

Joints

Cartilage,
ligaments and
tendons



Moving Our Bodies

The human body moves in many different ways.

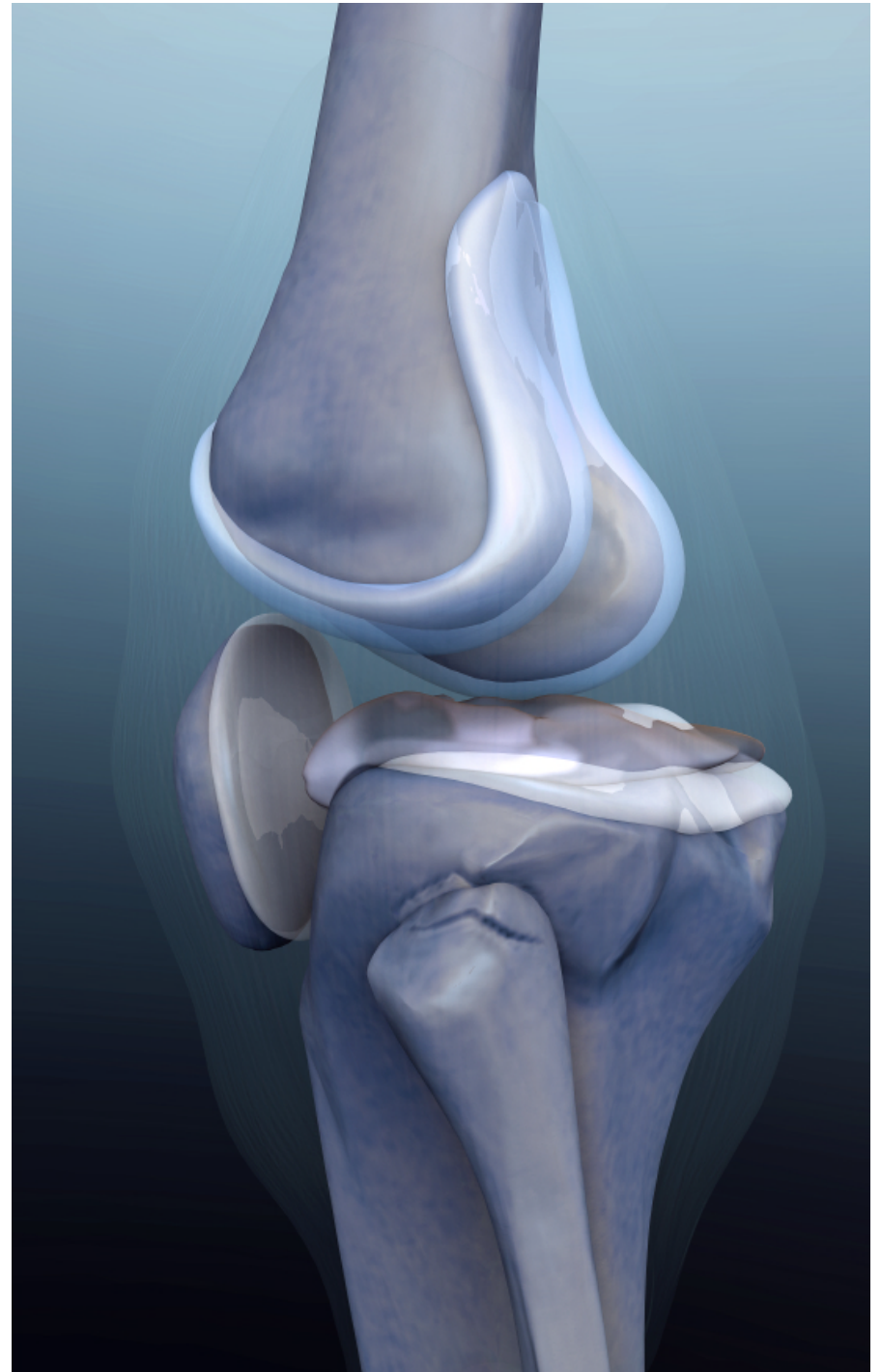
You can turn, bend, twist, and stretch.



Joints

Joints are formed where the surfaces of two or more bones meet.

We can breathe, bend our limbs and wriggle our fingers because of our joints.

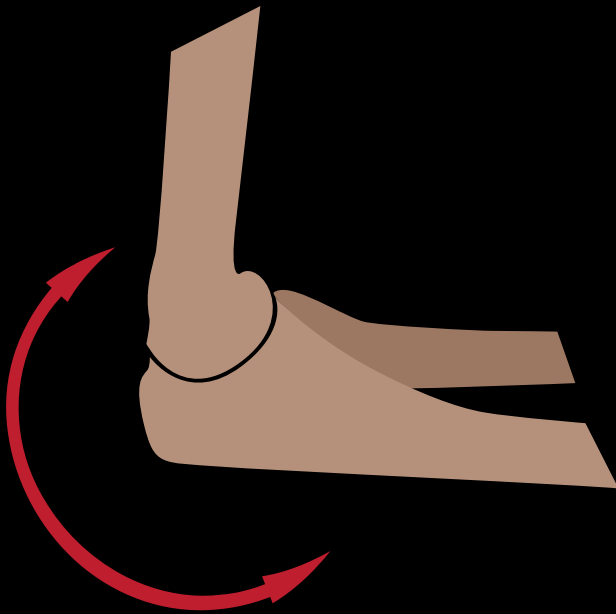


Joints allow both movement and flexibility.

When you turn your head, bend your knees, or twist your wrists, your joints are in action.



Types of movable joints



hinge



ball and socket



pivot

Some joints move in only one direction

Elbow and knee joints only move in one direction.

These are hinge joints that only allow movement in one direction.

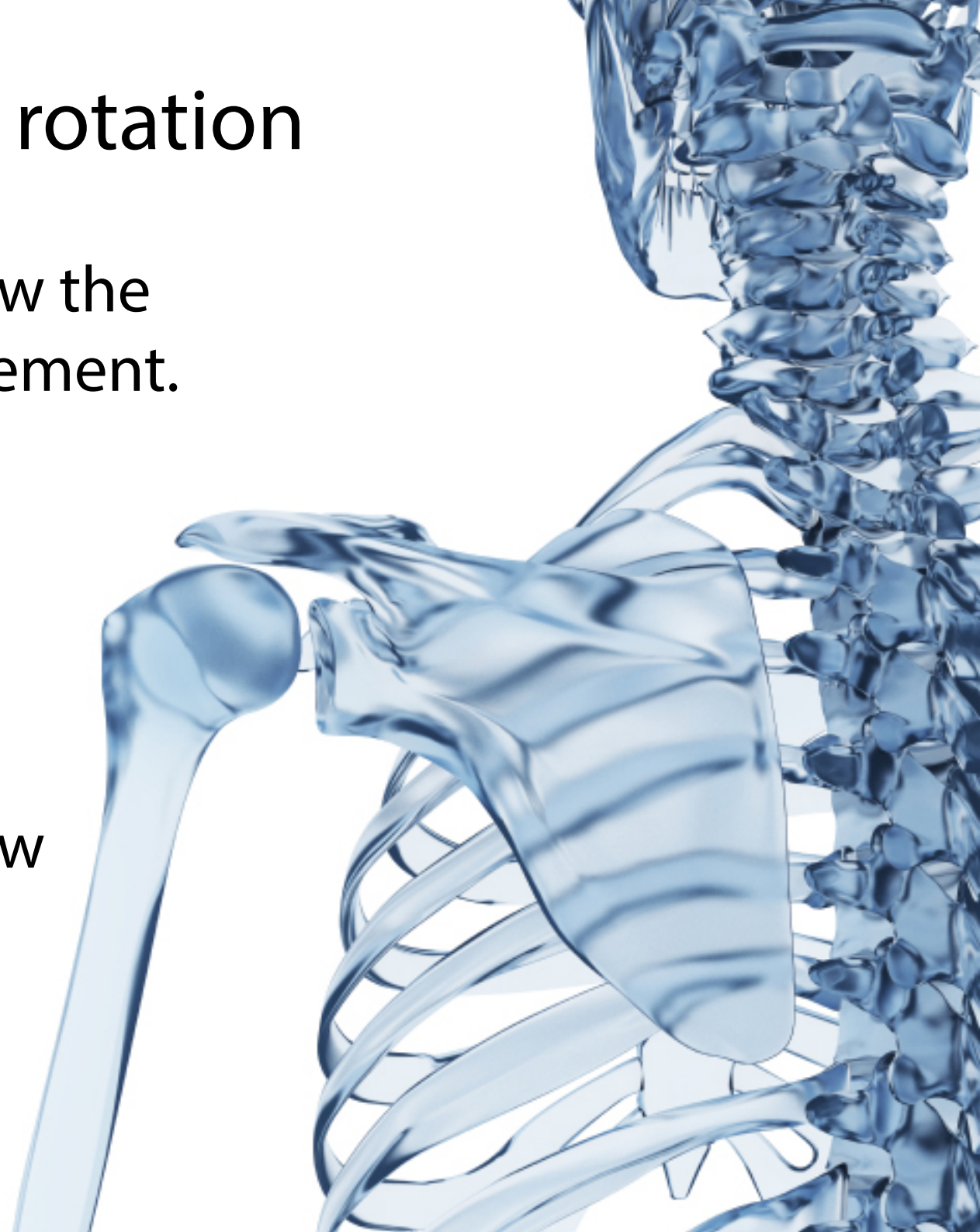


Some joints enable rotation

Ball and socket joints allow the greatest freedom of movement.

Your hips and shoulders are examples of ball and socket joints.

Ball and socket joints allow you to swing your arms in circles, dance, leap and do the splits.

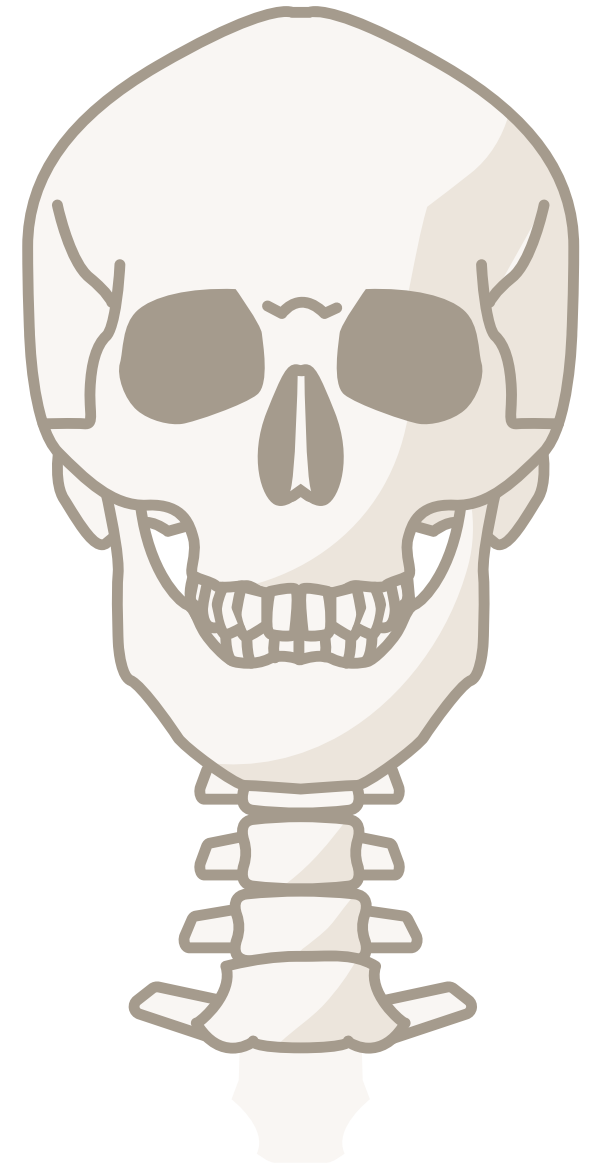


Some joints enable pivoting

Pivot joints only allow movement from side to side.

The joint between the first two vertebrae in your neck, near your skull is a pivot joint. It allows you to turn your head from side to side.

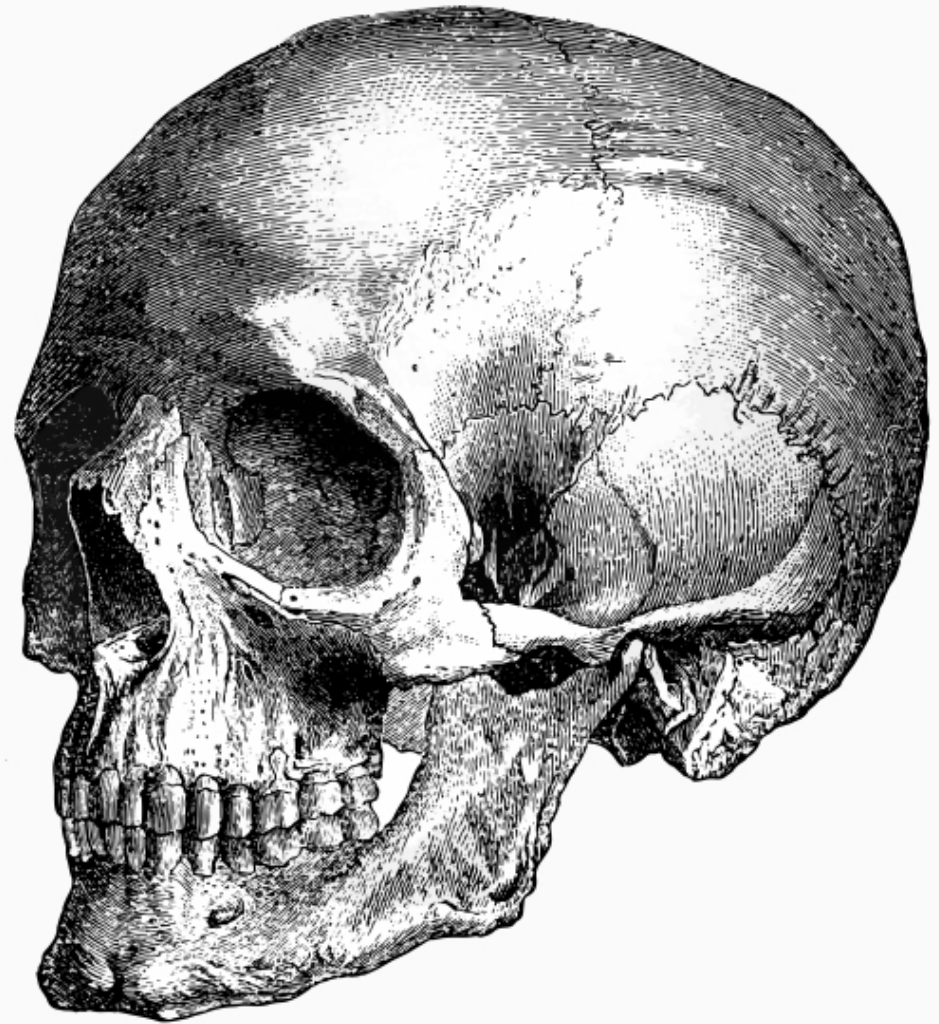
The other two pivot joints in your body are found in your wrist and elbow. These joints let you rotate your forearm so you can turn your hand over..



Some joints are fixed

Some joints do not move.
These are called fixed
joints.

The skull is made of bony
plates, which fuse together
as you grow through your
childhood. These bones
become immovable to
protect the brain.

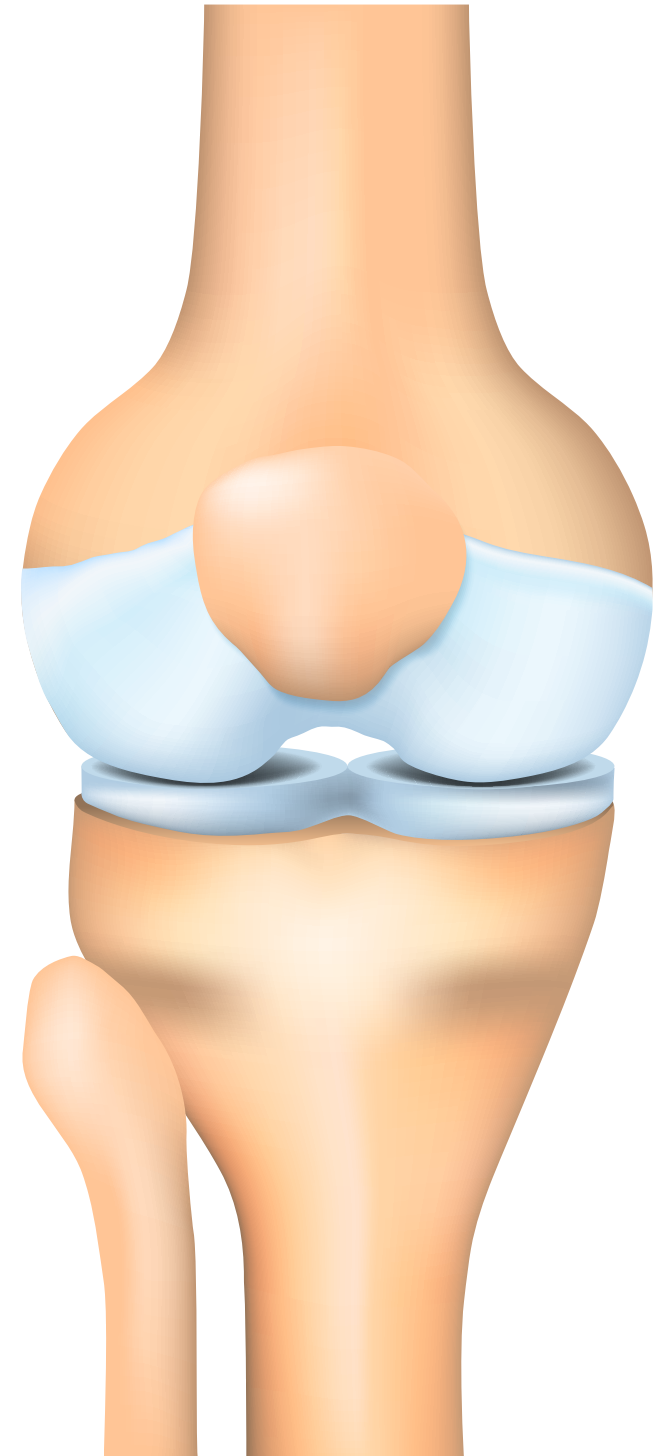


What protects our joints from damage?

Cartilage is the connective tissue found between bones.

It acts as a cushion to stop bones from grinding together and wearing away.

Cartilage is soft, flexible and strong.



Cartilage also gives soft body parts like your ears and nose structure. There is no bone at the tip of your nose.



Gently wiggle the tip of your nose with your finger. Can you feel the cartilage in your nose?

What holds our joints together?

Ligaments are soft tissues made of collagen that connect our bones together at the joints.

Tendons are soft tissues that connect our muscles to the bones.

Cartilage, ligaments, tendons and muscles work together to support our joints so we can move efficiently.

