

## Skeletal System Overview

### STARTER:

- Use your phone to go to the app store and download a free QR reader.
- OR use a PE student ipad to scan and watch the video.
- Watch the video.



Name 3 main functions of the skeletal system:

Identify what the two main types of joint are within the body:

## YEAR 11 LEARNING MAT 1.2.5 A HEALTHY, ACTIVE LIFESTYLE AND THE SKELETAL SYSTEM

### Learning Objectives:

1. To understand the functions of the skeletal system
2. To understand the different joints and the movements they can perform
3. To understand how the exercise can affect the skeletal system and the types of injuries that can occur

### SKELETAL SYSTEM WORDSEARCH

I S F A F I S O N W D B Z I N Q Q Y I Y  
 S Y Z G I V O N O I T C E T O R P F U P  
 B R T D K P O V S G Q D O J I H U B L V  
 N A I E Z R G L X I M R S M T G W G M Y  
 U O L C Q M O V E M E N T G C S G L J A  
 E D I L E C A G G B F E E L U Q Y S A Y  
 K K Y S A J T W F N O G O P D J Z S R O  
 B N Y T N N B R O P R Z P J D F O P G U  
 V G I X D E D I O E K O O J A R K O S B  
 T O T A T Z T S G T R N R P F A K S D G  
 N N S N R C L X O T A P O V Z C E F X H  
 Y Z I Q U P F G E C E T S V O T Q E X L  
 U O M D V N S I J C K G I N Q U X B R S  
 J M B N O I X E L F B E S O S R U D X B  
 Q A F F Y A H I N G E Q T K N E G C R V  
 J P Q V F R B U F R X T Z O E P V C H A  
 K D H B K T B C X C M J X H V B Y A H X  
 A C B P D S O V M F F I N O A N H L C P  
 N U H M P L Z R N J C Z E H H V J K P U  
 Y S D E E B B Z J V W F X X A E B L N I

ABDUCTION / ADDUCTION / BALLANDSOCKET/  
 DISLOCATION / EXTENSION / FLEXION / FRACTURE  
 HINGE / JOINT / MOVEMENT / OSTEOPOROSIS  
 PROTECTION / RICE / ROTATION /  
 SPRAIN / STRAIN / SUPPORT

The ball and socket joint is the most movable joint.

Why do you think this is?

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Where would you find one in your body?

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Explain how it helps a tennis player?

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### Types of Synovial Joint

Joint Type	Movement at joint	Examples	Structure
Hinge	Flexion/Extension	 Elbow/Knee	 Hinge joint
Pivot	Rotation of one bone around another	 Top of the neck (atlas and axis bones)	 Pivot Joint
Ball and Socket	Flexion/Extension/Adduction/Abduction/Internal & External Rotation	 Shoulder/Hip	 Ball and socket joint
Saddle	Flexion/Extension/Adduction/Abduction/Circumduction	 CMC joint of the thumb	 Saddle joint

**YEAR 11 LEARNING MAT 1.2.5 A HEALTHY, ACTIVE LIFESTYLE AND THE SKELETAL SYSTEM**

Identify 3 long term effects of exercise on the skeletal system.



Identify the two injuries which can occur as a result of the 2 sports pictured above.

Explain how you would treat an injury such as a strain or a sprain?

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**LABEL THE HUMAN SKELETON**

CARPALS	PELVIS	ULNA	FEMUR	SPINE
	RIB CAGE	CRANIUM	SCAPULA	TIBIA
TARSALS	RADIUS	CLAVICLE		FIBULA
	HUMERUS	STERNUM		

Join up the correct term with the correct definition

Flexion	Moving a limb towards the midline of the body
Extension	Decreasing the angle at a joint
Adduction	Moving a limb away from the midline of the body
Abduction	Increasing the angle at a joint

	HINGE	BALL & SOCKET	PIVOT
FLEXION			
EXTENSION			
ABDUCTION			
ADDUCTION			
ROTATION			

**Questions**

- What bone protects our brain?
- What bones protect our organs?
- What nutrient do our bones need to be strong?
- About how many bones are there in an adult's body?
- What is it called when we break a bone?
- What is inside our bones that makes red blood cells?
- What connects bones to other bones?
- What health problem do we have when our cartilage wears away?
- What are the places where our bones meet?

