

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:

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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?

Where would you find one in your body?

Explain how it helps a tennis player?

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 |

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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?

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?

