



Principles of Biomedical Science

Virtual Learning

9-12 / PLTW[®] PBS

May , 1 2020



Principles of Biomedical Science

9-12/PLTW[®] PBS
Lesson: May 1 2020

Objective/Learning Target:

Students will be able to: design a heart disease reduction program. (*Reference: PLTW[®] 4.4.2 Heart Disease Interventions*)



Let's Get Started (Bell Ringer):

Watch Videos:

[8 surprising ways to reduce your risk of heart disease](#)

[Is salt reduction 'the holy grail' of preventing heart disease?](#)



Lesson/Activity:

Start by... Refer back to your lesson from yesterday. We used information from [Anna's Medical History](#) to determine her risk factors for a heart attack. We also looked at modifiable and non-modifiable factors, based on what we already know about Anna. Complete any extra research that you may need to do over over any of these particular issues to help us understand Anna's medical conditions better. Write down the answers to your research in you notebook or seperate piece of paper.



Answers:

Answers will vary based on what students found important and did not already understand. Here is a short list of what may have been researched:

Blood Pressure, Pulse, Weight, Diabetes, Sickle Cell disease, self-resolved chest pain, high fat diet, wine drinker (to much) family history of heart disease, hypertension, tingling in right calf, tachycardic, heart murmurs, PVC's.



Lesson/Activity continued:

Your job now is to design a heart disease risk reduction program for Anna. Your plan should include recommendations for improving heart health and decreasing risk. Think about her current values and outline goals of where Anna should be. Describe actions that can help her go from her current state to what you have made the goal to be.

The plan should include the following:

- Key heart-related medical issues and risk factors. Provide a diagnosis with this.
- Lifestyle modifications.
- A clearly outlined plan for achieve heart health.
- Recommendations for medical procedures, medications, therapies etc.
- Schedule for post-intervention testing and goal values such as blood pressure levels, cholesterol levels, and physical fitness.



Answers:

All plans will vary based on student's goals and objectives for Anna. As long as they follow the outline provided.



Practice:

Make a list of healthcare providers in your notebook or separate piece of paper that may get involved with Anna's recovery process. This list will have a lot to do with what you have made for her recovery plan. What will their job be in this recovery process?



Answers:

Jobs may include but not limited to:

Cardiologist, nurses, nutritionists, physical therapists, trainers, acupuncturists, reflexologists, massage therapist, medical assistant, Home health aide, Pharmacists, Sonographer, Laboratory Technologist, Phlebotomist, dietician, Anesthesiologist, Chiropractor, etc.



Additional Practice:

Check out careers in health care, make a list of your top 5 that you would like to know more about in you notebook or seperate piece of paper.

[Top 50 Healthcare Careers for 2020- Career Outlook & Salary](#)



Answers:

Answers will completely depend on student interest.