Arm and leg bones

Arms and legs are strong tubes of bone. The ends of each bone are shaped to allow them to move.

The arms, legs, hands and feet are mostly made of long, thin, tubular bones with nobbly ends. In between the long bones are pebble-shaped bones (for example in your wrists). This arrangement gives you the chance to move your arms and legs in an amazing number of ways.

Arms and legs

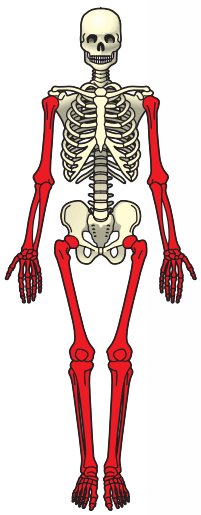
Arms and legs are each made of three bones: one in the upper half of the limb and two in the lower half.

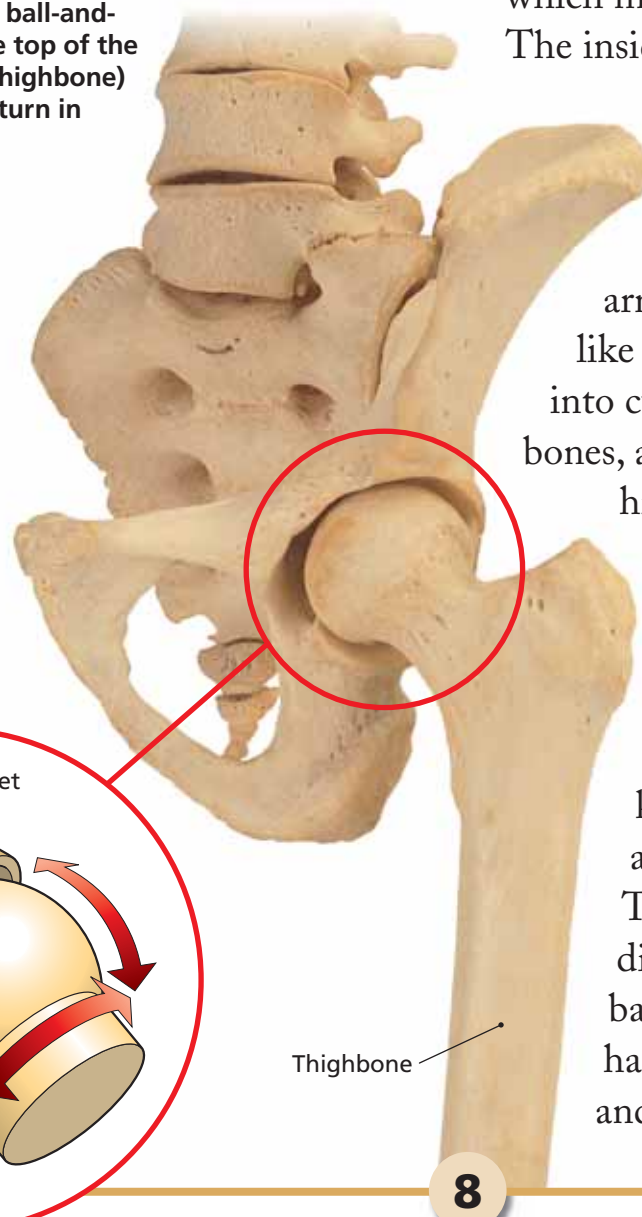
If they were solid, these bones would be extremely heavy. They would also be more **BRITTLE** and liable to break. Instead, they are in the form of tubes, which makes them lighter and stronger. The inside of the bones is not hollow. It contains a substance called **MARROW**, which makes blood for the body.

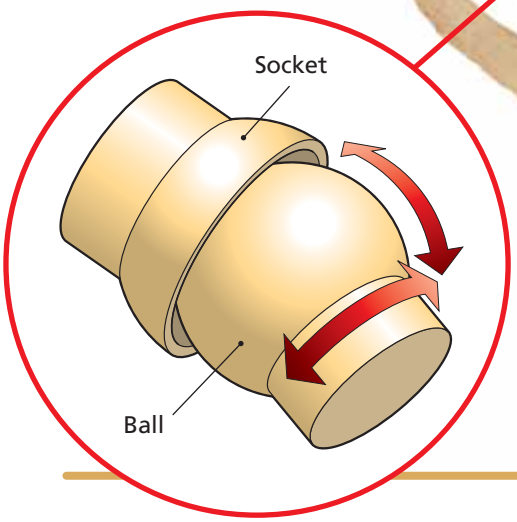
The upper ends of the upper arm and leg bones are shaped like round balls. The arm bones fit into cup-shaped hollows in the collar bones, and the leg bones fit into a broad hipbone called the pelvis. Being ball-shaped at the ends allows the arm and leg bones to move in many directions (Picture 1).

The other ends of the arm and leg bones (at your knees, feet, hands and elbows) are not ball-shaped (Picture 2). These bones only move in one direction. If these bones also had ball-shaped ends it would be much harder to control how your arms and legs moved.

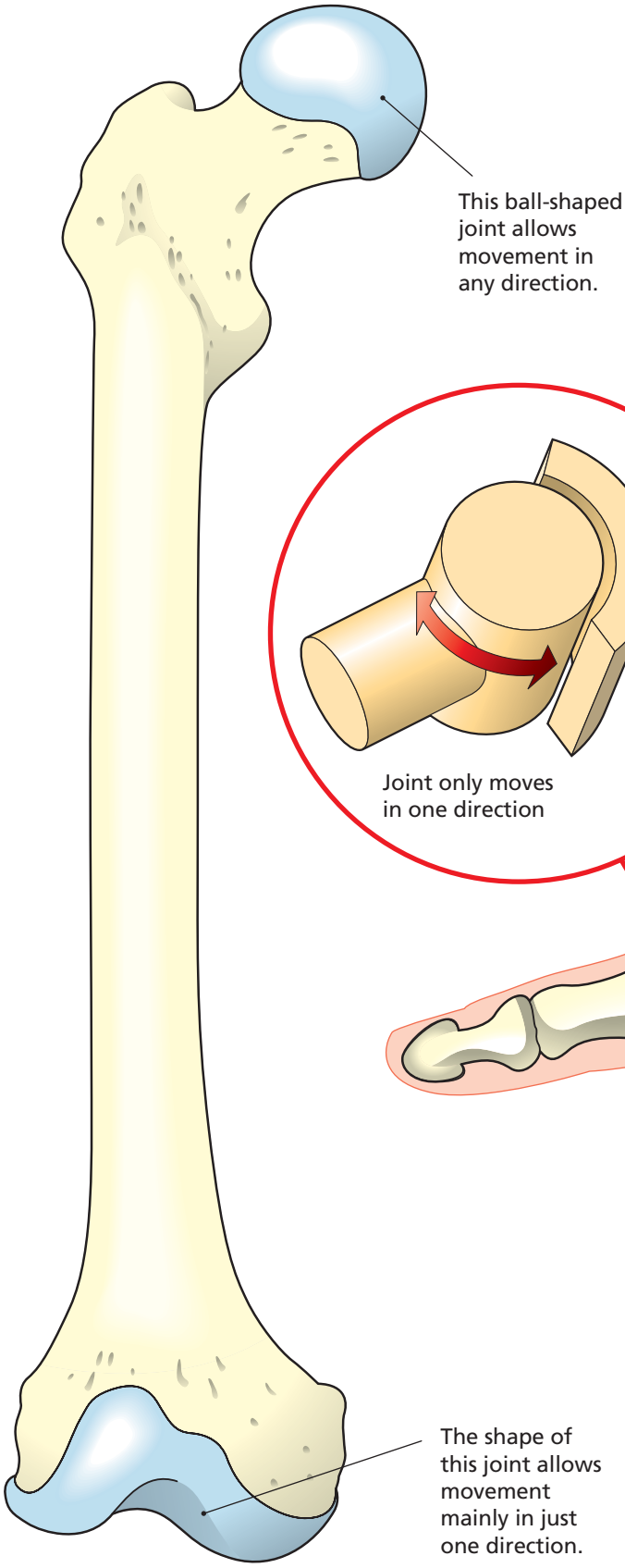
▼ (Picture 1) The ball-and-socket joint at the top of the upper leg bone (thighbone) allows the leg to turn in many directions.





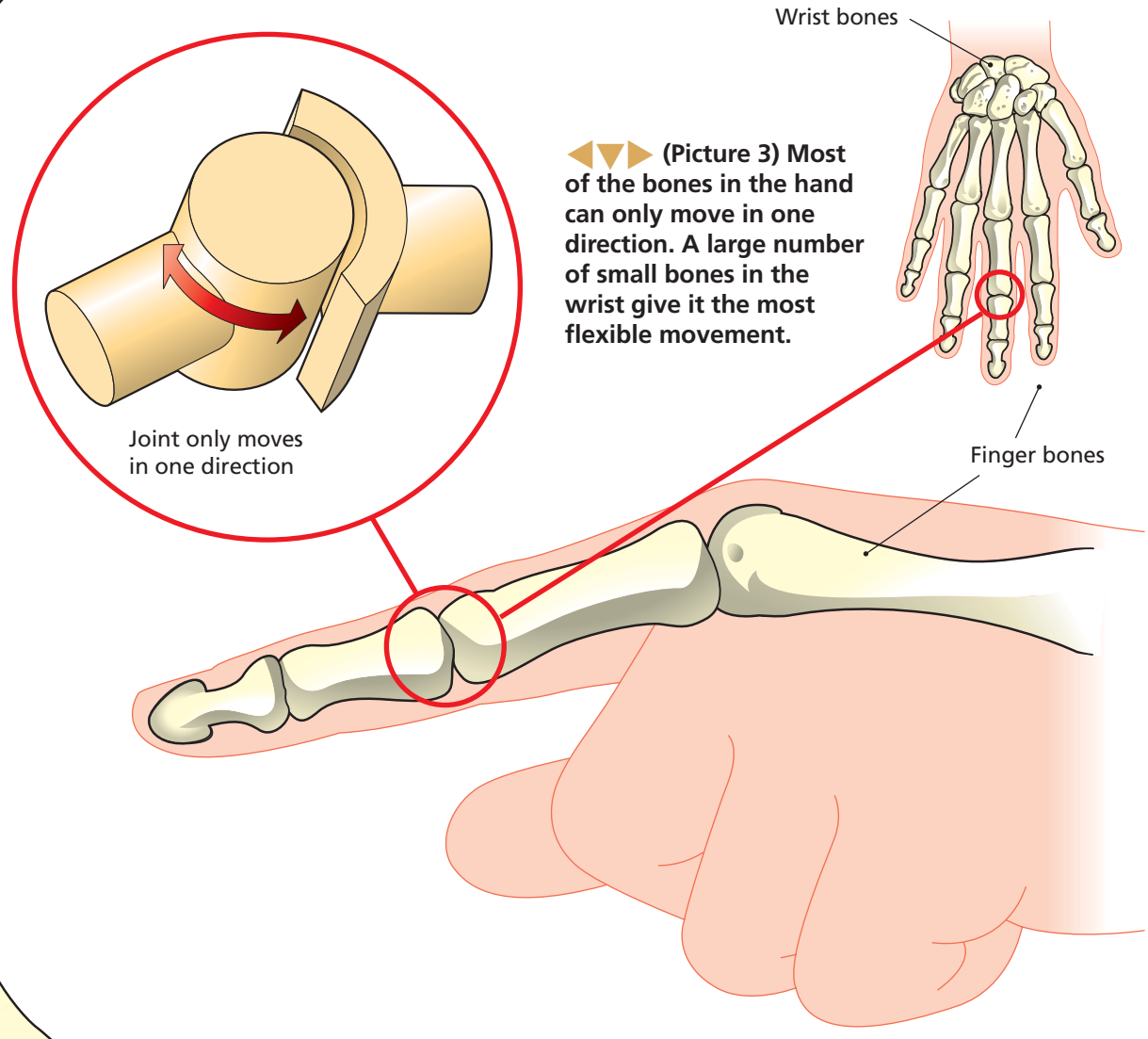


▼ **(Picture 2) Notice how the shape of the ends of the thighbone are different.**



Hands and feet

Your hands and feet are made of many small bones (Picture 3). This gives them enormous flexibility. Again, some have straight joints and others more rounded joints. Just as in the arms and legs, this combination of joints allows you to keep easy control of your movements.



◀▼▶ **(Picture 3) Most of the bones in the hand can only move in one direction. A large number of small bones in the wrist give it the most flexible movement.**

Summary

- **Arms and legs are made up of long, tubular bones.**
- **The ends of the bones are shaped to allow one bone to move against another.**

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