

HUMAN ANATOMY/PHYSIOLOGY

UNIT 1 ASSIGNMENT (70 POINTS)

DUE: _____

1. Provide definitions for the following terms:

- (a) Physiology (5 points)
- (b) Anatomy (5 points)
- (c) Homeostasis (5 points)
- (d) Negative Feedback (*INCLUDE AN EXAMPLE HERE; SEE CLASS NOTES; INCLUDE TERMS LIKE RECEPTOR, CONTROL CENTER, AND EFFECTOR) (10 points)
- (e) Positive Feedback (*INCLUDE AN EXAMPLE HERE; SEE CLASS NOTES) (10 points)

2. Explain why homeostasis is the central theme in human anatomy/physiology. (Hint: Describe the interrelationship among cells, body systems, and homeostasis. Refer to the description and circular diagram in your notes.) (10 points)

3. Name the 7 factors within the human body that must be homeostatically maintained. (15 points)

4. For each of the following contributions to homeostasis, name the human body system that performs it (10 points):

- (a) Obtains O₂ and eliminates CO₂
- (b) Support and protect body parts and allow movement (2 SYSTEMS FOR THIS ONE)
- (c) Controls various processes via the hormones it secretes
- (d) Transports materials from one part of the body to another
- (e) Removes wastes and excess water, salt, and other electrolytes
- (f) Essential for the perpetuation of the species
- (g) Obtains nutrients, water, and electrolytes
- (h) Defends against foreign invaders and cancer
- (i) Acts through electrical signals to control rapid responses
- (j) Serves as a protective barrier between the body and the external environment