPRINT

The Hamstring Group

Level 2 3

3 Muscles:
Bicep Femoris
Semitendinosus
Semimembranosus

Key Function:
Knee Flexion



The following 3 Flashcards explain the Hamstring muscles in detail

MUSCLE MEMORY SPRINT

Hamstrings 1: Bicep Femoris

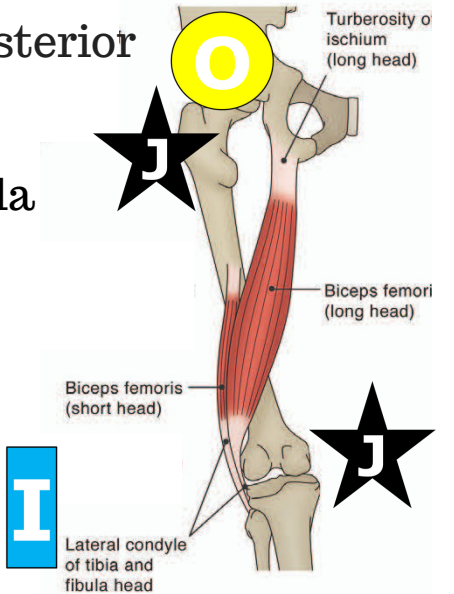
Level 3

O **Origin:** Ischium and Posterior Surface of Femur

I **Insertion:** Head of Fibula

J **Joints Crossed:** Knee and Hip

Knee Flexion, Extension and External Rotation of the Hip



MUSCLE MEMORY SPRINT

Hamstrings 2: Semitendinosis

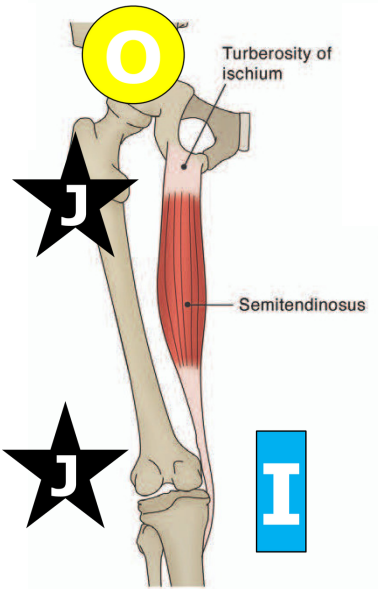
Level 3

O Origin: Ischium

I Insertion: Upper Medial Surface of the Tibia

J Joints Crossed: Knee and Hip

Knee Flexion, Hip Extension and Posterior Pelvic Tilt



MUSCLE MEMORY SPRINT

Hamstrings 3: Semimembranosis

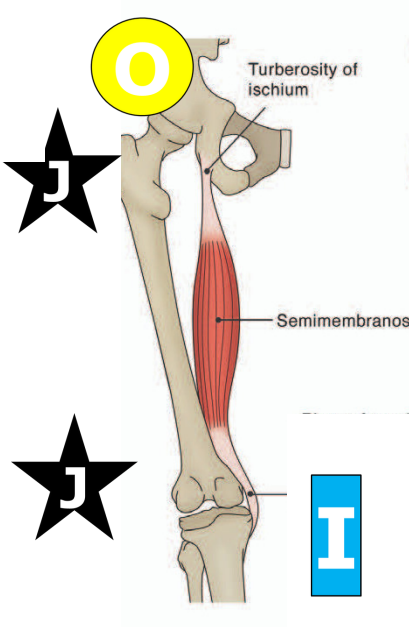
Level 3

O Origin: Ischium

I Insertion: Upper Medial Surface of the Tibia

J Joints Crossed: Knee and Hip

Knee Flexion, Hip Extension and Posterior Pelvic Tilt



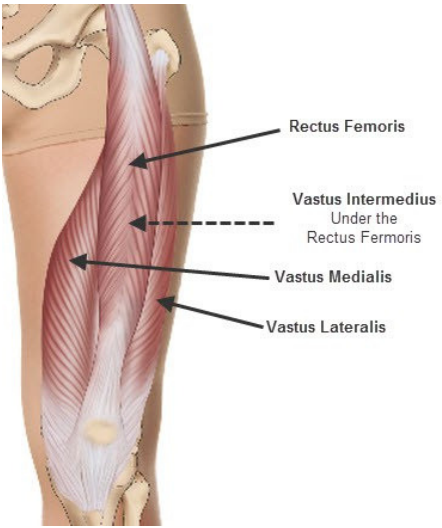
MUSCLE MEMORY SPRINT

The Quadriceps Group

Level 2 3

4 Muscles:

Rectus Femoris
Vastus Medialis
Vastus Lateralis
Vastus Intermedialis



Key Function:
Knee Extension

The following 4 Flashcards explain the Quadriceps muscles in detail

MUSCLE MEMORY SPRINT

Quadriceps 1 : Rectus Femoris

Level 3

O

Origin: Anterior Inferior Iliac Spine (AIIS)

I

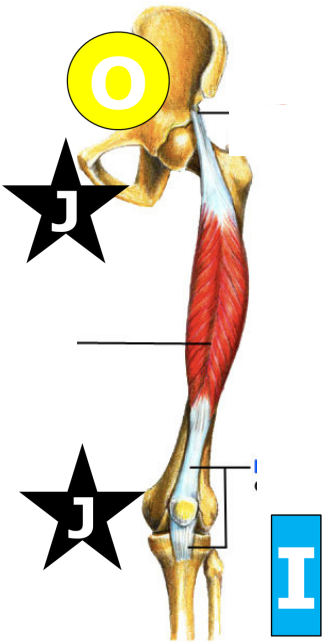
Insertion: Anterior Upper Tibia via Patella

J

Joints Crossed: Knee and Hip

Hip Flexion

Knee Extension



MUSCLE MEMORY SPRINT

Quadriceps 2 : Vastus lateralis

Level 3

O

Origin: Greater Trochanter and lateral surface of femur

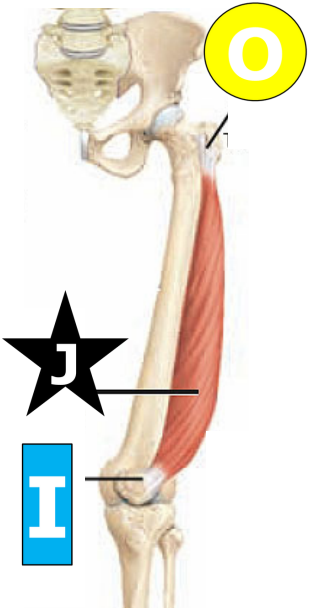
I

Insertion: Anterior Upper Tibia via Patella

J

Joints Crossed: Knee

Knee Extension



MUSCLE MEMORY SPRINT

Quadriceps 3 : Vastus Intermedialis

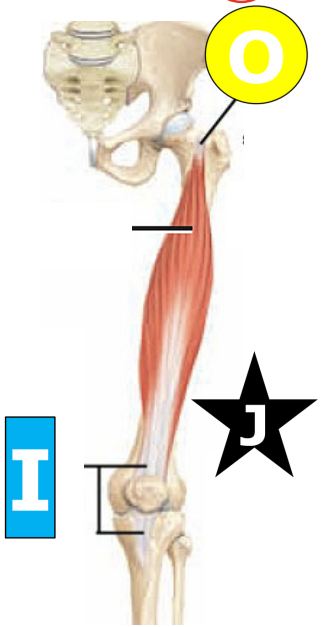
Level 3

Origin: Anterior and lateral Surface of Femur

Insertion: Anterior Upper Tibia via Patella

Joints Crossed: Knee

Knee Extension



Quadriceps 4 : Vastus medialis

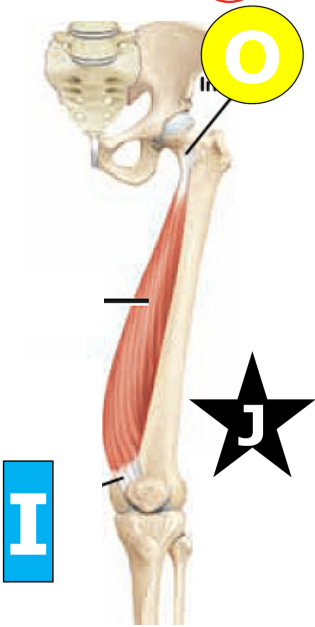
Level 3

O Origin: Medial surface of femur

I Insertion: Anterior Upper Tibia via Patella

J Joints Crossed: Knee

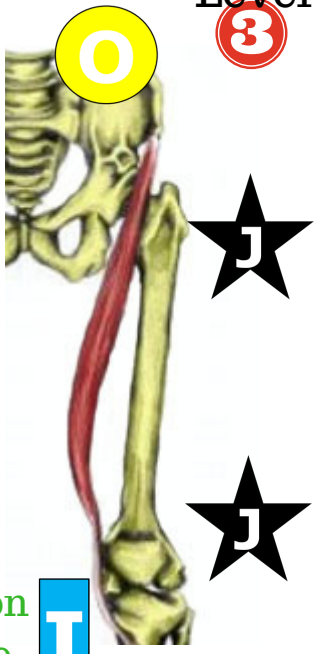
Knee Extension (final 20 degrees)



MUSCLE MEMORY SPRINT

SARTORIUS

Level 3



O **Origin:** Anterior Supra Iliac Spine (ASIS)

I **Insertion:** Medial Upper Tibia

J **Joints Crossed:** Knee

Flexion, Abduction and External Rotation of the Hip, Internal Rotation of the Knee

NOTE: This is not one of the Quadriceps Muscles

MUSCLE MEMORY SPRINT

The Adductor Group

Level 2 3

5 Muscles:
Adductor Magnus
Adductor Longus
Adductor Brevis
Pectineus
Gracilis

Key Function:
Hip Adduction

The following 5 Flashcards explain the Adductor muscles in detail

MUSCLE MEMORY SPRINT

Adductor Magnus

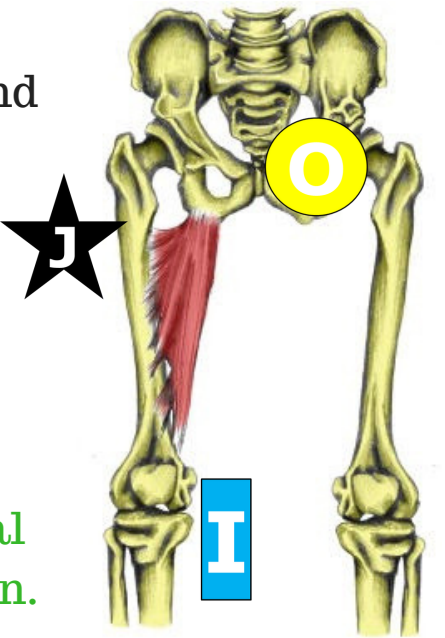
Level 3

O Origin: Base of Pubis and Ischium

I Insertion: Mid to Lower Femur

J Joints Crossed: Hip

Hip Adduction, Hip Internal Rotation, and Hip Extension.



MUSCLE MEMORY SPRINT

Adductor Longus

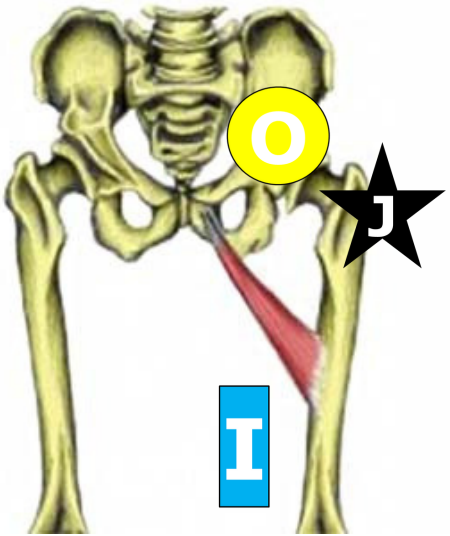
Level 3

O **Origin:** Anterior Pubis

I **Insertion:** Mid Femur

J **Joints Crossed:** Hip

Hip Adduction, and Hip Internal Rotation



MUSCLE MEMORY SPRINT

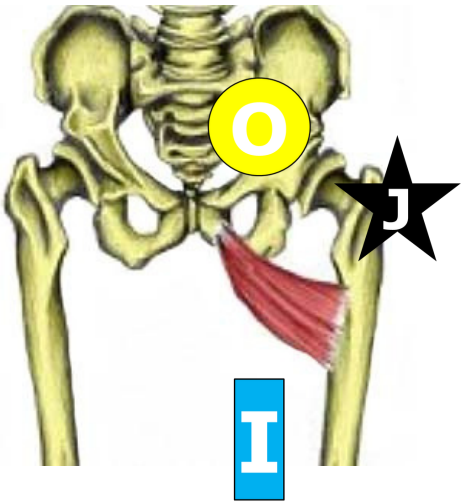
Adductor Brevis

Level 3

O **Origin:** Anterior Pubis

I **Insertion:** Upper Femur

J **Joints Crossed:** Hip



Hip Adduction, and Hip Internal Rotation

MUSCLE MEMORY SPRINT

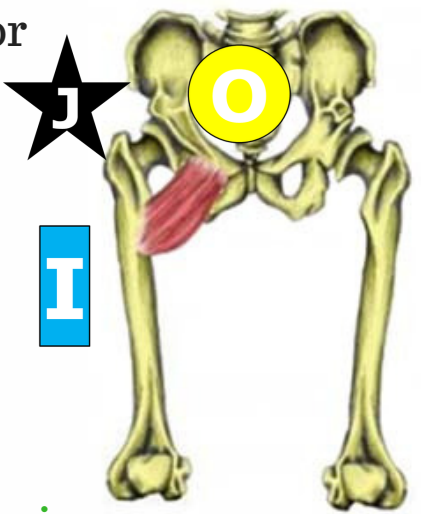
Pectineus

Level 3

O Origin: Anterior Superior Pubis

I Insertion: Posterior Upper Femur

J Joints Crossed: Hip



Hip Adduction, and Hip Flexion

MUSCLE MEMORY SPRINT

GRACILIS

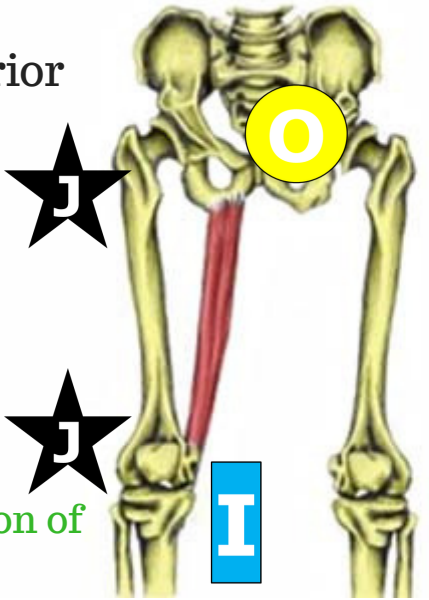
Level 3

O Origin: Anterior Inferior Pubis

I Insertion: Medial Upper Tibia

J Joints Crossed: Hip and Knee

Adduction and Internal Rotation of the Hip and Knee Flexion

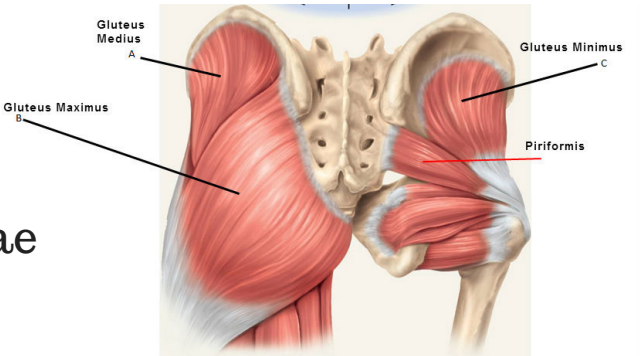


The Abductor Group

Level 2 3

4 Muscles:

Gluteus Medius
Gluteus Minimus
Piriformis
Tensor Fascia Latae



Key Function:
Abduction of the Hip

The following 4 Flashcards explain the Abductor muscles in detail

MUSCLE MEMORY SPRINT

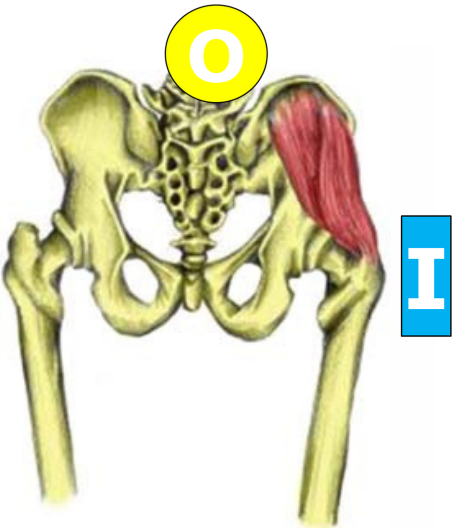
ABDUCTOR 1: GLUTEUS MEDIUS

Level 3

O **Origin:** Upper Lateral Surface of Ilium

I **Insertion:** Lateral surface of Greater Trochanter

J **Joints Crossed:** Hip



Anterior Fibres: Hip Abduction and Internal Rotation

Posterior Fibres: Hip Extension and External Rotation

MUSCLE MEMORY SPRINT

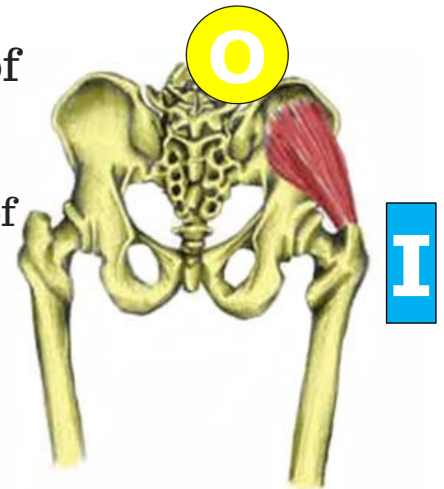
ABDUCTOR 2: GLUTEUS MINIMUS

Level 3

O Origin: Lateral Surface of Ilium

I Insertion: Anterior surface of Greater Trochanter

J Joints Crossed: Hip



Hip Abduction, and Hip Internal Rotation

ABDUCTOR 3: PIRIFORMIS

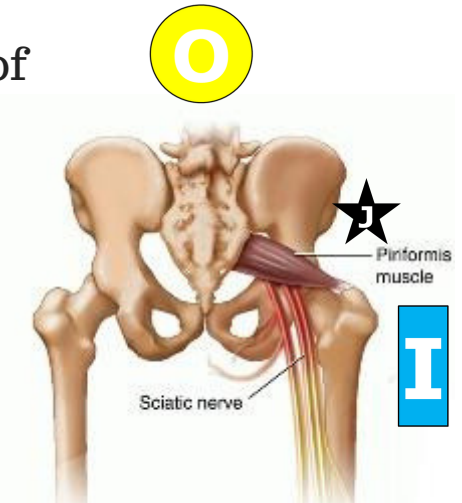
Level 3

O Origin: Anterior Surface of the Sacrum

I Insertion: Superior Greater Trochanter

J Joints Crossed: Hip

Hip Abduction and Hip External Rotation



MUSCLE MEMORY SPRINT

ABDUCTOR 4: TENSOR FASCIA LATAE

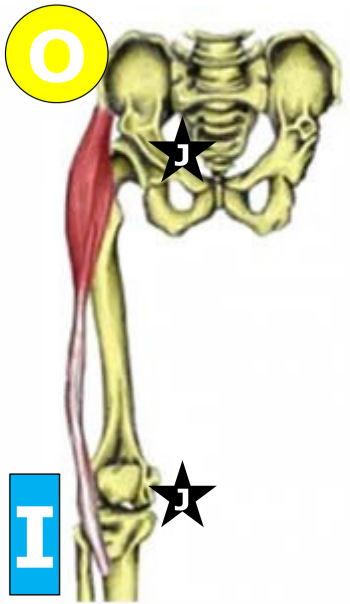
Level 3

O Origin: Anterior Iliac Crest

I Insertion: Lateral Upper Tibia via IT Band

J Joints Crossed: Hip and Knee

Hip Flexion and Hip Abduction



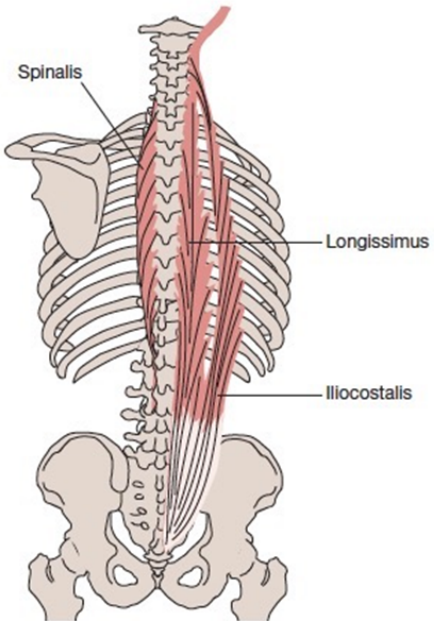
MUSCLE MEMORY SPRINT

The Erector Spinae Group

Level 2 3

3 Muscles:
Iliocostalis
Longissimus
Spinalis

Key Function:
Lateral Flexion and
Extension of the Spine



The following 4 Flashcards explain the Erector Spinae muscles in detail

MUSCLE MEMORY SPRINT

Erector Spinae : Iliocostalis

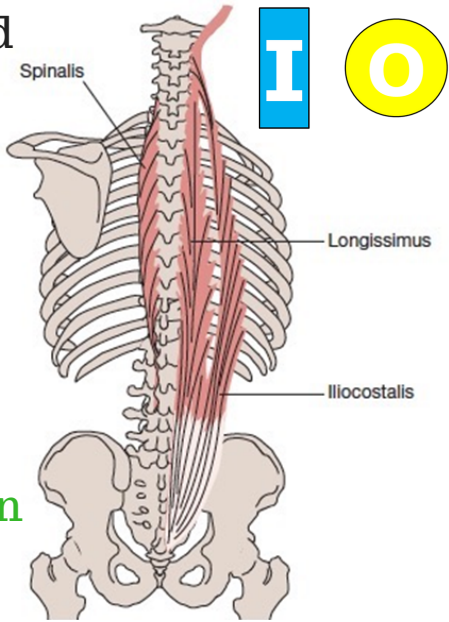
Level 3

O **Origin:** Sacrum, Ilium and Posterior Ribs 1-12

I **Insertion:** Posterior ribs 1-12 and transverse processes of c1 - c7 vertebrae

J **Joints Crossed:** Spine (Vertebrae)

Lateral Flexion and Extension of the spine



MUSCLE MEMORY SPRINT

Erector Spinae : Longissimus

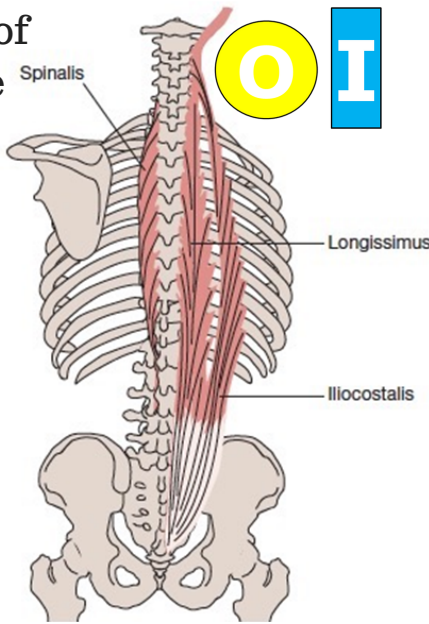
Level 3

O Origin: Transverse processes of lumbar and thoracic vertebrae

I Insertion: Ribs and transverse processes of C1 - T12 vertebrae and mastoid process

J Joints Crossed: Spine (Vertebrae)

Lateral Flexion and Extension of the spine



MUSCLE MEMORY SPRINT

Erector Spinae : Spinalis

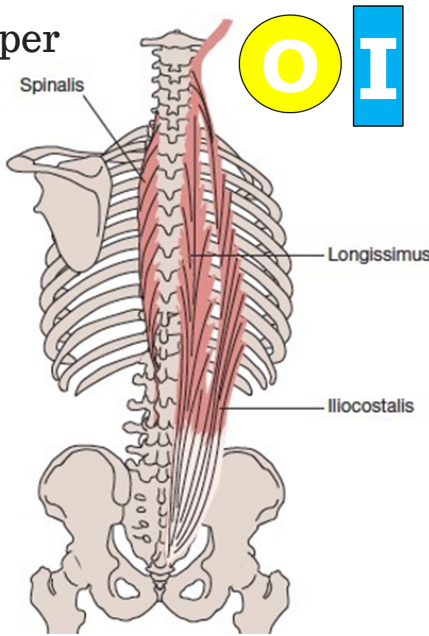
Level 3

O Origin: Spinous processes of upper lumbar and thoracic vertebrae

I Insertion: Spinous processes of upper thoracic and cervical vertebrae

J Joints Crossed: Spine (Vertebrae)

Lateral Flexion and Extension of the spine



MUSCLE MEMORY SPRINT

Multifidus

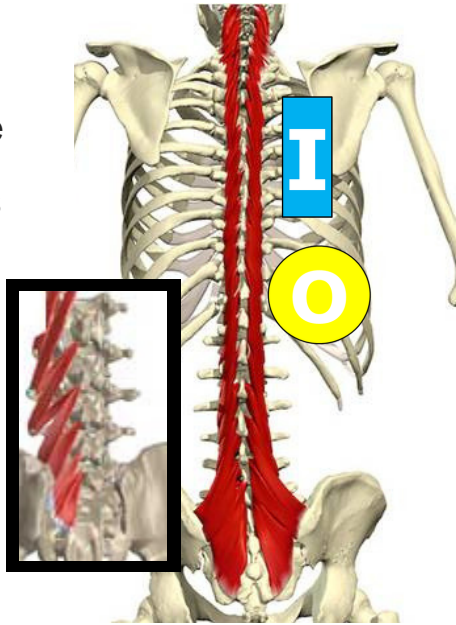
Level 3

O Origin: Sacrum, transverse processes of L, T,C vertebrae

I Insertion: Spinous processes of 2nd-4th vertebrae above origin

J Joints Crossed: Spine (Vertebrae)

Extension and Rotation of the spine



MUSCLE MEMORY SPRINT

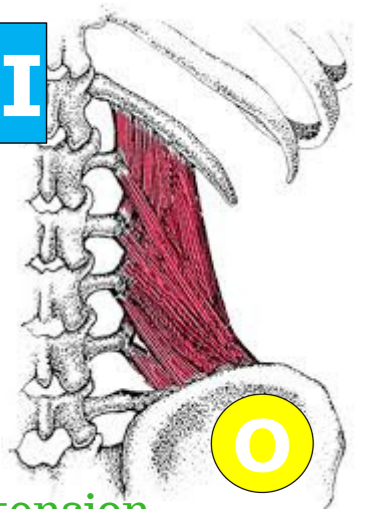
Quadratus Lumborum

Level 3

O Origin: Iliac Crest

I Insertion: 12th Rib and Transverse processes of L1- L4

J Joints Crossed: Spine (Vertebrae)



Lateral Flexion and Extension of the spine, and Lateral Tilt of the Pelvis

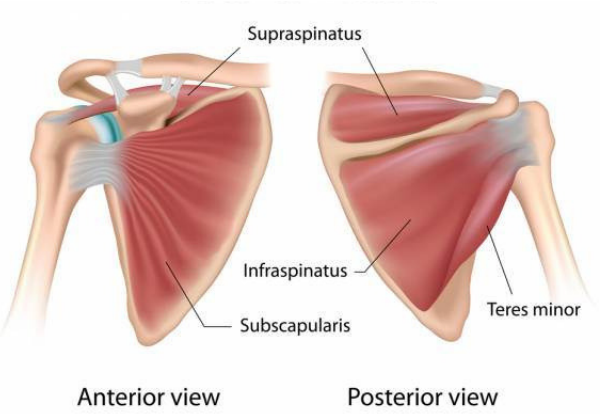
MUSCLE MEMORY SPRINT

The Rotator Cuff Group

Level 3

4 Muscles:

Teres Minor
Supraspinatus
Infraspinatus
Subscapularis



Key Function:

Stabilisation of the Shoulder

The following 4 Flashcards explain the Rotator Cuff muscles in detail

MUSCLE MEMORY SPRINT

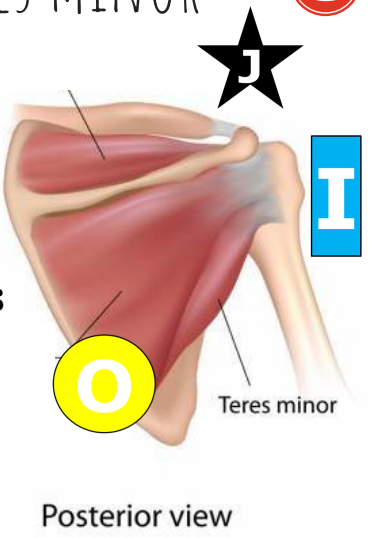
Rotator Cuff: Teres Minor

Level 3

O Origin: Lateral Border of Scapula

I Insertion: Upper Humerus

J Joints Crossed: Shoulder



Adduction, External Rotation and Stabilisation of the Shoulder

MUSCLE MEMORY SPRINT

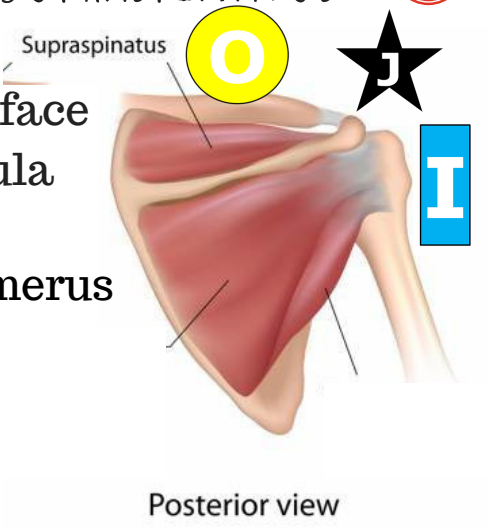
Rotator Cuff: Supraspinatus

Level 3

O Origin: Superior Surface above Spine of Scapula

I Insertion: Upper Humerus

J Joints Crossed: Shoulder



Abduction and Stabilisation of the Shoulder

MUSCLE MEMORY SPRINT

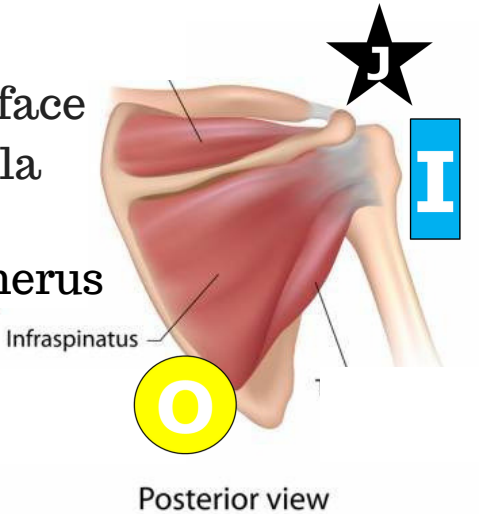
Rotator Cuff: Infraspinatus

Level 3

O Origin: Posterior surface below Spine of Scapula

I Insertion: Upper Humerus

J Joints Crossed: Shoulder



Adduction, Horizontal Extension, External Rotation and Stabilisation of the Shoulder

MUSCLE MEMORY SPRINT

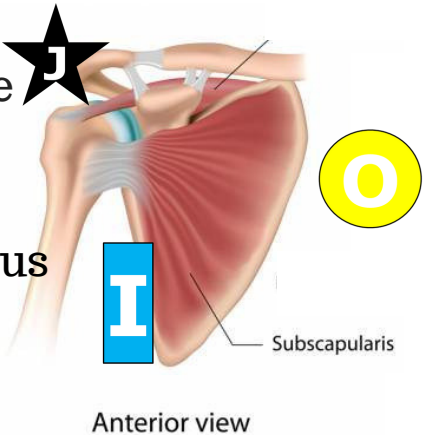
Rotator Cuff: Subscapularis

Level 3

O Origin: Anterior surface of Scapula

I Insertion: Upper Humerus

J Joints Crossed: Shoulder



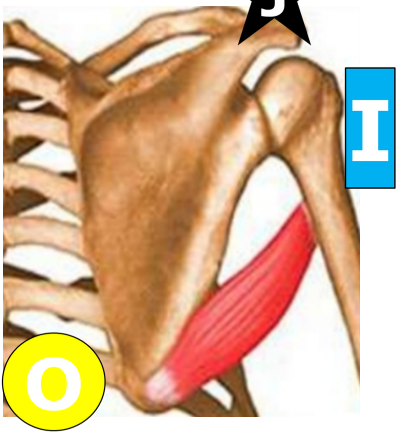
Anterior view

Adduction, Internal Rotation and Stabilisation of the Shoulder

MUSCLE MEMORY SPRINT

Teres major

Level 3



O Origin: Inferior Angle of Scapula

I Insertion: Upper Humerus

J Joints Crossed: Shoulder

Extension, Adduction and Internal Rotation of the Shoulder

MUSCLE MEMORY SPRINT

LATISSIMUS DORSI

Level 2 3

O

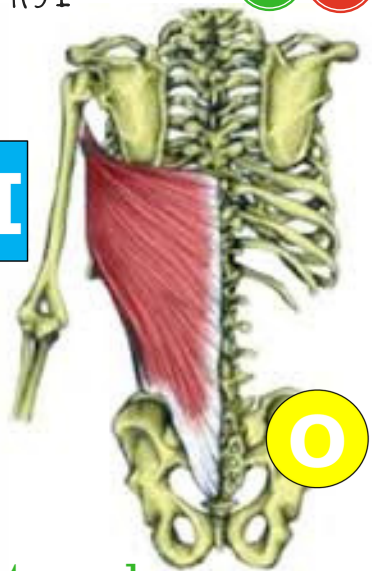
Origin: Vertebrae T5-T12, Inferior Angle of scapula, Thoracolumbar fascia and Iliaccrest

I

Insertion: Anterior Upper Humerus

J

Joints Crossed: Shoulder Girdle



Adduction, Extension and Internal Rotation of the Shoulder Joint

MUSCLE MEMORY SPRINT

Trapezius

Level 2 3

O

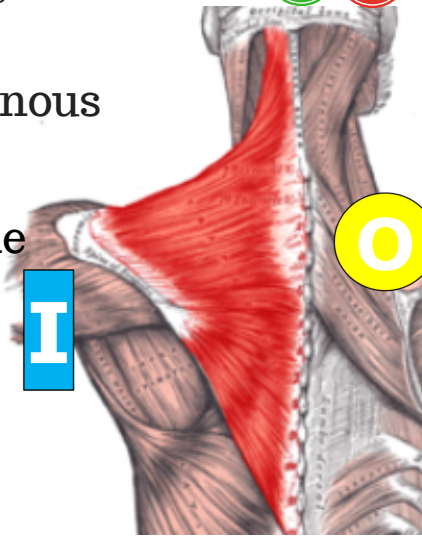
Origin: Base of Skull, Spinous Processes of C7-T12

I

Insertion: Lateral Clavicle and Upper Surface of the Scapula

J

Joints Crossed: Shoulder Girdle



Elevation, Retraction, Depression of the Shoulder Girdle; Extension, Lateral Flexion and Rotation of the Neck

MUSCLE MEMORY SPRINT

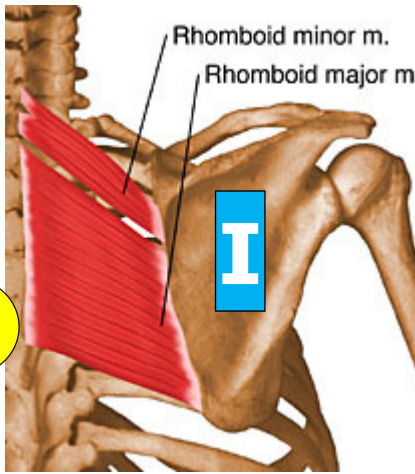
Rhomboid Major

Level 2 3

O Origin: Spinous Processes of T2-T5

I Insertion: Medial Border and Inferior angle of the scapula

J Joints Crossed: Shoulder Girdle



Retraction and Elevation of the Scapula

MUSCLE MEMORY SPRINT

Rhomboid Minor

Level 2 3

O

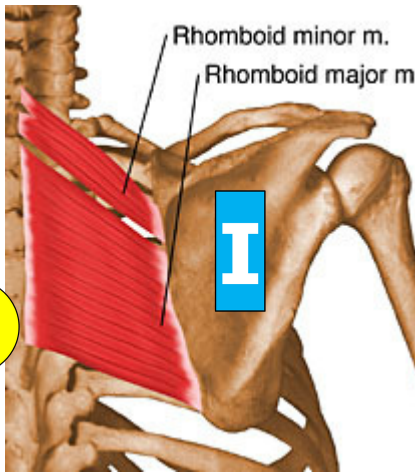
Origin: Spinous Processes of C7 - T1

I

Insertion: Upper Medial Border of the scapula

J

Joints Crossed: Shoulder Girdle



Retraction and Elevation of the Scapula

MUSCLE MEMORY SPRINT

PECTORALIS MAJOR

Level 2 3

O

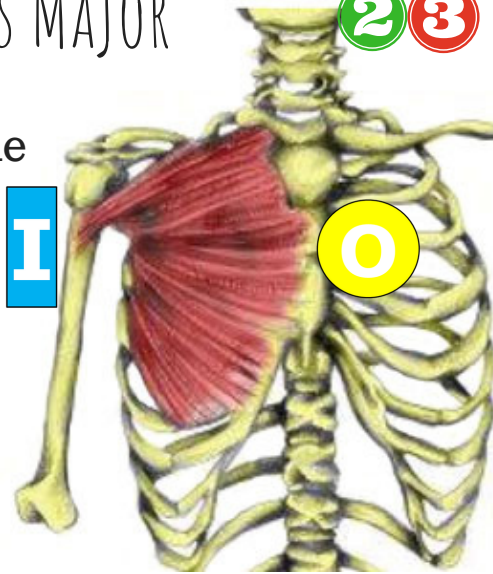
Origin: Medial clavicle and sternum

I

Insertion: Upper Humerus

J

Joints Crossed: Shoulder



Flexion, Horizontal Flexion, Adduction and Internal Rotation of the Shoulder

MUSCLE MEMORY SPRINT

PECTORALIS MINOR

Level 3

O

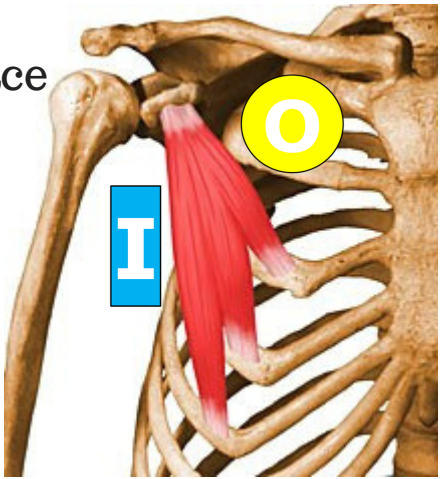
Origin: Anterior Surface of the 3rd-5th Rib

I

Insertion: Coracoid Process of the Scapula

J

Joints Crossed: Shoulder Girdle



Depression and Protraction of the Scapula

MUSCLE MEMORY SPRINT

Biceps Brachii

Level 2 3

O

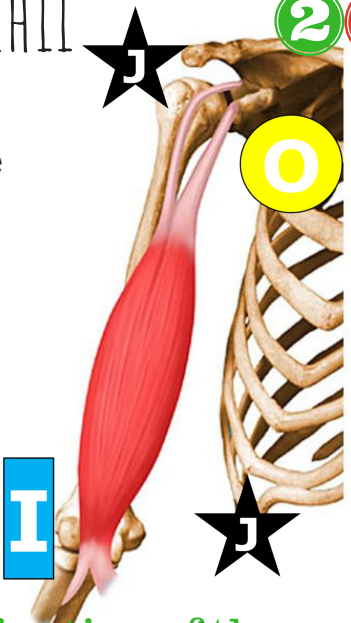
Origin: Anterior Surface of the Scapula

I

Insertion: Upper Radius

J

Joints Crossed: Elbow and Shoulder



Flexion of the Elbow, Supination of the Forearm and Flexion of the Shoulder

MUSCLE MEMORY SPRINT

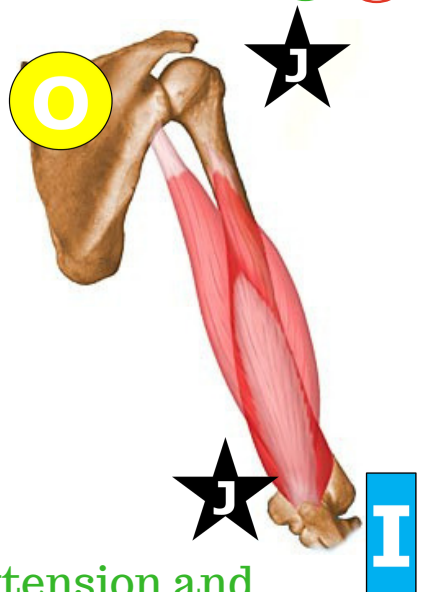
Triceps Brachii

Level 2 3

O Origin: Posterior Upper Humerus and Scapula

I Insertion: Upper Ulna

J Joints Crossed: Elbow and Shoulder



Extension of the Elbow, Extension and Abduction of the Shoulder

MUSCLE MEMORY SPRINT

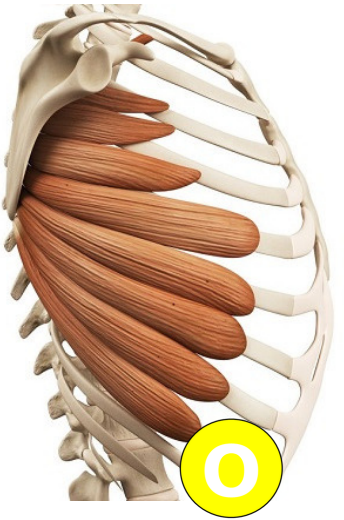
Serratus Anterior

Level 3

O **Origin:** Surface of Ribs 1-8

I **Insertion:** Anterior Surface of Medial Border of Scapula

J **Joints Crossed:** Shoulder Girdle



Protraction of Scapula

MUSCLE MEMORY SPRINT

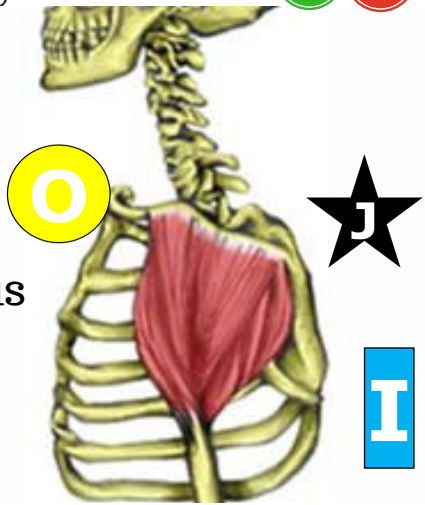
Deltoids

Level 2 3

O Origin: Clavicle and Scapula

I Insertion: Upper Humerus

J Joints Crossed: Shoulder



Abduction, Flexion and Extension, Horizontal Flexion and Extension; Internal and External Rotation of the Shoulder

MUSCLE MEMORY SPRINT

Levator Scapulae

Level 3

O

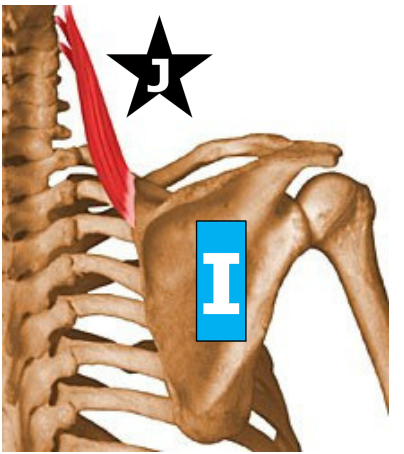
Origin: Transverse Processes of C1- C4

I

Insertion: Superior Angle of Scapula

J

Joints Crossed: Shoulder Girdle



Elevation of the Shoulder Girdle, Lateral Flexion and Extension of the Neck

MUSCLE MEMORY SPRINT

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