

Year 9 Homework Booklet Spring/Summer Term

Name:	•••••••••••••••••••••••••••••••••••••••

Form:

Teacher:

Structure and functions of the skeletal system



1.1 The Structure of the Skeleton

To do:

- Label the skeleton
 Colour code each bone with their classification.

Key: Short bones	Long Bones	Irregular bones	Flat bones
		 Vou are	
		i locatio	n of each of the bones e classification of each
		· · ·	



Homework 1 (2/2)

1.2 Classification of bones



Homework 2 (1/2)

1.2 Classification of joints

There are four different types of joint:



Fill in the missing words: (All joint types)	
joints are located at the elbow, knee and ankle.	
joints are located at the hip and shoulder.	
joints are located at the wrist.	
joints are located at the neck.	

Homework 2 (2/2)

1.2 Movement at Joints

/		\backslash
,	There are 8 different types of movement possibilities at joints)
	F	
	E	
	Ad	
	Ab	
	R	
	c	
	P	
	D	
/		



Can you define all movement possibilities at joints?		
F is		
E is		
Ad is		
Ab is		
C is		
P is		
D is		

The functions and role of the muscular system



Homework 3 (1/3)

2.1 Structure of the Muscular System





Homework 3 (2/3)

2.1 Structure of the Muscular System



Homework 3 (3/3)

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2.1 Antagonistic Muscle Pairs

Antagonistic Muscle Pairs

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Muscles work in	pairs. When one muscle,
the other	<u>.</u>
The working muscle is the	muscle.
There are 4 antagonistic muscl	e pairs you need to know:
T and B	
Н	and G
Hand Q	
Gand T	

Homework 4

2.3 Muscle types

Muscle type	Location	Function
V muscles		
In muscles		
C muscle		

Homework 4 2.3 Muscle Fibre Types

	Slow twitch type 1	Fast twitch type IIa	Fast twitch type IIx
Force of contraction			
Speed of contraction			
Resistance to fatigue			
Aerobic or anaerobic			

Key:		
Low	Very High	High
Fast	Slow	Medium
High	low	Moderate
Both	Anaerobic	Aerobic

Can you list as many sports as possible which is best suited to each muscle fibre type?

Туре 1	Туре 2а	Type 2x

The Cardiovascular System



Homework 5 <u>3.1The Structure of the Cardiovascular System</u>

Name the 3 components of the cardiovascular system?



There are 5 functions of the cardiovascular system: CONtrol bleeding

- Transportation of
- Transportation of
- Transportation of
- Temperature
- Blood











Homework 5 3.1 Arteries, Capillaries and Veins

Arter	ies
Structure: Arteries have walls. This structure allows blood to be carried at a pressure.	Function Arteries are blood vessels that take blood from the heart.
Relevance	to sport
	Top Tip: Arteries carry blood Away from the heart



The Respiratory System



Homework 6 <u>4.1 The Structure of the Respiratory System</u>



The passage of air



Physical Training: Fitness



Homework 7 5.1 Fitness Testing

Complete the table below:

Test	Component of Fitness	Protocol Explanation
12-minute Cooper Run		
Sit & Reach Test		
Vertical Jump Test		
1-Minute Press Up Test		
1-Minute Sit Up Test		
Illinois Agility Run Test		
Hand Grip Dynamometer		
30m Sprint Test		

Homework 8 5.2 Training Methods Homework 9 5.2 Training Methods Homework 10 5.2 Training Methods Homework 11 5.3 Principles of training Homework 12 5.4 Long Term Effects of Training Homework 13 6.1 Performance Enhancing Drugs (PED's) Homework 14 6.1 Performance Enhancing Drugs (PED's) Homework 14 6.2 Performance Enhancing Drugs (PED's) Homework 15 <u>7.1 The role of macronutrients and dietary manipulation</u> Homework 16 7.2 The role of micronutrients Homework 17 *The skeletal system*

<u>The Vertebrae Column</u>



Homework 18 *Movement analysis*



In the pictures, the movement that o	ccurs is to
at the join	t.
)



is ______ at

the _____ joint.



Homework 19 Movement Analysis



Homework 20 *Ligaments and Tendons*



join bone to bone.

join muscle to bone.

Кеу:					
ligaments	tendons	dislocates	tear		
contract	movement				
			7		1
Without	. io	ints would	be unstable. I	f ligaments ar	e stretched too
far they	and t	he joint		·	
Without	,		would	be impossible	. It is this
about differe	ent actions.	s an anchor	for muscles to		and bring

Homework 21 The muscular system

Hip Flexors and Gluteus Maximus

Hip flexors- The movement possible at the Hip flexors is	_at the
hip (b and s joint).	
Gluteal muscles- The movement possible at the gluteal muscles is e the leg at the hip (b and s joint).	of





A sporting example of the use of hip flexors is....

A sporting example of the use of the gluteal muscles is....

Homework 22 The muscular system

Quadriceps and Hamstrings



The ugoinst is the _

The antagonist is the _____



The agonist is the _____

The antagonist is the _____

Homework 23 The muscular system

Triceps and Biceps





The agonist is the _____

The antagonist is the _____

Homework 24 The muscular system

Gastrocnemius and Tibialis Anterior



Review Questions!

