VI. CIRCULATORY SYSTEM

1. purpose of system:

2. annelids:

3. arthropods / open circulatory system:

A. Vertebrate Circulatory Systems

1. arteries

a. structure:

b. direction:

c. pressure:

2. capillaries

a. structure:

b. function:

3. veins

a. direction:

b. pressure:

c. unidirectional valves:

B. Patterns of Circulation in Vertebrates

1. fish (+ problem):

2. other higher animals

a. pulmonary circuit:

b. systemic circuit:

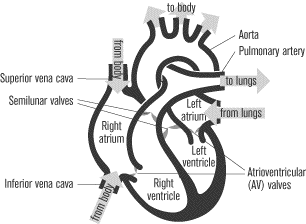
C. The Heart

1. 2 chamber hearts

a. what organisms?

b. inefficiency:

2. 4 chamber hearts

 a. what organisms?

b. atria:

c. ventricles:

3. blood flow

a. receives blood from body:

i. veins bringing blood:

b. pumps blood to lungs:

c. receives blood from lungs:

d. pumps blood to body:

i. aorta:

4. control of beating

a. cardiac muscle:

b. sinoatrial nerve:

c. atrioventricular nerve:

D. The Blood

1. Plasma:

2. Red blood cells:

a. hemoglobin

3. white blood cells:

4. platelet:

a. thromboplastin:

b. fibrinogen / fibrin:

E. Blood Types

1. antigens:

2. antibodies: