The Heart PowerPoint Notes

Contractions of the heart generate blood pressure & heart valves prevent back flow of blood in the circulatory system.

Circulation
Watch the Bill Nye video clip on Blood Circulation. What did William Harvey discover?

Your body is made of trillions of ____________. Each cell needs ____________ and ____________.
As your cells carry out their functions, they need to get rid of ____________ like carbon dioxide. To do this, your body has a transportation system. The circulatory system transports ____________ throughout the body, delivers essential substances to cells, and removes wastes. The circulatory system consists of the ____________, ____________, and ____________.

The Heart
The heart is a ____________ organ found in the middle of your chest. It is made mostly of ____________ muscle tissue. The heart ____________ to pump blood throughout the body.

Contractions happen when muscle tissue ____________.
The right and left sides of the heart have separate ____________.
The ____________ side of the heart collects ____________ blood from the body and pumps it to the ____________ where it picks up ____________ and releases ____________ ____________. The ____________ side of the heart then collects ____________ blood from the ____________ and pumps it to the body so that every ____________ in the body has the oxygen it needs.

The heart has four chambers.
Each ____________ has a one-way ____________ at its exit. A valve is a ____________ of tissue that prevents the ____________ of blood. When each chamber contracts, the valve at its exit ____________. When a chamber ____________, the valve ____________ so that blood does not flow backwards.

The heart contracts (or beats) in two stages.
Blood enters the ____________ first. The ____________ atrium receives ____________ blood from the ____________. The ____________ atrium receives ____________ blood from the body. When the atria contract, blood is squeezed into the ____________. In the second stage, while the atria ____________, the ventricles ____________ together. This pushes blood ____________ of the heart. Blood from the ____________ ventricle goes to the ____________. Blood from the ____________ ventricle goes to the rest of the ____________. Then the heart muscle ____________ before the next heartbeat. This allows blood to flow into the ____________ again.