Homeostasis & Dying to be Thin Video Reaction Paper

The failure of any part of your body can affect the entire system.

Your body is a living system. As a living system, your body is organized to use matter and _________ to move, grow, and survive. Why? You need to do these things to stay alive. All sorts of variables affect an organism’s ability to stay alive. These include temperature, ________________, water, and the level of _____________________.

Body’s Built-in Processes
All organisms have built-in processes to help them survive when variables change. Your normal body temperature is 37°C. How do sweating and shivering help you maintain a constant body temperature?

_______________________________________________________________
_______________________________________________________________

In other words, living things can respond to ________________ in their surroundings to maintain a steady ________________ environment. The process of maintaining a life-supporting system is called _________________________________.

Word origins of homeostasis
- homeo- from _______________
- homos- meaning “__________________”
- stasis meaning “__________________”

Homeostasis means to maintain the "same standing" or to stay in ________________. It is the process by which organisms regulate their environment in order to maintain a ________________ condition. Our body tries to maintain homeostasis.

Importance of maintaining homeostasis
This ability is dependent on a many complex interactions between the various body systems linked by the ____________________ system (blood system). When these interactions do not function properly, a number of problems occur, some of which can be life threatening. But if one of the individual components fails, a person may ________________.

For example, a person may die:
- from a heart attack - failure of the ________________,
- suffocation or pneumonia - from insufficient gas exchange in the lungs,
- shock - from loss of ________________ volume, or
- a stroke - sometimes caused by an insufficient ________________ exchange with brain tissues due to the blockage of blood vessels

Serotonin
Today, you will examine the role the chemical serotonin plays in regulating ________________ in an effort to maintain homeostasis.

Terms to know:
- Neurotransmitter – transmits ________________ impulses across a synapse
- Serotonin – neurotransmitter involved in ________________ and depression and memory

Watch the two following Nova Video Clips: “Abnormally Thin” and “The Search for Answers”
http://www.pbs.org/wgbh/nova/thin/program.html#
Answer the following questions. (Additional paper may be used as long as it is 8½ x 11 inches or it will not be graded. You also may type your response and paper clip it to this paper.)

1. Write a reaction paper to the video clips you saw. Reaction papers are more open-ended than other types of writing. A reaction paper contains your opinion or reaction to the video.
   - Explain why many people become abnormally thin.
   - Explain the role of serotonin.
   - Use active voice and the first person "I".
   - Use paragraphs for your ideas. Each paragraph should have at least three sentences.
   - Correct spelling and grammar improve the clarity of your paper.

2. Explain and illustrate the feedback systems associated with anorexia nervosa. Color your illustration with colored pencils.