

# Anatomy of a Bone -Coloring

**EPIPHYSIS (a)** - at the ends of the bone (do not color)

The epiphysis has a thin layer of compact bone, while internally the bone is cancellous. The epiphysis is capped with articular cartilage.

**EPIPHYSEAL LINE (j)** - purple

The epiphyseal line or disk is also called the growth plate, it is found on both ends of the long bone.

**DIAPHYSIS (shaft) (b)** - do not color

The diaphysis is the shaft of the long bone. It has compact bone with a central cavity.

**ARTICULAR CARTILAGE (c)** - green

The articular cartilage is found on the ends of long bones. It is smooth, slippery, and bloodless. Color both ends.

**PERIOSTEUM (d)** - dark blue

Periosteum is a vascular, sensitive life support covering for bone. It provides nutrient-rich blood for bone cells and is a source of bone-developing cells during growth or after a fracture. Color both sides, it is the outermost layer.

**CANCELLOUS (spongy) BONE (e) and MARROW (e)** - red

The cancellous bone is found mainly within the epiphysis and has a textured appearance where it contains red marrow. Color both ends.

**COMPACT BONE (f)** - pink

The compact bone is a dense bone found in the diaphysis. Its repeated pattern is arranged in concentric layers of solid bone tissue. The compact bone can be seen as the layer just underneath the periosteum, color both ends.

**MEDULLARY CAVITY (g), YELLOW MARROW (g)** - yellow

The medullary cavity of the diaphysis serves to lighten bone weight and provide space for marrow. Yellow marrow is associated with fat.

**ENDOSTEUM (h)**- light blue. This tissue lines the medullary cavity of bone.

1. Where do you find yellow marrow (be specific)? \_\_\_\_\_
2. What type of bone is arranged in concentric layers? \_\_\_\_\_
3. Where do you find red marrow? \_\_\_\_\_
4. What is the end of the bone called? \_\_\_\_\_
5. Spongy bone is also called \_\_\_\_\_ bone.
6. What cushions the ends of bones at their joints?  
\_\_\_\_\_

