Watch It:

Go to the following link:

<https://m.youtube.com/watch?v=oZ1_TAwCUWw>

Watch the video and answer the questions that follow on your worksheet.

1. How big is the human heart?

2. How many chambers are in the human heart? Name each chamber.

3. The left side of the heart receives what type of blood? Where does the blood come from?

4. The right side of the heart receives what type of blood. Where does the blood come from?

5. While blood is circulating through the body, what does it do?

6. What is the job of the valves?

7. What are coronary arteries?

8. What happens when cholesterol builds up in the coronary arteries?

9. The beating of the heart is regulated by what?

Explore it:

Definitions-

Red blood cell: A disk-shaped, biconcave cell in the blood that contains hemoglobin, lacks a nucleus, and transports oxygen and carbon dioxide to and from the tissues.

Hemoglobin: a red protein responsible for transporting oxygen in the blood of vertebrates. Its molecule comprises four subunits, each containing an iron atom bound to a heme group.

White blood cell: Any of the colorless or white cells in the blood that have a nucleus and cytoplasm and help protect the body from infection and disease through specialized neutrophils, lymphocytes, and monocytes.

Platelets: a small colorless disk-shaped cell fragment without a nucleus, found in large numbers in blood and involved in clotting.

Examine the photos of the blood smears. One is from a person with normal blood, the other is from someone with sickle cell anemia. Draw and label in the space Provided on your worksheet.

Answer these questions on your worksheet:

1) Describe the size, appearance and relative number of red blood cells (RBCs)in the normal blood smear.

2) Compare the RBCs in the normal smear with the sickle cell smear. How are they different?

5) Compare the size and appearance of platelets with red blood cells and white blood cells. What is the function of platelets?

6) What is the important transport protein in RBC’s? What does it transport?

8) What is sickle cell anemia? What causes this disease? What might be a problem associated with this condition? Is it ever “good” to have this disease? (You should remember this from our genetics unit!)

Read It:

Read the article and answer the questions provided on your worksheet.

Questions:

1. What causes a heart attack?

2. What are the symptoms?

3. What should you do if someone is having a heart attack?

**Draw It:**

Examine the diagrams. On your worksheet draw and label the following parts:

Diagram 1-

heart

aorta

vein

artery

capillary

Diagram 2-

right atrium

right ventricle

left atrium

left ventricle

aorta

vena cava (inferior and superior)

pulmonary vein

pulmonary artery

Organize it:

Use the arrows provided to show path of blood through the body. Arrange the pieces, and then call the teacher over. If correct, she will initial your worksheet.

Research It:

Go to:

http://biology.about.com/od/humananatomybiology/ss/blood\_vessels.htm

Read the information provided at the website. On your worksheet, give a description of each type of blood vessel.

Assess It:

Answer the Regents questions ( at seats when done with other stations) from Liverpool packet? No actual Station \*