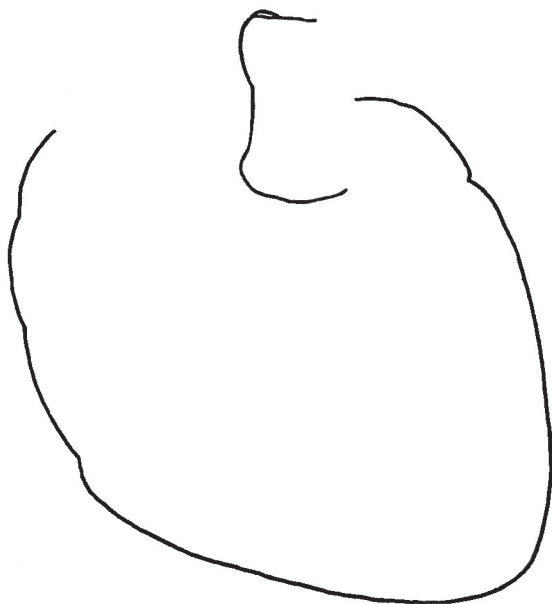


THE HEART

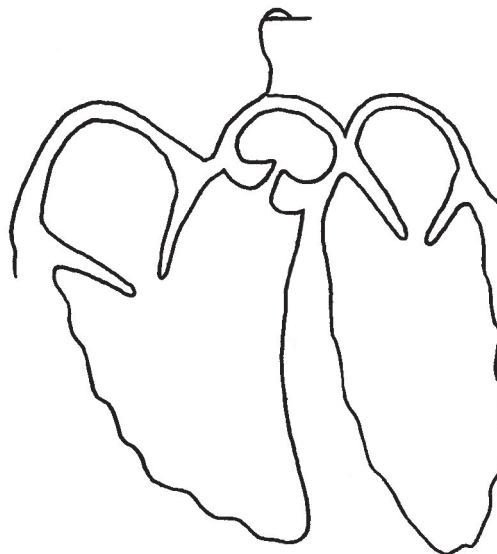
ARTERIES go away from the heart. VEINS go toward the heart.

EXTERIOR ANATOMY



The **pericardium** is a membrane "bag" that goes around (peri) the heart (cardi).

INTERIOR ANATOMY

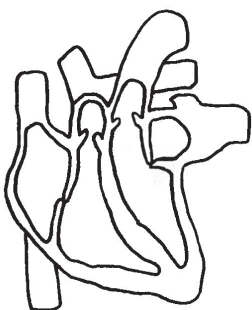


VALVES:

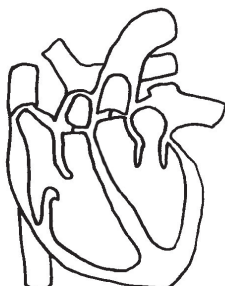
- 1: Tricuspid
- 2: Bicuspid (a.k.a. mitral valve)
- 3: Semilunar valves

"LUB DUB" (the cardiac cycle)

The familiar "lub dub" sound of a beating heart is made by the valves opening and closing.



The first sound, the "lub," is when the cuspid flaps close.

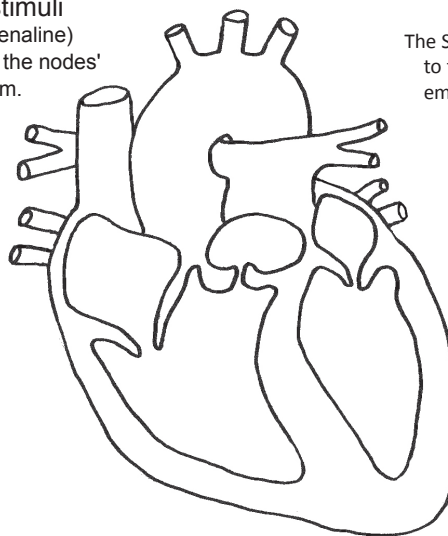


The second sound, the "dub," is when the semilunar flaps close.

Intrinsic Conduction System

(how the heart beats in rhythm)

Extrinsic stimuli (such as adrenaline) can override the nodes' normal rhythm.



The SA and AV nodes began to function very early in embryonic development. An embryo's heart cells begin beating in rhythm long before the shape of the heart has been completed.

The two phases of rhythm:

- 1) _____ : _____
- 2) _____ : _____