

Blood Vessels

Text: Human Biology, by Mader. pp. 92-93; 102-105

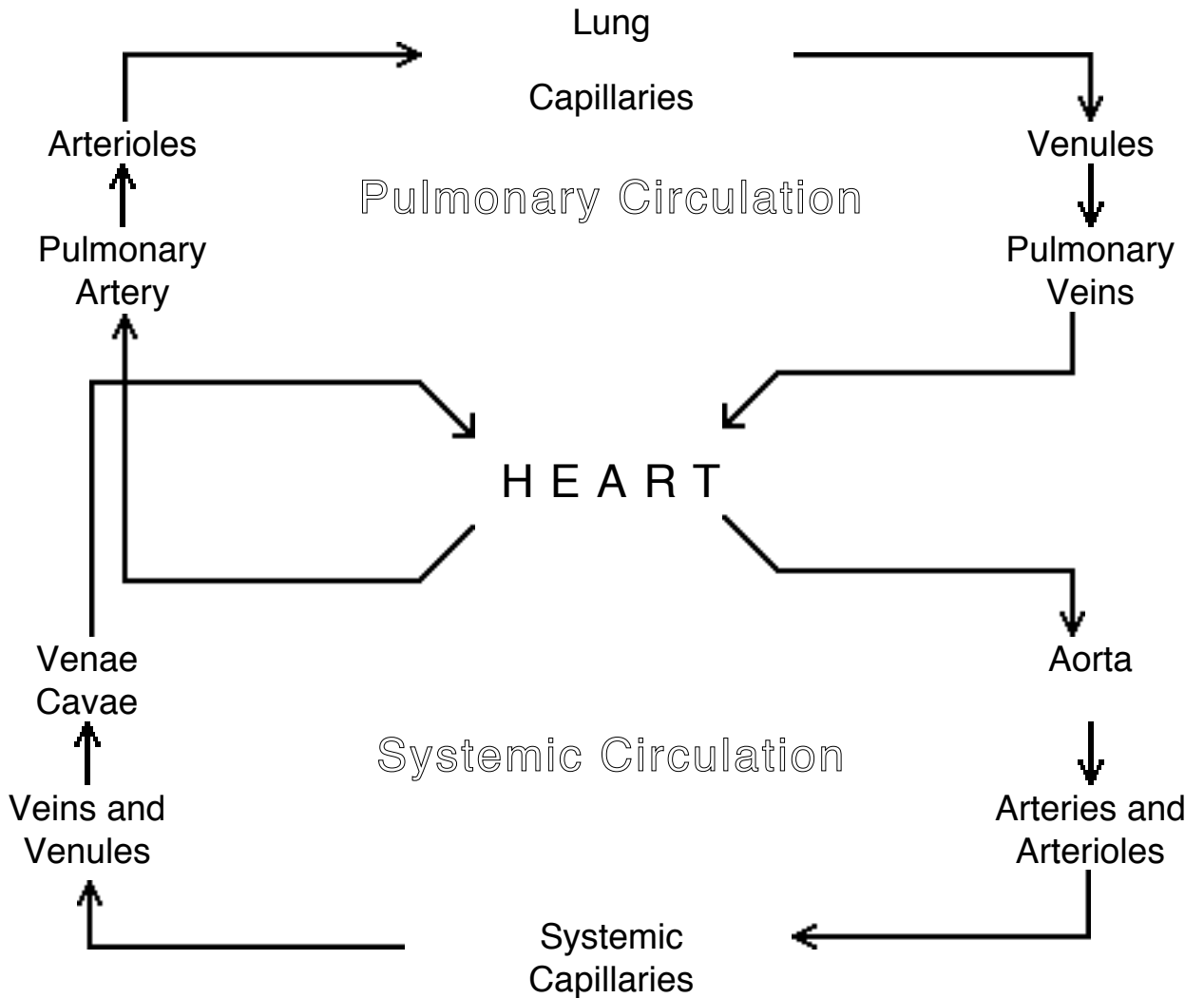
1. Overview of Blood Circulation (p. 102 - 103)

A. Closed System

- Lumen

B. Double Circulatory System

- Pulmonary Circulation
- Systemic Circulation



C. Divisions of Vessel Systems

- i. Arterial Division
- ii. Venous division
- iii. Portal System

2. Arteries (See figure 5.2, page 93)

A. Histology: Tissue Layers

- i. Endothelial Layer
- ii. Muscular Layer
- iii. Fibrous Connective Tissue Layer

B. Types

- i. Elastic
- ii. Muscular
- iii. Arterioles
 - Constriction

3. Capillaries (p. 93 - 94)

A. Precapillary Sphincters

. Capillary Blood Flow

- i. Autoregulation

4. Veins
 - A. Venules
 - B. Veins
 - i. General Characteristics
 - ii. Valves
 - iii. Skeletal Muscle Pump
5. Venous Portal Systems
 - A. Hepatic Portal System (p. 104)
 - i. Hepatic Portal Vein
6. Physiological Issues of Blood Flow
 - A. Pulse
 - B. Blood Flow
 - i. Blood Pressure
 - a. Systolic Pressure
 - b. Diastolic Pressure
 - Normal: 120/80 mm Hg
 - C. Capillary Exchange (page 104, see figure 5.12)