

NAME: \_\_\_\_\_

Grade: \_\_\_\_\_/100

### BIO132 - Blood Tracing Assignment

Instructions: Using the information in Lab #8, complete the following pathways to reflect proper blood flow through the heart and blood vessels. Include all arteries, veins, heart chambers, & valves. **You must get ALL blood vessels correct in order to get credit for each tracing.** Tracing # 1, 2, and 4 are worth 20points each, #3 is worth 40pts. To determine how this assignment will effect your grade, multiply your score by 0.02%. It is worth 2% of your total course grade.

#### 1. Circulation in the Heart: Superior Vena Cava → Aorta

Superior Vena Cava → \_\_\_\_\_ → \_\_\_\_\_ →  
\_\_\_\_\_ → Pulmonary Valve → \_\_\_\_\_ →  
\_\_\_\_\_ → Lungs (Pulmonary Capillaries) →  
\_\_\_\_\_ → \_\_\_\_\_ →  
\_\_\_\_\_ → Left Ventricle →  
\_\_\_\_\_ → Aorta.

#### 2. Cranial Circulation: Brain → Heart → Brain

Brain → Internal and External Jugular Veins → \_\_\_\_\_ →  
\_\_\_\_\_ → \_\_\_\_\_ →  
\_\_\_\_\_ → Pulmonary Valve → \_\_\_\_\_ →  
\_\_\_\_\_ → Lungs → \_\_\_\_\_ →  
\_\_\_\_\_ → Bicuspid Valve → \_\_\_\_\_ →  
\_\_\_\_\_ → \_\_\_\_\_ → Brachiocephalic Artery  
→ \_\_\_\_\_ → Right side of Brain.

### 3. Visceral Circulation: Lungs → Heart → Lungs

Lungs → \_\_\_\_\_ → \_\_\_\_\_ →

\_\_\_\_\_ → \_\_\_\_\_ →

\_\_\_\_\_ → Aorta → (Each number below, at the beginning of the 'sentence', denotes a branch from the Aorta. Complete the local circulations in the order that they branch off of the Aorta until they return to the right atrium of the heart.)

1 → \_\_\_\_\_ → myocardium → \_\_\_\_\_ →

Right Atrium.

2a → Brachiocephalic Artery → \_\_\_\_\_ → Right Side of Head →

\_\_\_\_\_ & \_\_\_\_\_ →

\_\_\_\_\_ → Right Atrium.

2b → Brachiocephalic Artery → \_\_\_\_\_ → Right Shoulder and

Arm → \_\_\_\_\_ → \_\_\_\_\_ → Right

Atrium.

3 → Left Common Carotid Artery → \_\_\_\_\_ →

\_\_\_\_\_ & \_\_\_\_\_ →

\_\_\_\_\_ → Right Atrium.

4 → Left Subclavian Artery → \_\_\_\_\_ →

\_\_\_\_\_ → \_\_\_\_\_ → Right Atrium.

5a → Celiac Trunk → \_\_\_\_\_ (first branch) → \_\_\_\_\_

→ \_\_\_\_\_ → \_\_\_\_\_ → Right Atrium.

5b → Celiac Trunk → \_\_\_\_\_ (second branch) → \_\_\_\_\_

→ \_\_\_\_\_ → \_\_\_\_\_ → Right Atrium.

5c → Celiac Trunk → \_\_\_\_\_ (third branch) → Liver →

\_\_\_\_\_ → \_\_\_\_\_ → Right Atrium.

6 → Superior Mesenteric Artery → \_\_\_\_\_ →

\_\_\_\_\_ → \_\_\_\_\_ → Right Atrium.

7 → Renal Artery → \_\_\_\_\_ → \_\_\_\_\_ →  
\_\_\_\_\_ → Right Atrium.

8 → Inferior Mesenteric Artery → \_\_\_\_\_ → \_\_\_\_\_  
→ \_\_\_\_\_ → Right Atrium.

9 → Common Iliac Artery → Internal Iliac Arteries → \_\_\_\_\_ Common  
Iliac & External Iliac Veins → \_\_\_\_\_ → Right Atrium.

OR → External Iliac Arteries → \_\_\_\_\_ → Upper and Medial Leg →  
\_\_\_\_\_ → Femoral Veins → Iliac & External Iliac Veins →  
\_\_\_\_\_ → Right Atrium.

OR → External Iliac Arteries → Femoral Artery → \_\_\_\_\_ → Lower  
Leg and Feet → Tibial veins & \_\_\_\_\_ →  
\_\_\_\_\_ & \_\_\_\_\_ →  
Inferior Vena Cava → Right Atrium.

**Now return to the lungs from the Right Atrium → \_\_\_\_\_ →**  
\_\_\_\_\_ → \_\_\_\_\_ →  
\_\_\_\_\_ → \_\_\_\_\_ → Lungs.

#### **4. Systemic Circulation: Feet → Heart → Feet**

Feet → Tibial Veins → \_\_\_\_\_ & Internal & External Common  
Iliac Arteries → Inferior Vena Cava → \_\_\_\_\_ →  
\_\_\_\_\_ → Right Ventricle →  
\_\_\_\_\_ → \_\_\_\_\_ →  
\_\_\_\_\_ → \_\_\_\_\_ → Pulmonary Veins →  
\_\_\_\_\_ → \_\_\_\_\_ →  
\_\_\_\_\_ → Aortic Valve → \_\_\_\_\_ →  
\_\_\_\_\_ → External Iliac Arteries → \_\_\_\_\_ →  
\_\_\_\_\_ → Feet.