**The Heart and Blood**

**A Blood “Flow Chart”**

**Components of Blood**

Blood is the transport system of your body. It carries essential nutrients and energy to your cells and carries away the wastes. Of the approximate 5L of blood, about **55%** of it is made of a liquid called \_\_\_\_\_\_\_\_\_\_\_\_\_. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is mostly water with some minerals, proteins and salts dissolved in it. The rest of the blood is made up of \_\_\_\_\_\_\_\_ **blood cells, \_\_\_\_\_\_\_\_\_\_\_\_ blood cells,** and \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** are the workhorse of blood, carrying all the materials needed. Red blood cells are made in your bone marrow, liver, and spleen.

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** fight infections and help prevent the growth of cancer. They are much bigger than red blood cells. When you get an infection, the number of your white blood cells increases.

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** are important for clotting the blood. When you get a cut, the platelets thicken the blood, forming a scab which stops the bleeding.

It takes roughly the same effort to squeeze a tennis ball as it does for your heart to beat once.

**Let’s try:**

Squeeze the tennis ball as many times as you can in 60 seconds. Remember, a half-beat of your heart isn’t enough to keep you alive, so only count full squeezes.

Record how many squeezes you got in 60 seconds:

How does your hand feel? (Fine, Tired, Sore?)

On average my class was able to squeeze the tennis ball:

How often does the heart beat?

What does this say about our heart?