The Structure of Bone

The **exterior of a bone** is covered by periosteum and the joint ends are protected by articular cartilage.

In a **long bone**, the shaft is called the diaphysis. The end nearest the midline of the body is the proximal epiphysis and the end furthest from the midline is the distal epiphysis. Bone growth occurs at the epiphyses.

The **compact bone** of the shaft provides strength, while the medullary cavity reduces the weight of the bone.

This **cavity is lined** with endosteum and filled with fatty yellow bone marrow.

**Spongy bone** is porus, light in weight, and very important because it contains red bone marrow that are hematopoietic. Hematopoietic means they produce essential blood cells.