**Muscles can only pull your bones. They cannot push them. Many muscles make your body move by working in pairs. When you use a muscle it shrinks (contracts). When you relax a muscle it expands (gets longer.) Voluntary controlled by the thinking part of your brain and involuntary by the brain stem. Voluntary you choose to use. Involuntary (heart beating, breathing, digesting shivering etc.)**

**CIRCULATORY SYSTEM (CARDIOVASCULAR SYSYTEM) heart, blood, blood vessels, lungs**

**Three types of blood vessels:**

* + **1. Arteries: thick, muscular, carry blood away from the heart (arteries and away both start with “a”).**
  + **2. Veins: thinner than arteries, carry blood back to heart**
  + **3. Capillaries: smallest vessels, connect larger arteries to veins, one cell wide (allow oxygen, carbon dioxide, sugar, nutrients, molecules to move to and from blood and throughout other systems).**
  + **HEART**
  + **organ made of muscle tissue**
  + **pumps blood throughout body**
  + **basically hollow, consists of four compartments surrounded by thick muscle**
  + **Atrium: top compartments that hold blood coming into the heart**
  + **Ventricles: bottom compartments, the thick and muscular walls push together pumping blood out of the heart to the body**
  + **BLOOD FLOW IN THE HEART:**
  + **Blood flows into heart (from all over body)**
  + **Enters right atrium.**
  + **Into right ventricle.**
  + **Pumped to lungs.**
  + **Blood gets oxygen from air sacs in lungs, gets rid of carbon dioxide, blood flows from lungs.**
  + **Goes to left atrium of heart.**
  + **Flows into left ventricle.**
  + **Blood pumped out of body through aorta.**