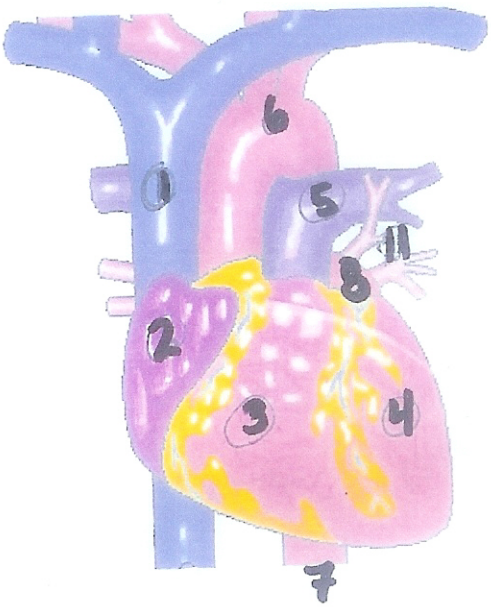
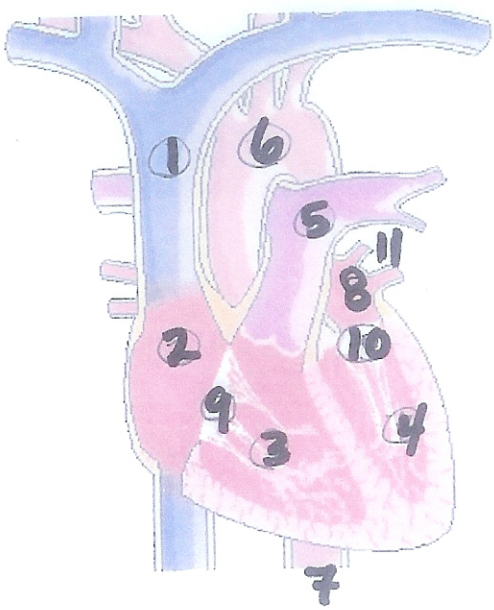
Key Anatomy 2009

Human Heart Picture (Surface View)



Heart (Cut View)



Listed below are some anatomical terms for the human heart as diagramed from the surface and cut views. On the right side please identify by number of the corresponding part labeled 1 thru 11.

3	Tricuspid Valve	9
7	Left Atrium	8
1	Superior Vena Cava	1
11	Descending Aorta	7
2	Right Atrium	2
9	Left Ventricle	4
10	Arch of Aorta	6
4	Right Ventricle	3
5	Pulmonary Artery	5
6	Pulmonary Vein	11
8	Mitral Valve	10

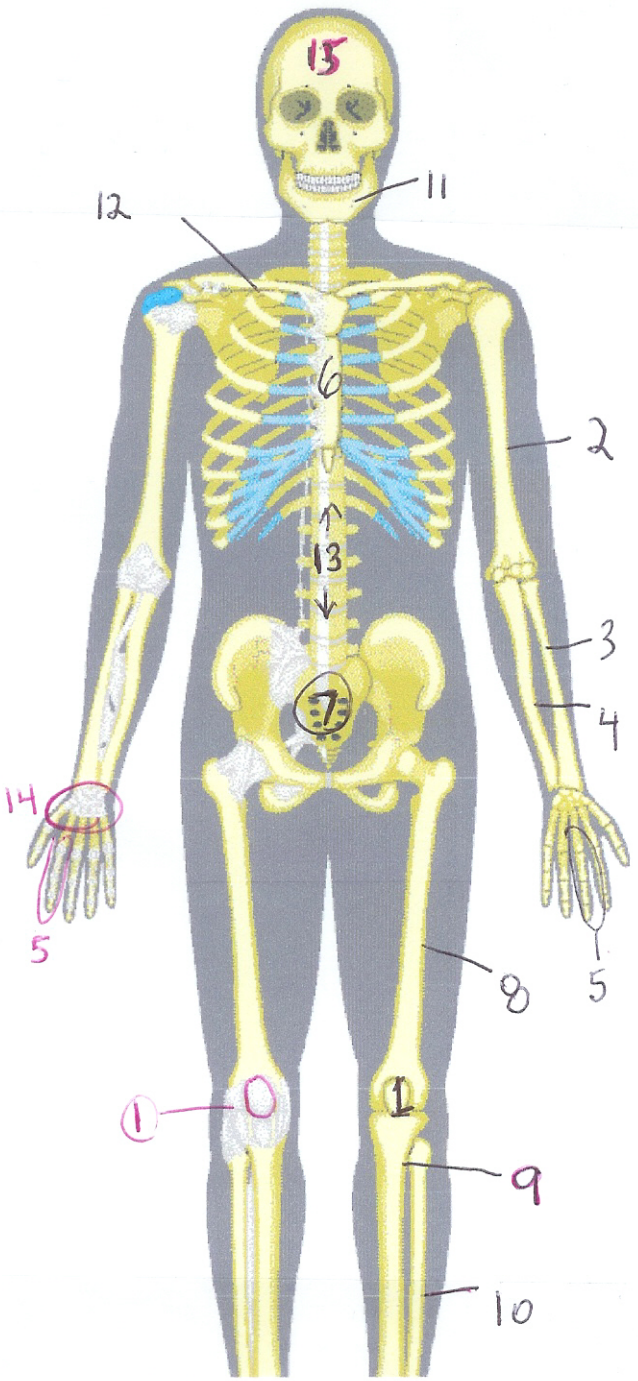
In the left column please trace the path of a red blood cell from the Vena Cava, through valves and chambers of the heart, towards the lungs to get oxygen, and then exiting the heart to take oxygenated blood to the body.

Key

1. patella
2. humerus
3. radius
4. ulna
5. phalanges
6. sternum
7. sacrum
8. femur
9. tibia
10. fibula
11. mandible
12. clavicle
13. spine
14. carpus (wrist for.s)
15. skull

Word Bank for Skeletal Anatomy:

Skull
femur
patella
mandible
tibia
sacrum
sternum
ulna
femur
clavicle
fibula
phalanges
radius
carpus
spine
humerus



Two point questions:

Give an example of a ball and socket joint. ***Hip and shoulder joints,*** *(these allow for complete range of motion)*

Give an example of a hinge joint. ***Elbow, fingers, toes, and knees,*** *(like a door hinge these bend and extend).*

Give an example of a pivot joint. ***Axis/atlas and the proximal radioulnar joint*** *(one bone pivots in the arch of another)*

Humans have _*7*_number of cervical vertebrae.

Humans have _*12*__number of thoracic vertebrae

Humans have _*5*__number of lumbar vertebrae.

Short answer questions: 3 points for each answer

Describe the key role of iron in the circulatory system. *Iron is part* ***of hemoglobin*** *which is the carrier of oxygen in the red blood cells.*

What is the difference between an osteoclast and an osteoblast? *An osteoblast is a* ***bone forming*** *cell, an osteoclast is a* ***bone absorbing cell*** *that break down bone tissue and are important for healing and remodeling*

Where does hematopoiesis take place? *In the* ***red bone marrow***

Define hypertension and why it can cause problems: ***High blood pressure*** *which stresses the heart, blood vessels, and stresses other parts of the body that involve blood flow. Can lead to* ***stroke and cardiovascular disease***

Define hypotension and why it can cause problems: ***Low blood pressure****. Problems can range from light-headed feelings (dizzy) to death if the tissues cannot be adequately perfused by the circulatory system*

Explain the positive effects of exercise on the skeletal system: ***strengthen bones*** *because they are constantly remodeling in response to stress, this decreases the loss of calcium and minerals and helps to* ***mobilize the joints****,*

Explain the difference between an exoskeleton and an endoskeleton: *An* ***exoskeleton is outside*** *the body, for example an insect or crustacean.* ***Endoskeleton is inside the body*** *(humans)*

What is the purpose of platelets? *They are a key player in* ***clot formation and stopping bleeding****.*

What is the largest single bone in the human body? ***Femur***

Do all arteries carry oxygenated blood? Explain your answer. *Almost all arteries carry oxygenated blood. Arteries carry blood away from the heart. The* ***exception is the pulmonary artery*** *carries unoxygenated blood from the right ventricle to the lungs where is becomes oxygenated and returns to the heart through the pulmonary vein.*