

Muscle attachments and actions – answer sheet

Muscle	Origins	insertions	Movements	Joints crossed
Trapezius	Base of skull Spinous process of C7 Thoracic	Scapula Spine Lateral edge of clavicle	Elevation Retraction Depression Rotation of scapula	
Rhomboids	C7 T1 – T5	Medial border Scapula	Retracts scapula Downwardly rotates Scapula	
Levator scapulae	Transverse processes of C1 – C4	Medial border of Scapula, between superior angle and root of spine	Elevation	
Serratus anterior	Front of ribs 1 – 8	Anterior medial Scapula	Protraction and Retraction of Scapula	
Pectoralis minor	Front of ribs 3 - 5	Coracoid process of Scapula	Protracts Scapula Downwardly rotates Scapula Elevates rib cage	
Deltoid	Clavicle anterior head Spine of Scapula acromium medial head	Humerus lateral surface halfway down	Flexion, Horizontal Flexion, Extension, Horizonatal Flexion, Abduction	
Pectoralis major	Sternum Clavicle Ribs 1 - 5	Humerus Lateral Top	Horizontal Flexion, Adduction, Medial Rotation of arm	
Latissimus dorsi	Thoracolumbar fascia (TLF) from spinous process of T6 – T12 Sacral Vertebrae Iliac crest Lower ribs inferior edge of Scapula	Humerus top anterior	Adducts and extends arm Assists medial rotation of arm Depresses shoulder girdle	
Teres major	Lateral border of Scapula	Humerus proximal anterior	Medial rotation Adduction and extension of shoulder joint	
Supraspinatus Rotator Cuff	Superior to spine of scapula	Head of humerus Superiorly	Rotates arm medially	

			Stabilises shoulder	
Infraspinatus Rotator Cuff	Scapula Inferior to spine	Humerus head laterally	Lateral rotation of humerus	
Teres minor Rotator Cuff	Scapula lateral border near inferior angle	Humerus laterally on head	Rotates arm laterally Stabilises shoulder	
Subscapularis Rotator Cuff	Anterior surface of Scapula	Humerus anterior on head	Rotates arm laterally Stabilise shoulder	

Biceps brachii	Scapula Longhead – supraglenoid tubercle Short head - coracoid	Radius and bicipital aponurosis to medial forearm	Flexion of elbow Supinates forearm Assists shoulder flexion	
Brachialis	Humerus	Ulna	Flexes elbow	
Brachioradialis	Humerus laterally distal end	Radius laterally distal end	Flexion when forearm is semi supine Assists flexion	
Triceps brachii	Long head – infraglenoid tubercle lateral border medial head (deep) - upper Humerus Lateral head – upper humerus	Ulna olecranon	Extension of elbow Assists in shoulder extension – long head	
Iliacus	Inside surface of ilium	Top of femur	Flexes hip	Hip
Psoas major	Transverse process of Lumbar and T12	Top of femur	Flexes hip Pulls trunk up – sit ups	Hip and Lumbar region
Sartorius	Iliac crest anterior and lateral	Tibia medial	Flexion and lateral rotation hip Knee flexion	
Tensor fascia latae	Crest of ileum	Into Iliotibial (IT) band	Flexes, medially rotates and abducts hip	
Gluteus maximus	Base of spine –	IT Band and	Extends and	

	sacrum and coccyx Back of ileum	Femur	laterally rotates hip	
Gluteus medius	Outer surface of ileum	Femur laterally on top	Abducts hip, assists medial rotation Posterior fibres laterally rotates hip when hip is flexed Stabilises hip in walking/running	
Gluteus minimus	Outer surface of ileum	Femur laterally on top	Abducts hip, assists medial rotation Posterior fibres laterally rotates hip when hip is flexed Stabilises hip in walking/running	
Piriformis	Anterior surface of Sacrum	Top of femur - greater trochanter	Abducts hip, assists in lateral rotation, and can assist in medial rotation when hip is flexed	
Adductor group (Adductor longus, magnus and brevis)	Pubis	Femur medial and posterior	Adduction	
Pectineus	Pubis	Femur	Adducts and flexes hip Assists in medial rotation	
Gracilis	Pubis	Top of Tibia	Adducts the hip Assists in knee flexion	

Hamstrings Biceps femoris	Ischium Short head – posterior femur	Head of Fibula	Knee flexion Hip Flexion	
Semimembranosus	Ischium	Tibia medial	Knee flexion Hip Flexion	
Semitendinosus	Ischium	Tibia Medial	Knee flexion Hip Flexion	

Rectus Femoris	Iliac Spine Acetabulum	Patella tendon into Tibia	Hip Flexion Knee extension	
Vastus Lateralis	Femur	Patella tendon into Tibia	Knee extension	
Vastus Medialis	Femur	Patella tendon into Tibia	Knee extension	
Vastus Intermedius	Femur	Patella tendon into Tibia	Knee extension	
Gastrocnemius	Condyles of Femur	Calcaneus via Achilles tendon	Plantar flexion Assists knee flexion	
Soleus	Tibia, Fibula and interosseous membrane	Calcaneus via Achilles tendon	Plantar flexion	
Tibialis anterior	Lateral condyle of Tibia, upper half of interosseus membrane	Underside of cuneiform bone, 1 st metatarsal	Dorsi flexion Inversion of Sub Talar joint	
Vertebral Column Muscles Deep				
Transverse abdominis (anterior support)	Thoracolumbar vertebrae Iliac crest Cartilage of lower 6 ribs	Linea alba	Compression of abdominal cavity Increase of intra- abdominal pressure	Intervertebral joints Lumbar vertebrae
Multifidus (posterior support)	Sacrum Transverse processes of vertebrae	Spinous processes 2 – 4 vertebrae superior to origin	Extension of vertebrae (bi) Assists in rotation (uni) Assists in lateral flexion (uni)	Intervertebral joints of vertebral column
Quadratus Lumborum	Iliac Crest Iliolumbar fascia	Upper 4 Lumbar vertebrae 12 th rib	Lateral flexion (uni) Prevents lateral flexion (uni) Prevents hyperflexion of lumbar spine (bi)	Lumbar vertebrae
Internal Obliques (lateral support)	Thoracolumbar lumbar vertebrae Iliac crest	Linea alba Bottom 3 ribs	Rotation and flexion (uni) Flexion (bi)	Lumbar and lower thoracic vertebrae
Pelvic Floor Muscles (inferior support)	Front and base of Pubic bone	Spine at back of pelvis	Stability of pelvic girdle Support of internal organs Counteracts	Lower hip pelvic region

			changes in abdominal pressure	
Diaphragm (superior support)				
Vertebral column muscles Global - superficial				
Rectus Abdominis	Pubis and Pubis symphysis	Base of sternum Cartilages of ribs 5 - 7	Flexion Tilts pelvis backwards	Lumbar and thoracic vertebrae
External Obliques	Outer surface of bottom 8 ribs	Linea alba Iliac crest	Rotation and flexion (uni) Flexion (bi)	Lumbar and Thoracic vertebrae
Erector Spinae Iliocostalis Longissimus Spinalis	Ribs and Iliac crest	Transverse processes of cervical vertebrae Ribs superior to origin	Extends spine	All vertebrae

Thoracolumbar fascia video - https://www.youtube.com/watch?v=TS2IT_gFlus