

4.5 - 4.6 FEEDBACK- POSITIVE AND NEGATIVE LOOPS

A. ASSIGNMENT #1 – VIEW THE FOLLOWING VIDEOS TWICE.

B. remember, Remember, REMEMBER THIS SEQUENCE.....

RECEPTOR...STIMULUS...EFFECTOR....RESPONSE

Assignment: 2 Which of the above items in the sequence above are actually bodily organs/ structure and which are the actions taken/occurring/?

Organs = _____

Actions= _____

Assignment #3

Given the differing states of the items in the graphic below...



1. How does the visual below apply to the sequence above?

2. What one word/goal is the ultimate outcome of the process RECEPTOR...STIMULUS...EFFECTOR....RESPONSE ?

_____ the likes of which is achieved by the constant process of _____
G _ L _ T _ _ N via various _____ and _____ Feedback
_____.

3. Using both arrows and letters, accurately complete Positive/Negative Feedback Loop below?

___ ___ P _ T LOOP ___ ___ T ___ U T

ASSIGNMENT# 5 List and briefly describe the following examples of other positive negative feedback loop systems discussed in your assigned videos in ASSINMENT #1

1. THERMOREGULATION

2. DIABETES 1

3. DIABETES 2

4. FRUIT RIPENING

ASSIGNMENT #6 Match the best fit for each item below

- | | |
|------------------------------|--|
| 1. _____ ethylene | A. Develops due to abusive sugar intake |
| 2. _____ insulin | B. inherited, inadequate insulin production |
| 3. _____ Beta Cells | C. amplification of fruit ripening |
| 4. _____ Alpha Cells | D. to magnify/speed up a response |
| 5. _____ Diabetes 1 | E. ectoderm and endoderm |
| 6. _____ Diabetes 2 | F. stored form of glucose in your liver |
| 7. _____ Glucagon | G. the fuel for cellular functioning, in blood |
| 8. _____ Glucose | H. an Effector organ that produces insulin |
| 9. _____ Glycogen | I. an Effector in thermoregulation |
| 10. _____ Amplification | J. a response in thermoregulation |
| 11. _____ Looping | K. key characteristic of a +/- feedback loop |
| 12. _____ Effectors | L. a goal where homeostasis will be achieved |
| 13. _____ Receptors | M. systems spotlighted in this topic of study |
| 14. _____ Stimulus | N. stimulate production of insulin-pancreas |
| 15. _____ Response | O. stimulates breakdown of glycogen to glucose |
| 16. _____ Input+Output | P. opposites which assure a bal./regulation |
| 17. _____ Pancreas | Q. a Take Action item |
| 18. _____ Sweating | R. receives info |
| 19. _____ Sweat glands | S. the answers to |
| 20. _____ Target Set Point | T. a take action organ |
| 21. _____ Endocrine, Nervous | U. metabolizes glycogen to glucose |
| 22. _____ thermoreg, phys | V. Metabolizes glucose |
| 23. _____ Chem Comm | W. hormones, pheromones, insulin, |

