- 1. You have a relative in their 60s who is reluctant to get a physical exam. Explain why it is important to periodically monitor blood pressure to detect hypertension, including; (A) the symptoms, if any, (B) what could be causing hypertension, and (C) three possible negative impacts of hypertension on the body. My answer: It is important to monitor blood pressure because the leading cause of mortality is cardiovascular issues. Monitoring blood pressure is important because if you can catch prehypertensive, you can stop hypertension before it happens. | A. dizziness and headaches | B. weight issues, lack of exercise, drug abuse, too much sodium and too little potassium, smoking, too much alcohol | C. heart attack, heart failure, stroke, kidney damage, vision loss, arterial damage
- 2. Describe how atherosclerosis can result in a myocardial infarction and describe two possible treatments that can reduce the chance that atherosclerosis will lead to a heart attack.

 My answer: Atherosclerosis is where there is a blockage in blood flow. This can lead to a heart attack because if there is atherosclerosis in the coronary arteries of the heart, it can stop heart cells from contracting. There are treatments to deal with this which are coronary bypass operation and angioplasty. | Coronary bypass operation: where vessels are placed in veins that are blocked to bypass the clots so blood can flow in an alternative route. | Angioplasty: mechanically widening a blocked vessel
- 3. From your notes taken on blood disorders, diagnose each of the four patients (A, B, C, and D) by listing each patient's blood disorder and explaining your rationale for each diagnosis.

 My answer: A. Sickle cell. The red blood cells are irregular in shape. A lot are pointed | B. Iron defincieny anemia. Red blood cells are generally pale, appearing thin and picking up less of the stain. | C. Lymphoma. large quantities of lymphocytes. WBC with large, dark nuclei | D. Granulocytic leukemia. I see three different types of WBC
- 4. Explain how excess dietary salt, sugar, and lipids (triglycerides and cholesterol) can each contribute to cardiovascular disease.

 My answer: High amount of salt can raise blood pressure, which can lead to a stroke. | Sugar can contribute to obesity because it contributes to a build up of fat in the body. The main thing about cardiovascular disease is the maintenance of blood flow. High fat can cause blockages. | Lipids can contribute to cholesterol levels. Lipids are important because of low density lipoproteins and high density lipoproteins. LDLs transport cholesterol to body cells, but too much can start to produce a plague. HDLs remove lipid

molecules to control the amount of LDLs. A loss in HDLs would be bad.