

Blood Flow through the Heart & Lungs

Name: _____

(Outcome 23)

Date: _____

Right side of the heart – works at the same time as the left side of the heart

Blood enters the heart through the **inferior and superior vena cava** (brings **oxygen-poor** blood from the body into the right atrium)

→ The right atrium contracts

→ oxygen-poor blood flows into the right ventricle through the tricuspid valve

→ the right ventricle fills

→ the tricuspid valve shuts (prevents backflow into the atria)

→ The right ventricle contracts

→ oxygen-poor blood leaves the heart through the pulmonary valve

→ blood flows into the pulmonary artery

→ **blood goes into the lungs** to be oxygenated (gas exchange)

Left side of the heart – works at the same time as the right side of the heart

Blood enters the heart through the **pulmonary vein** (brings **oxygen-rich** blood from the lungs to the left atrium)

→ The left atrium contracts

→ oxygen-rich blood flows into the left ventricle through the mitral valve

→ the left ventricle fills

→ the mitral valve shuts (prevents backflow into the atria)

→ the left ventricle contracts

→ oxygen-rich blood leaves the heart through the aortic valve

→ blood flows into the aorta

→ blood goes to arteries to circulate **blood to body**

Blood Flow through the Heart to the Lungs

Blood enters your lungs from the **pulmonic valve** (pulmonary circulation)

→ blood travels to the pulmonary artery to capillaries in the lungs

→ oxygen travels from alveoli in the lungs, through the capillary walls, into the blood

→ once blood is oxygenated, it travels back to the left atrium through **pulmonary veins**

→ carbon dioxide (waste) passes from the blood into the alveoli

→ carbon dioxide leaves the body during **exhale**







