Body System: Cardiovascular

The heart is a very strong muscle that pumps blood through the arteries to all parts of the body (Picture 1). Blood comes back to the heart through the veins. It is pumped to the lungs where it picks up oxygen.

**Major arteries coming from the heart:**
- Aorta (1) – Large artery that pumps blood to the head, arms, and body.
- Pulmonary artery (2) – Pumps blood to the lungs.

**Major veins going to the heart:**
- Superior vena cava (3) – Large vein that brings blood from the head and arms back to the heart.
- Inferior vena cava (4) – Vein that returns blood to the heart from the legs and lower body.
- Pulmonary veins (5) – These veins bring oxygen-rich blood back to the heart from the lungs.

**Inside the Heart**

**Chambers**
There are 4 chambers in the heart:
- Right atrium (6) – Blood comes from the body into this chamber.
- Right ventricle (7) – Blood flows from the right atrium into this chamber. Then it is pumped through the pulmonary arteries to the lungs.
• Left atrium (8) – Oxygen-rich blood flows from the lungs into this chamber.
• Left ventricle (9) – Blood flows from the left atrium into this chamber. Then it is pumped through the aorta to the body.

Valves
As blood goes through the heart, 4 valves open and close:
• Tricuspid valve (10) – Opens to let blood go from the right atrium to the right ventricle.
• Mitral valve (11) – Opens to let blood flow from the left atrium to the left ventricle.
• Pulmonary and aortic valves (12) – Open to let blood flow to the lungs and body.