A LEVEL PE

Anatomy & Physiology



The Muscular Skeletal system

The aim for this module is to learn and understand:

- <u>8</u> joints
- 15 pairs of muscles

Key Vocabulary

These words will be crucial to understanding the movement of the muscular skeletal system:

Articulation – where two bones meet together at a joint

Flexion – when the joint angle decreases Extension – when the joint angle increases

Abduction – moving a limb away from the body's mid-line Adduction – moving a limb towards the body's mid-line

Circumduction – circular motion of the arm Rotation – When a body part turns about its long axis

Pronation – turning the wrist to make palm face the ground Suppination – turning the wrist to make palm face the sky

Lateral flexion – bending the spine sideways

Dorsiflexion – making the toes point upwards Plantarflexion – making the toes point to the floor

Agonist – the prime mover muscle that is contracting Antagonist – the resisting muscle that is lengthening

The Wrist Join Joint type:	<u>t</u>	Wrist extensors	Lateral epicondyle
The articulatin	g		
bones at the w	rist	Wrist flex	cors
are the <u>radius</u> ,	<u>ulna</u>		1
and <u>carpals</u> .		7	
			Medial epicondyle
The movement	ts possi	ible at the wris	t are:
	Mov	vement 1	Movement 2
Agonist			
Antagonist			
Examples from	n sport:		

The Padie ulnar	loint	N.			
The Radio-ulnar Joint Radius					
Joint type:					
	Distal radioulnar joint				
The articulating l	ones at the				
radio-ulnar joint	Oilla	The same			
radius and ulna.		JAK S			
		3 64			
1					
The movements p	possible at the radio	o-ulnar joint are:			
	&				
	Movement 1	Movement 2			
Agonist					
Antagonist					
Tintagomst					
Examples from sp	oort:				

The Elbow Joint Joint type: The bones that articulate at the elbow joint are the humerus, radius and ulna.		Tricep	Biceps muscle and tendon s muscle tendon emmg 2010	
The movements p	oossible at the &	elbo	w joint are:	
	Movement 1		Movement 2	
Agonist				
Antagonist				
Examples from sport:				

<u>The Shou</u>			Deltoid	and the second second second
oint type	e:			1
				Subscapularis
The bone	es that arti	iculate at th		
shoulder	joint are	the <u>humer</u> ı	<u>ıs</u>	
and <u>scap</u>	ula.		Infras	oinatus ommg 2001
The mov	ements pos	ssible at the	shoulder joi	int are:
		&		
		🌣		
		&		
		&		
		&		
		&		
		& &		
	Movement 1	& &		
Agonist	Movement 1	& &		
Agonist	Movement 1	&	Movement 3	Movement 4

The Spine				
Joint types:			$\left(\S \right)$	
	,	&		
The bones that articulate in the spine are the <u>vertebrae</u> (Cervical 7, Thoracic 12, Lumbar 5, Sacrum, Coccyx).				
The movem	nents possi	ble at the sp	oine are:	
		&		
	Movement 1	Movement 2	Movement 3	Movement 4
Agonist				
Antagonist				

The Hip Joi Joint types:			Musc	les
The boarticulate a the pelvis a	•	Front	MMG 2003	Side view
The moven	nents possil	&	p joint are:	
Agonist Antagonist	Movement 1	Movement 2	Movement 3	Movement 4

The Knee Joint Joint type: The bones that the knee joint and tibia.		Tibia	
The movements p	ossible at the	knee joint are:	
	Movement 1	Movement 2	
Agonist			
Antagonist			

The Ankle Joint			
Joint type:	. 10	1100	
	Calf	Gastrocnemius —	
The bones that articulate	muscles	- Soleus	
at the ankle joint are the		Achilles tendon —	
tibia, <u>fibula</u> and <u>talus</u> .			
The movements that are	_		
Movem	ent 1	Movement 2	
Agonist			
Antagonist			