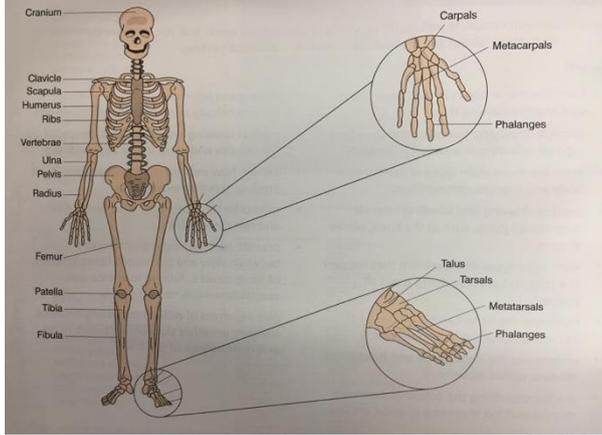
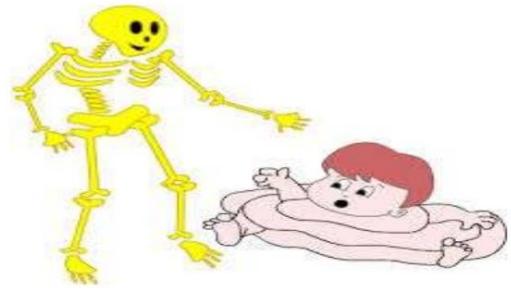


1.



2.



Shape and Support

BEYOND

3.



Movement

BEYOND

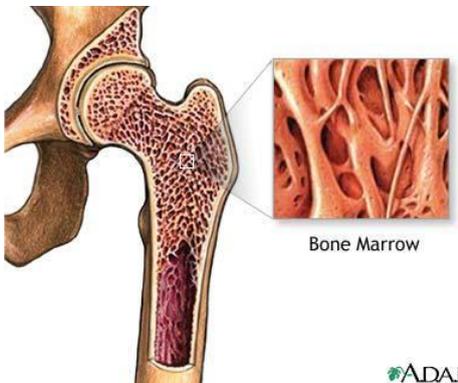
4.



Protection

BEYOND

5.



Blood Production

ADAM.

BEYOND

6.



Long Bones

BEYOND

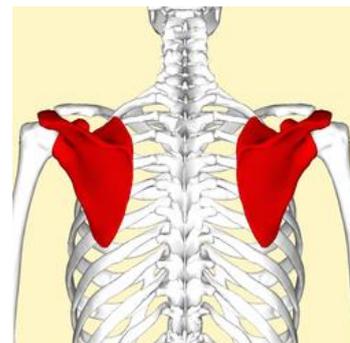
7.



Short Bones

BEYOND

8.



Flat Bones

BEYOND

2.

The skeleton.
Forms the frame to which our muscles attach and our organs sit in.
It keeps us upright.

BEYOND

1.

The Skeleton.
The internal framework of the body, made up of 206 bones.

BEYOND

4.

Our internal organs are soft and delicate, they can get easily damaged. The skeleton protects the organs from being damaged.

Question – Name one organ protected by the skeleton?

BEYOND

3.

Muscles are attached to the skeleton. Movement occurs when the muscles pull on the bones making them move at a joint.

Question – what connects a muscle to bone?

BEYOND

6.

Act as levers to produce a large range of movement.

Can you give an example of another long bone in the human body?

BEYOND

5.

In the centre of some long bones, there is bone marrow. Bone marrow creates red blood cells.

BEYOND

8.

They provide a large surface area for muscles to attach too.

Name one flat bone that also protects vital organs?

BEYOND

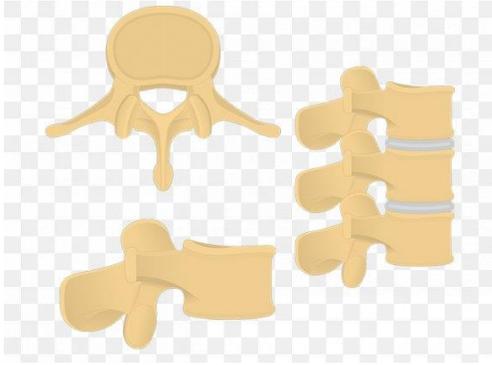
7.

They are as wide as they are long. They provide stability and support. They have little movement.

Can you give an example of another short bone in the human body?

BEYOND

9.



Irregular Bones

BEYOND

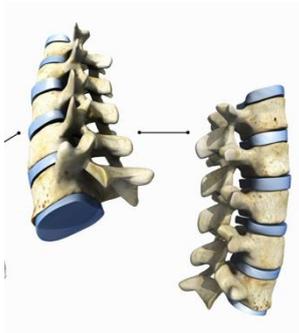
10.



Fixed or Immoveable Joints
(Fibrous Joints)

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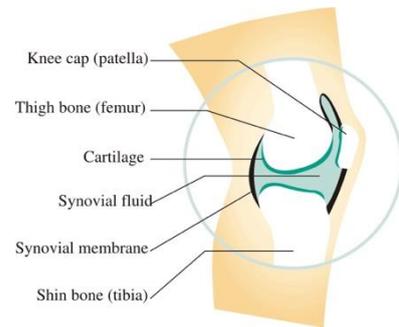
11.



Slightly Moveable Joints
(Cartilaginous Joints)

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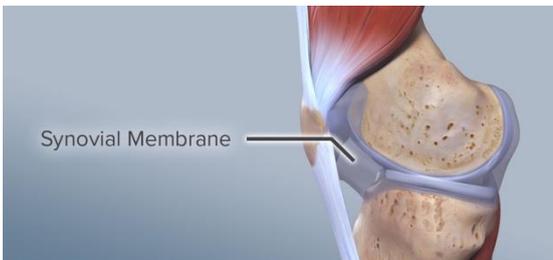
12.



Freely Moveable Joints
(Synovial Joints)

BEYOND

13.



Synovial Membrane

BEYOND

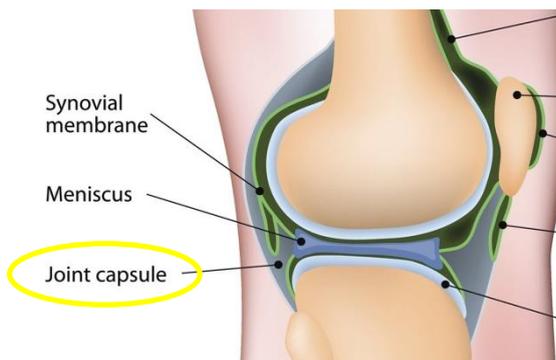
14.



Synovial Fluid

BEYOND

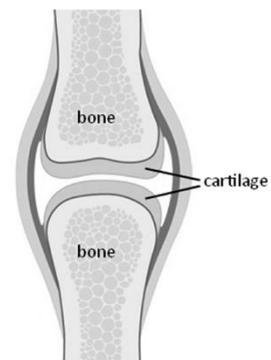
15.



Joint Capsule

BEYOND

16.



Cartilage

BEYOND

10.

These bones do not move at all. These joints are found in the cranium. These joints are also known as fibrous joints because they are connected by fibrous connective tissue.

BEYOND

9.

These bones provide protection and support. They are shaped to suit their specific job.

What does the vertebrae protect?

BEYOND

12.

This type of joint has the greatest amount of movement. Synovial joints are made up of a number of parts.

Can you list the 6 components of a synovial joint?

BEYOND

11.

This type of joint can move a small amount as they are linked together by ligaments and cartilage.

Give one other example of a slightly moveable joint in the human body?

BEYOND

14.

Acts a lubricant to reduce friction in the joint. It helps smoother movement and prevents damage to the joint.

BEYOND

13.

Surrounds the joint and is filled with synovial fluid.

BEYOND

16.

A strong and flexible material found on the end of bones and acts as a cushion to protect the bones.

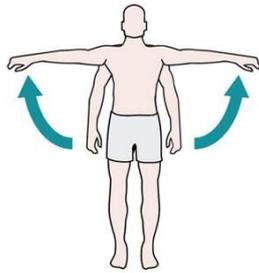
BEYOND

15.

It surrounds and protects the joint. It is made up of a fibrous outer membrane and an inner synovial membrane.

BEYOND

17.

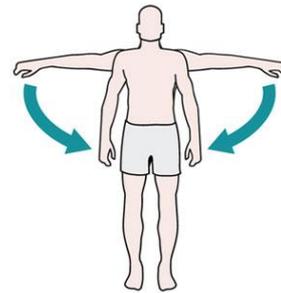


Abduction

Abduction

BEYOND

18.



Adduction

Adduction

BEYOND

19.



Flexion

BEYOND

20.



Extension

BEYOND

21.



Plantar flexion

Plantar flexion

BEYOND

22.

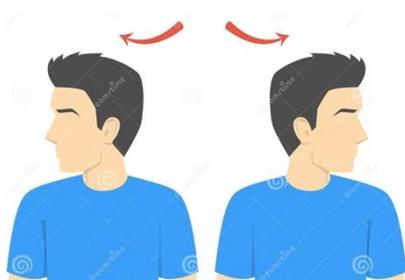


Dorsiflexion

Dorsiflexion

BEYOND

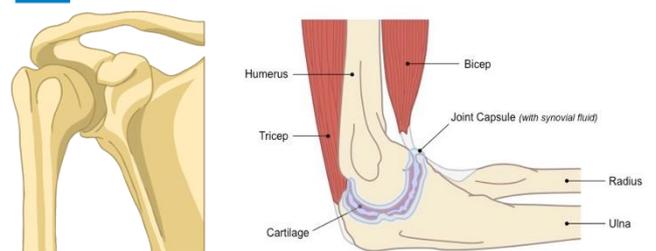
23.



Rotation

BEYOND

24.



Examples of Synovial Joints

END

18.

Sideways movement towards the centre of your body.

The backwards pull of breaststroke is an example of adduction.

BEYOND

17.

Sideways movement away from your body.

Lifting your arm from your side is an example of abduction.

Can you give another example of abduction?

BEYOND

20.

Extension means straightening a part of the body. It makes the angle of the joint larger.

An example of extension is straightening your leg at the knee.

Questions – which muscle is responsible for extension at the knee?

BEYOND

19.

Flexion is bending a part of the body. It makes the angle of the joint smaller.

An example of flexion is a bicep curl.

BEYOND

22.

This is flexion of the ankle joint, bringing the toes towards the shin.

Question – what is the scientific name for the shin bone?

BEYOND

21.

This is extension of the ankle joint to point the toes towards the floor.

BEYOND

24.

Ball and socket joints – provide a large range of movement.

Hinge joints – allow movement in one direction.

Can you give an example of a ball and socket joint and a hinge joint?

BEYOND

23.

Rotation is a turning point around an imaginary line.

Turning your head from side to side is an example of rotation.

Rotation is a common movement at ball socket joints.

BEYOND