Path of Blood

- Aorta
- Pulmonary Arteries
- Pulmonary Vein
- Left Atrium
- Bicuspid Valve
- Aortic Valve
- Right Atrium
- Tricuspid Valve
- Inferior Vena Cava
- Right Ventricle
- Pulmonary Valve
- Left Ventricle

Oxygen = $O_2$  Carbon Dioxide = $CO_2$
Pulse

1. Count your pulse for 1 minute.
   Resting Heart Rate: _______ Beats Per Minute (BPM)

2. Guess how many times your heart will beat after 1 minute of exercise.
   Prediction: _______ BPM

3. Exercise for 1 minute, and then count your pulse again for 1 minute.
   After Exercise Heart Rate: _______ BPM

4. Create a bar graph showing your BPM before exercise and BPM after exercise. What do you notice?
Blood Vessels

<table>
<thead>
<tr>
<th>Types</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veins</td>
<td>• Connect veins and arteries</td>
</tr>
<tr>
<td>Arteries</td>
<td>• Carry oxygen–rich blood away from heart</td>
</tr>
<tr>
<td>Capillaries</td>
<td>• Carry carbon dioxide–rich blood to heart</td>
</tr>
</tbody>
</table>

We can feel our pulse through them, but we can’t see them.
Name the vessel: __________________________
Function: __________________________
_________________________
_________________________

We can see the blood through their walls, but we can’t feel them.
Name the vessel: __________________________
Function: __________________________
_________________________
_________________________

They are the thinnest of blood vessels and branch out to reach all parts of the body.
Name the vessel: __________________________
Function: __________________________
_________________________
_________________________
Blood

Label each part of the blood in its box, and write down the job that part has.

Name:  
__________________________
Function:  
__________________________

Name:  
__________________________
Function:  
__________________________

- White Blood Cell
- Red Blood Cell
- Plasma
- Platelet

- Carry oxygen to all of the body & carry carbon dioxide to lungs.
- Help the body fight infection.
- Clot the blood.
- Carry blood cells, nutrients, and some CO₂ through the body.
Observations

Answer the following questions after the program in groups, pair-share, or individually.

What were your observations during the heart dissection?

Draw the heart here

What is the job of the heart (how does it keep you alive)?

Why do you think it’s important to study the circulatory system?