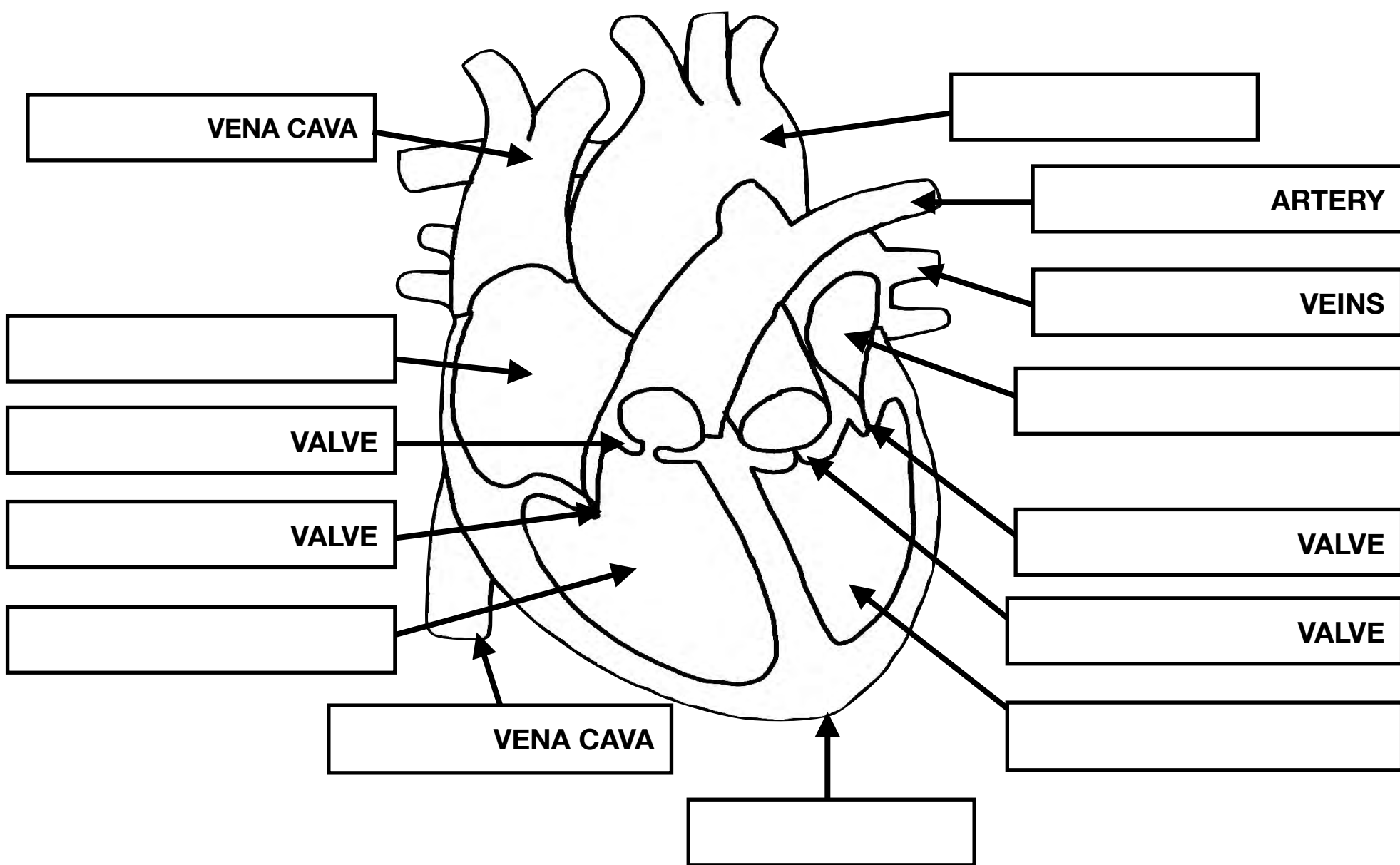


# CARDIOVASCULAR SYSTEM



The **Cardiovascular System** includes the \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

The main function of the Cardiovascular System is to transport substances, nutrients and \_\_\_\_\_ to tissues and cells all over the body.

**Atrium** = Blood goes \_\_\_\_\_ heart.

**Ventricles** = Blood goes \_\_\_\_\_ heart.

The **three layers** of the heart are:

\_\_\_\_\_ = outermost layer \_\_\_\_\_ = middle layer \_\_\_\_\_ = innermost layer

**Tricuspid** "Triangle" = the right AV valve with \_\_\_\_\_ flaps.

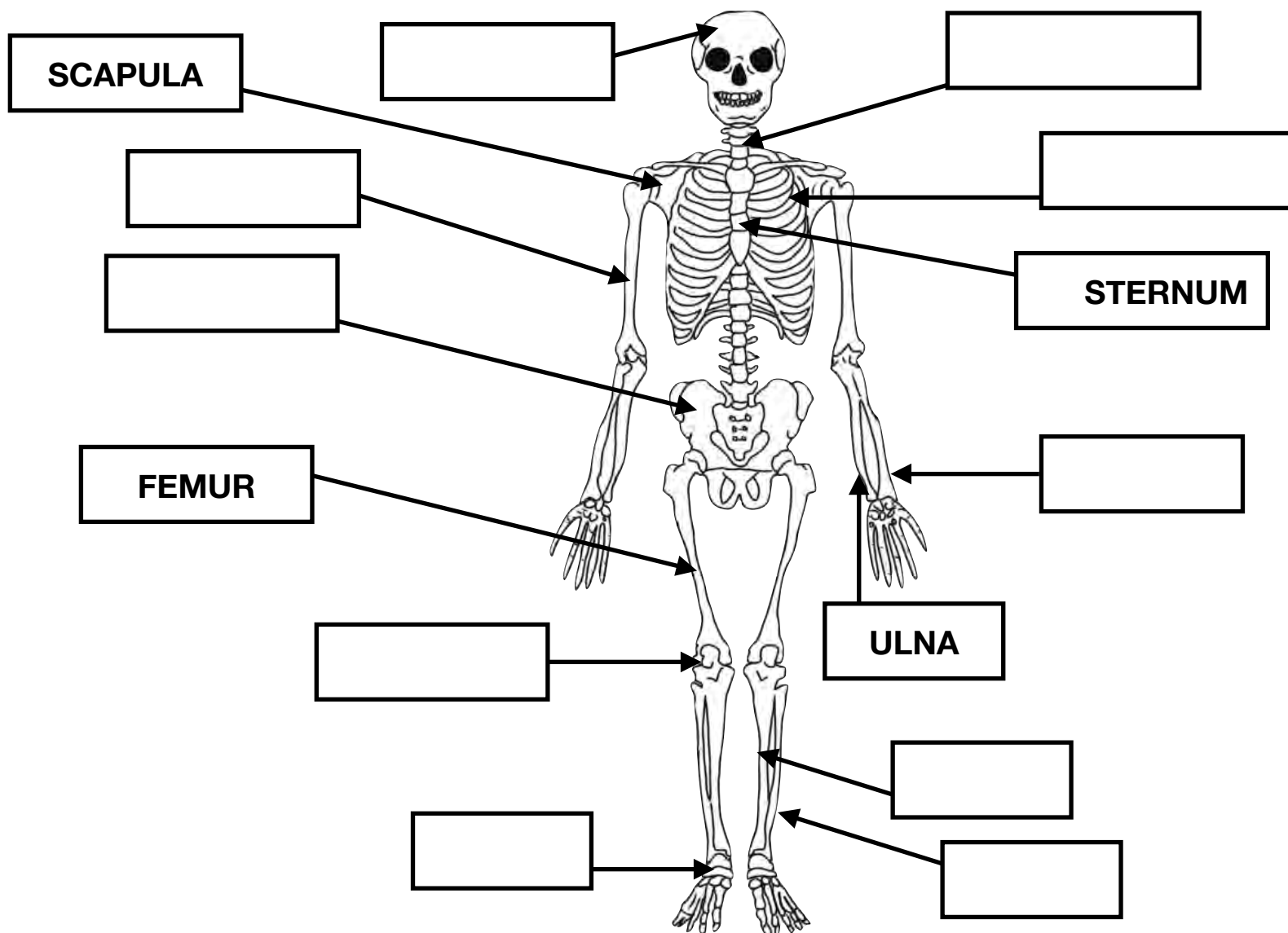
**Bicuspid** "BI=2" = the left AV valve with \_\_\_\_\_ flaps.

**Contraction** of the heart is called \_\_\_\_\_ meanwhile **relaxation** of the heart is called \_\_\_\_\_.

The **first heart sound** "LUB" in the cardiac cycle is caused by a closing of the \_\_\_\_\_ valves. The **second heart sound** "DUB" is due to closing of the \_\_\_\_\_ valves.

**Normal Pulse:** 60-100, **Normal BP:** 120/80

# SKELETAL SYSTEM



The **Skeletal System** includes the \_\_\_\_\_, tendons, ligaments, and cartilage.

The **functions** of the skeletal system includes supporting the body, protecting \_\_\_\_\_, movement, storage of calcium, and blood cell formation.

The Skeletal System is divided into the Axial & Appendicular skeleton. The **Axial Skeleton** include the longitudinal axis of the body bones (ribs, sternum, skull, vertebral column), while the Appendicular Skeleton include the \_\_\_\_\_ (arm, legs, hips).

The two types of **bone tissue** are: compact and \_\_\_\_\_ bone.

Bones can be classified into **four shapes**: long, short, flat, and irregular.

\_\_\_\_\_ : humerus of arm

\_\_\_\_\_ : sternum

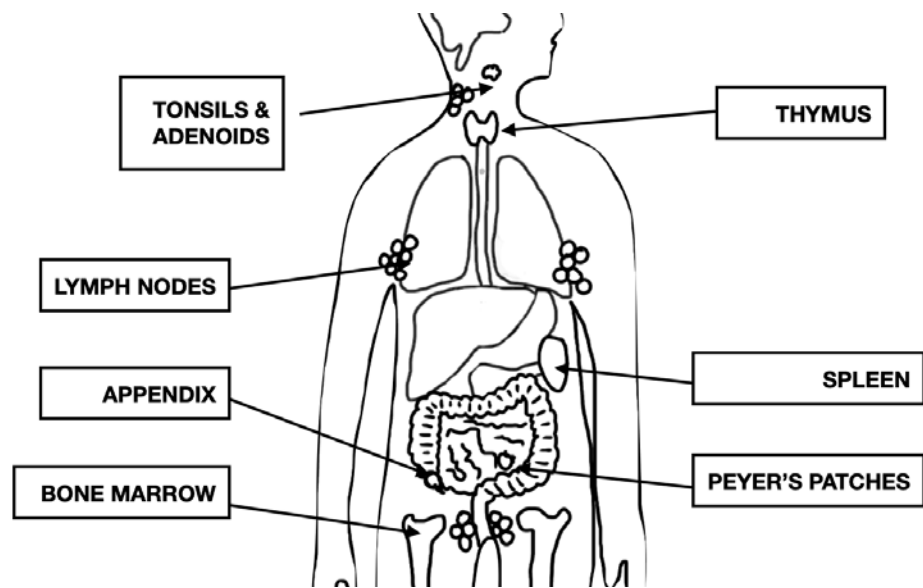
\_\_\_\_\_ : vertebra

\_\_\_\_\_ : carpal of wrist

Mature bone cells are called \_\_\_\_\_.

The types of **Bone Marrow** are: \_\_\_\_\_ produces red blood cells, and \_\_\_\_\_ is made up of adipose tissue.

while B cells from Red Bone Marrow provide **antibodies** to prevent future attacks. The largest organ of the body that provides external protection is the **SKIN**. Other mechanisms of external defense are mucous membranes, skin secretions, and cilia in the nasal cavity. Internal defenses system include **PHAGOCYTES** that eat bacteria, the inflammatory response (heat, redness, swelling, **PAIN**), and antimicrobial proteins. A virus,



bacteria, fungi, pollen, toxin is a type of **ANTIGEN**, and an **ANTIBODY** is used to bind to an antigen to reduce or stop its progression.

## MUSCULAR SYSTEM

The **Muscular System** is made up of skeletal, cardiac, and smooth muscle. The functions of the muscular system are to produce **MOVEMENT**, maintain posture, stabilize **joints**, and generate **HEAT**. The outer layer of muscle is called the

**epimysium**, middle layer is the perimysium, and the inner layer is called the endomysium.

**Flexion** : a movement that decreases the angle of a joint. "Coming Together"

**Extension** : a movement that increases the angle of a joint. "Distancing Apart"

**Abduction** : moving a limb away from the middle of the body.

**Adduction** : moving a limb towards the middle of the body.

**Rotation** : movement of a bone around a longitudinal axis.

**Eversion**: moving the foot laterally **Inversion**: moving the foot inward (invert)

**Supination**: palms facing up (anterior) **Pronation**: palms facing down (posterior)

