

Name:

Wednesday

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Science

The Skeletal System

The **skeleton** is made up of all the bones in the body. There are about **206** bones in the body of an adult human.

The skeleton has three functions:

1. supports the weight of the body
2. enables it to move
3. protects vital organs

The **skull** protects the brain and forms the shape of the face. The **spine** is made up of **vertebrates** that support and protect the spinal cord.

The **ribs** protect the **heart, lungs** and other **organs in the chest cavity**.

Bones are made of different kinds of tissues. Some bones are hollow.

These are light and strong. The outer part of bones is made of hard bone tissue. The hardness is crystals of calcium.

Where two bones meet is called a **joint**. The joints are held together by connective tissue called **ligaments**.

The ends of all bones are coated with a layer of rubber-like tissue called **cartilage**.

This cushions the bones and helps them to move against each other smoothly.

There are four common types of joints found in the body that allow movement and one that does not. These joints are: -

Hinge Joints – Allow bones to move against each other like the hinges on a door. These allow joints to flex (bend) and extend (straighten out). E.g.: knee, elbow and fingers.

Ball and Socket Joints – Allow joints to move in a circle (rotate). E.g.: shoulder, hip, ankle and wrist.

Pivot Joints – Allow joints to move from side to side. E.g.: - neck

Plane Joints – Allow joints in the hand to glide over each other and allows the spine to bend and twist

Suture Joints – do not allow movement. These are called **immovable joints**. E.g. skull.