



ANATOMY & PHYSIOLOGY HONORS

SUMMER TAKE-HOME ASSIGNMENT- PART 1

Obtain the book, “Stiff” by Mary Roach. This book can be purchased from Amazon or it can be checked out from the ZHS library. Read this book and answer the following questions in complete sentences using your **own** words. Submit the typed questions, and answers along with the final essay in a report folder. Please include a cover page containing the assignment title, your name and the date the assignment was completed. This assignment is worth 125 points and is due immediately upon returning to school. Copying another student’s assignment is dishonest and will result in a grade of ‘0’ for all involved. No student’s work on any question should be identical.

Introduction

- Explain what the author meant when she said she saw “her mother’s cadaver”.

Chapter 1 -- A Head Is a Terrible Thing to Waste

- Why is it important that the doctors (and students) learn to objectify the bodies?
- What is the malar fat pad and why might plastic surgeons focus on this area?
- How has surgery changed since the 17th century?

Chapter 2 – Crimes of Anatomy

- How do medical schools encourage respect for the dead? (or do they?)
- How were cadavers acquired before the modern day “donation” method?
- What was Robert Knox’s fatal PR blunder?
- What options did early surgeons have to learn anatomy since the government did not sanction human dissection?

Chapter 3 - Life After Death

- What is autolysis?
- Why do bodies bloat? (And do dead people really pass gas?)
- How are the dead prepared for burial?
- What is the scientific purpose for understanding how bodies decay?

Chapter 4 – Dead Man Driving

- Why are cadavers used to test vehicle crashes?
- Why are side impacts particularly dangerous?
- Why are “pieces” of cadavers sometimes used instead of the whole cadaver?

Chapter 5 - Beyond the Black Box

- What kind of information is included in the Aerospace Pathology book?
- How is this information useful to investigators?

- c. What happens to a body when it hits the water after falling from an extreme height?
- d. Why don't airlines install features that would make flying safer?

Chapter 6 - The Cadaver Who Joined the Army

- a. Why are large caliber bullets preferred over smaller ones?
- b. Why do people (and some animals) fall to the ground after being shot?
- c. Why are frangible bullets so devastating to the human body?
- d. What scientific value does bullet research on cadavers have?

Chapter 7 – Holy Cadaver

- a. What experiments were performed to determine the physiological effects of crucifixion?

Chapter 8 – How to Know If You're Dead

- a. What is a beating-heart cadaver?
- b. Why were “waiting mortuaries” necessary?
- c. Why is the heart given so much credit for being the seat of life (or the soul)?
- d. What is the modern definition of death?
- e. Why did the author call the cadaver a dead hero?

Chapter 9 – Just a Head

- a. What experiments were performed to determine if a severed head still retained consciousness?
- b. What scientific value did these experiments have?

Chapter 10 – Eat Me

- a. Before the scientific method was used, what information did doctors use to prescribe remedies for various illnesses?
- b. Describe one of these dubious remedies and explain why it might have actually worked.
- c. What are some reasons that cannibalism exists?

Chapter 11 – Out of the Fire and Into the Compost Bin

- a. What is tissue digestion and how is it accomplished?
- b. What are the potential benefits of composting the dead?
- c. Where does the water inside a human (or cadaver) come from? Where does it go?

Chapter 12 – Remains of the Author

- a. How are human skeletons prepared (from real bodies)?
- b. What is plastination?

FINAL ESSAY: Would you donate your body to science? Why or why not?

The introduction should include a thesis statement & other general information. The body should include at least 3 paragraphs consisting of several supporting statements. The conclusion should restate or summarize the major points and end with a final comment.

SUMMER TAKE-HOME ASSIGNMENT- PART 2

- 1. Go to my Moodle page and download workbook pages 31-60 of the Visual Guide to Anatomy & Physiology. This is located below the summer assignment for A & P. Look for the actual numbered pages of the workbook. These pages review the important processes of Cellular Biology. This is information that you were introduced to in Biology.**
- 2. Read and study these pages. Do all activities as instructed. Take notes.**
- 3. You will be given a test on this information on Friday, August 12th. It will not be an open notebook test. You must know this information.**