Functions of the Circulatory System

- Carry oxygen from lungs to tissues
- Carry carbon dioxide from tissues to lungs thereby aiding in the exchange of gases
- Helps carry nutrients to cells
- Helps to fight against infections (White Blood Cells)
- Helps blood clot or stop bleeding (Platelets)

BrainPop-Circulatory System
The Circulatory System

Magic School Bus- "Works Out" Circulatory System

School House Rock- "Do the Circulation"
Heart: Provides the force to blood throughout the body.

Arteries: Carry blood away from the heart to the rest of the body.

Veins: Carry blood to the heart from the rest of the body.

In the lungs there are tiny air-sacs called alveoli. The capillaries "hug" the alveoli. The alveoli and capillaries allow what is called the gas exchange. Oxygen is picked up to be delivered to the rest of the body and carbon dioxide is dropped off to be exhaled.
Veins and arteries
The highway of the body
As the blood leaves the heart, either as it travels to the lungs to pick up oxygen, or to the body to drop off the oxygen, it travels through the arteries.

Arteries - Away
When the blood heads to the heart, it is traveling through the veins.

Veins - To

Circulatory System Video

Parts of the Heart Detailed Animation
<table>
<thead>
<tr>
<th>Blood Vessels:</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Arteries</td>
<td>1. Carry [ ] from the heart</td>
</tr>
<tr>
<td>2. Veins</td>
<td>2. Carry blood to the heart.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Blood Cells:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Red Blood Cells</td>
<td>1. [ ] and glucose to the cells and carbon dioxide and water away.</td>
</tr>
<tr>
<td>2. White Blood Cells</td>
<td>2. Disease [ ]</td>
</tr>
<tr>
<td>3. [ ]</td>
<td>3. Clot blood</td>
</tr>
</tbody>
</table>

plasma- is the liquid portion of blood
Blood Cells

Red blood cells are in charge of carrying nutrients and oxygen to the body.

Platelets' job is to clot your blood and form a scab when you cut yourself.

White blood cells help fight infections when you are sick.

Bill Nye on Blood and Circulation Part 3
There are four chambers in the heart: left atrium, right atrium, left ventricle and right ventricle. The left and right atriums are on the top, and the left and right ventricles are located on the bottom of the heart.

The heart acts as two pumps: the left pump and the right pump. The blood enters the right atrium from the body, via a vein, and is in need of oxygen. It travels through a valve down to the right ventricle. The right ventricle pumps the blood through an artery to the lungs. In the lungs, it picks up oxygen from the capillaries of the lungs. It travels through a vein back to the heart into the left atrium. From there, it goes through a valve, down to the left ventricle. The left ventricle pumps the blood through an artery called the aorta back to the body to drop off the oxygen.

After that, it starts its cycle all over again!
Pulmonary Artery
Aorta
Right Atrium
valve

Pulmonary Veins
Left Atrium
Right Ventricle

Septum

Left Ventricle
Vena Cava

Kids Health-Heart
The Heart

pulmonary veins

aorta

pulmonary artery

vena cava

right atrium

Valve

right ventricle

left atrium

left ventricle

septum

Bill Nye on the Heart-Part 2
body
The right side of the heart pumps blood to the lungs.

The left side of the heart pumps blood to the body.
http://www.toxrap.org/36_kids_game1.html

http://www.educationalrap.com/song/circulatory-system.html

Complete the Loop Game
Attachments

- BrainPop movie
- The Heart BrainPop
- Blood BrainPop