

**LO2 - Understand the muscular system in relation to
exercise and physical activity**

Content	Notes
Main muscles acting at synovial joints	<ul style="list-style-type: none"> Shoulder - deltoid, latissimus dorsi, pectoralis major, trapezius, teres major Elbow - biceps brachii, triceps brachii Radio-ulnar - pronator teres, supinator muscle Wrist - wrist flexors, wrist extensors Vertebral column - rectus abdominus, erector spinae group, internal and external obliques Hip - iliopsoas, gluteus maximus, gluteus medius, gluteus minimus, adductor longus, adductor brevis, adductor magnus Knee - rectus femoris, vastus medialis, vastus intermedius, biceps femoris, semimembranosus, semitendinosus Ankle - tibialis anterior, gastrocnemius, soleus
Types of muscle function	<ul style="list-style-type: none"> Agonist, antagonist, fixator
Types of muscular contraction	<ul style="list-style-type: none"> Isometric Concentric Eccentric
Structure and function of muscle fibre types	<ul style="list-style-type: none"> Slow oxidative Fast oxidative Fast glycolytic
Link between fibre types and performance	<ul style="list-style-type: none"> In different types of physical activity and different intensities
Impact of physical activity, training and lifestyle	<ul style="list-style-type: none"> Short term Long term Effects of warm ups and cool downs

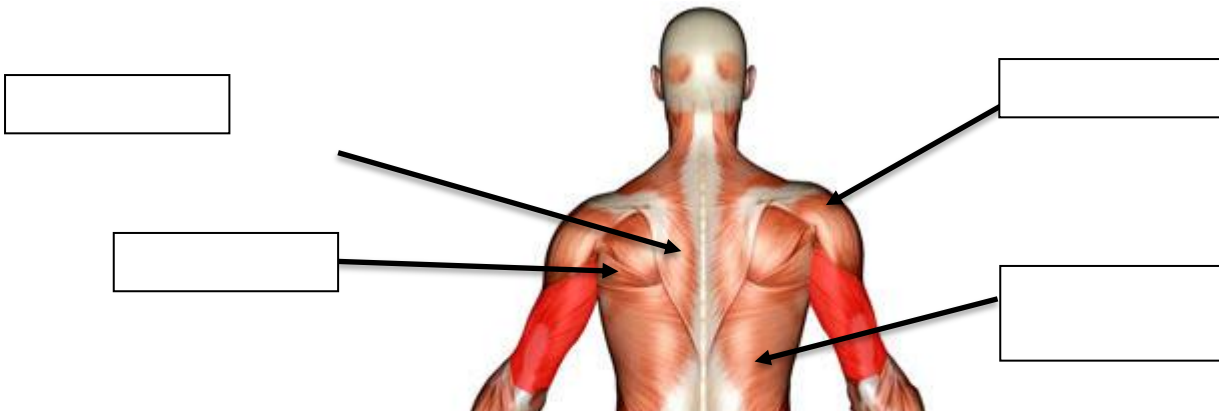
An introduction!



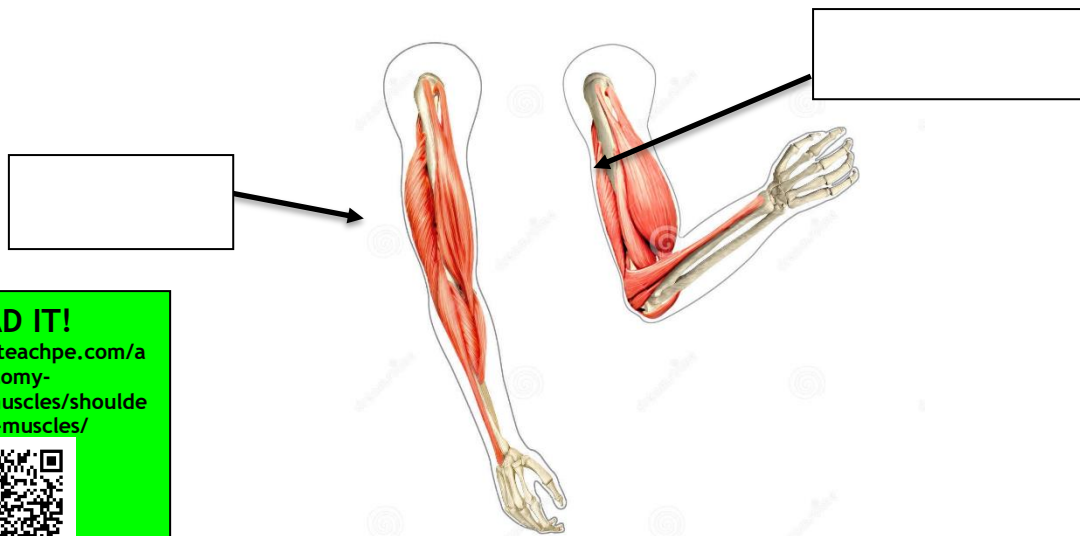
<https://youtu.be/rMcg9YzNSEs>

Please label the main muscles at synovial joints

1. Shoulder

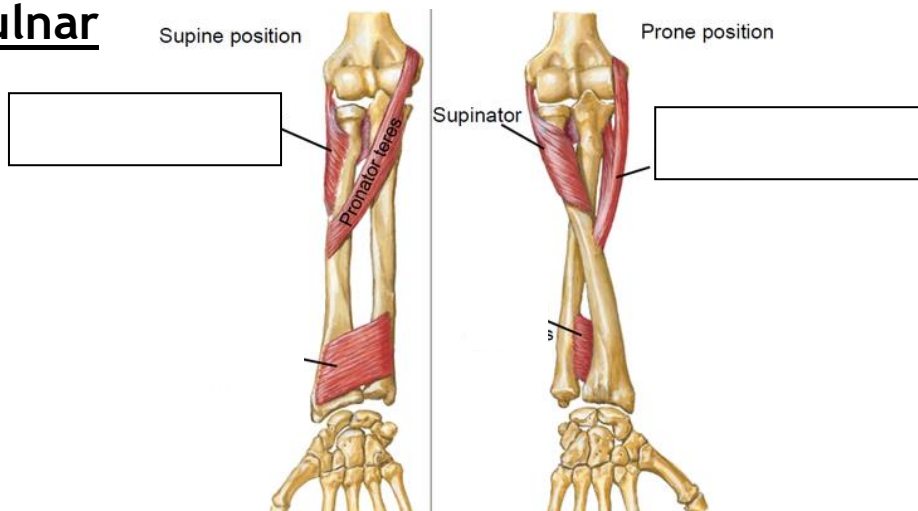


2. Elbow

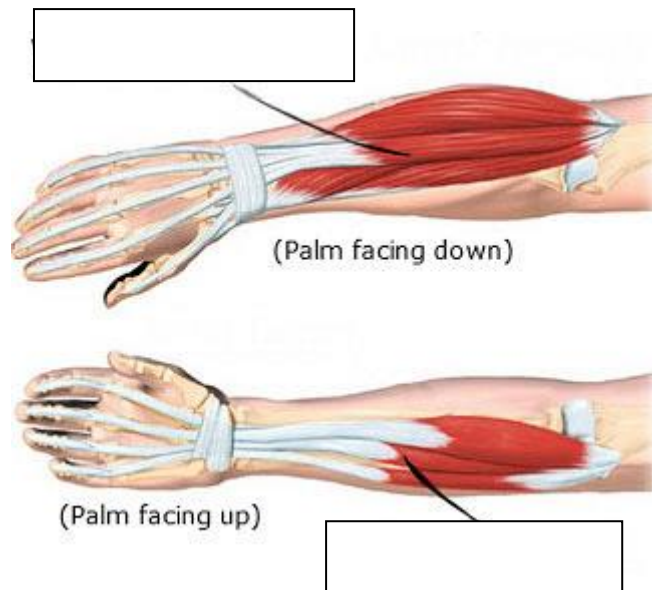


READ IT!
<http://www.teachpe.com/anatomy-physiology/muscles/shoulder-joint-muscles/>

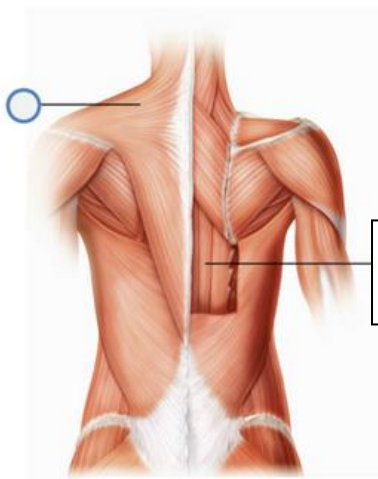
3. Radio-ulnar



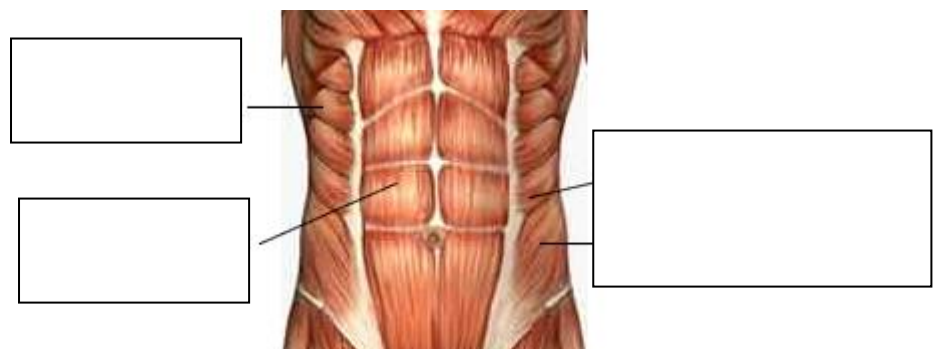
4. Wrist



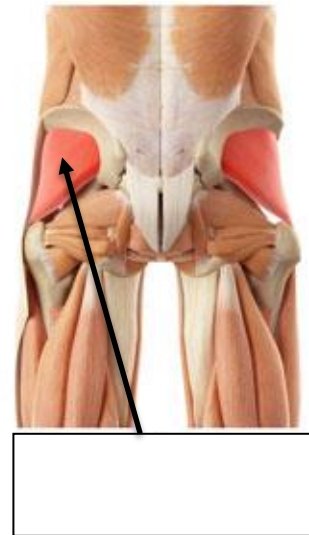
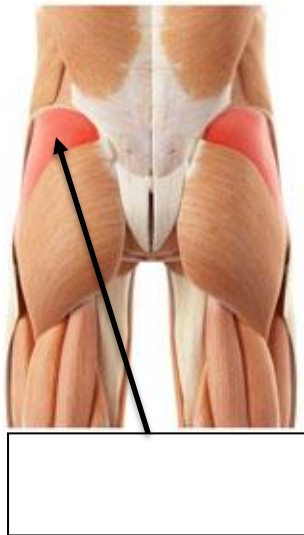
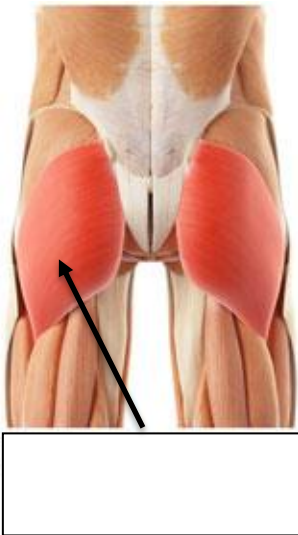
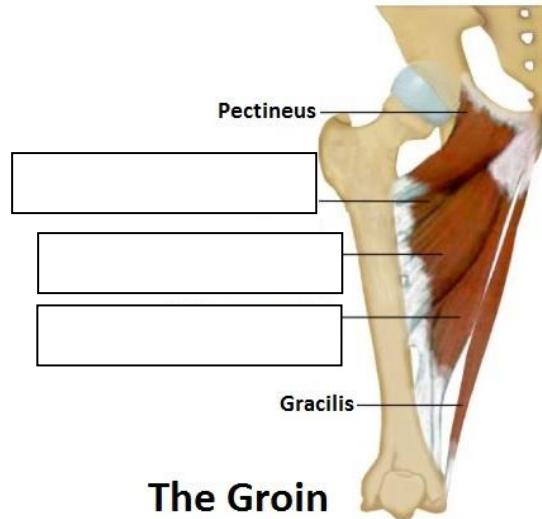
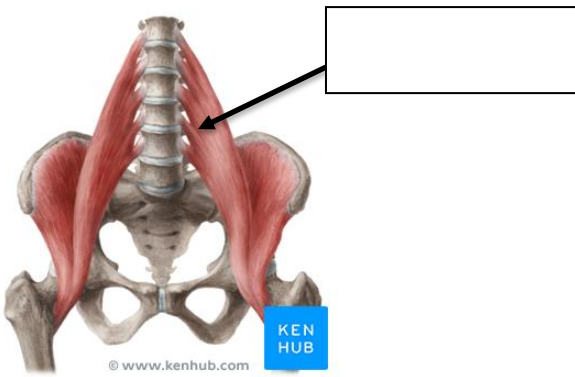
5. Vertebral column



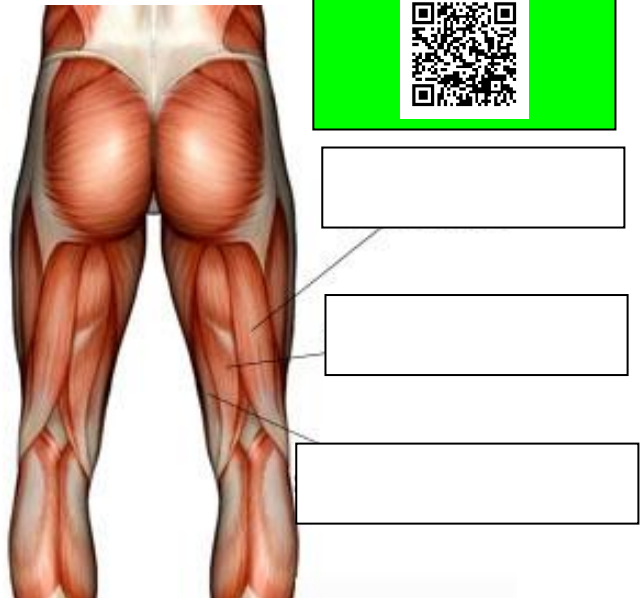
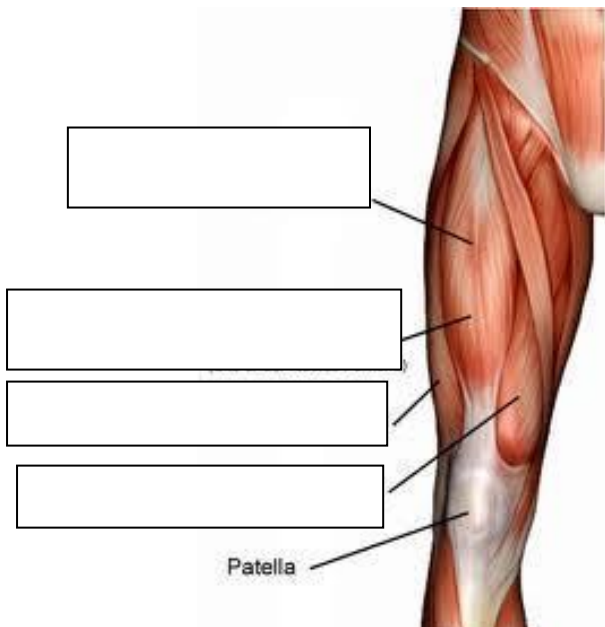
Posterior Trunk



6. Hip

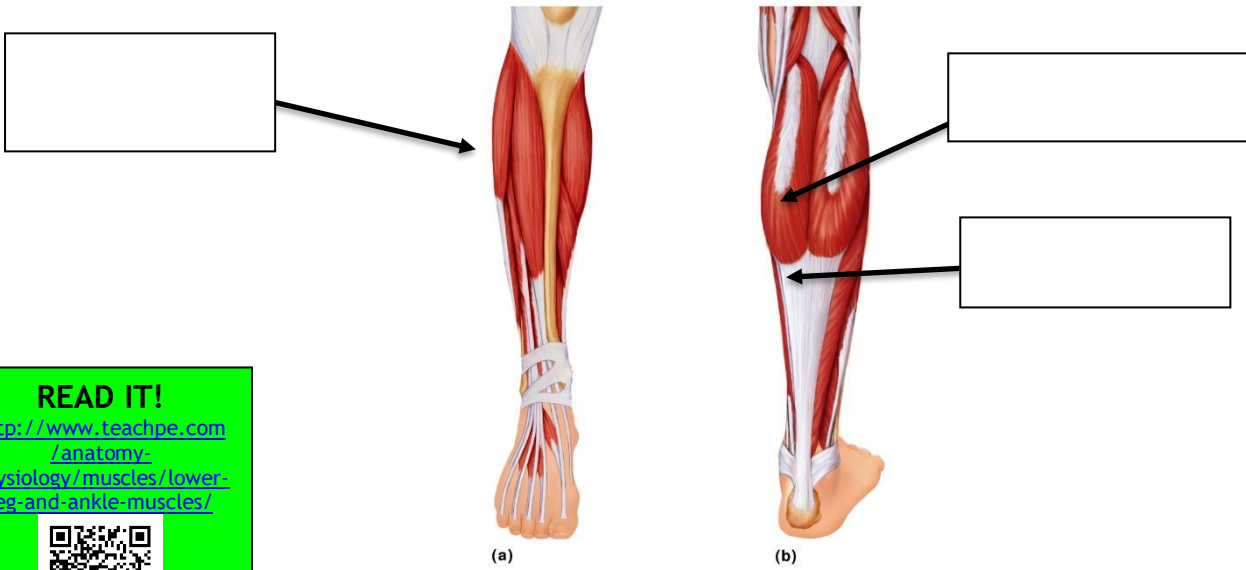


7. Knee



READ IT!
<http://www.teachpe.com/anatomy-physiology/muscles/knee-joint-muscles/>

L3 Cambridge Technicals - Unit 1
Body systems and the effects of physical activity



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READ IT!
<http://www.teachpe.com/anatomy-physiology/muscles/lower-leg-and-ankle-muscles/>

L3 Cambridge Technicals - Unit 1
Body systems and the effects of physical activity

Aim Higher

Complete the table below to show joints, movement and active muscles. Use previous notes to help if necessary.

JOINT	MOVEMENT	DEFINE THE MOVEMENT	ACTIVE MUSCLE
Shoulder	Flexion	Decreasing an angle at a joint. Such as the upward phase of a bicep curl or bending the leg at the knee getting ready to kick a ball.	
	Extension		
	Abduction		
	Adduction		
	Horizontal flexion		
	Medial rotation		
	Lateral rotation		
Elbow	Flexion		
	Extension		
Radioulnar	Pronation		
	Supination		
Wrist	Flexion		
	Extension		
Vertebral	Flexion		
	Extension		
	Lateral flexion		
Hip	Flexion		
	Extension, abduction		
	Adduction		
	Flexion		
Knee	Flexion		
	Extension		
Ankl	Dorsiflexion		
	Plantar flexion		