ສ Su (Name in Lao) _____

Part 1: Recall the following terms from the **"Endocrine Ed" online lab** and the **"Analyzing Feedback Loops" activity** we did. Write the **correct term** below on the **line beneath the boxes** that best describe them (4 points)

Score
_____ / 20

STIMULUS **CONTROL CENTER** **RECEPTOR** **EFFECTOR**

I know all the **normal ranges** of all the **variables** in the body I am within.

I process signals given to me from the **receptors** and signal the right body structures (**effectors**) to respond.

1. _____

This is the **external condition** (or environment) that is *different from an organism's internal environment*.

This is the **trigger** that begins the set of steps to keep the body's **internal conditions stable**.

2. _____

I am the structure(s) that "**sense**" a change in the external environment.

My job is to notify the control center of any changes to the external environment, I have been given very specific directions!

3. _____

I am the structure(s) that the control center signals once it knows that the external conditions have changed.

I **make and secrete specific compounds called hormones** to help or body keep its **internal conditions stable**.

Once the internal conditions are back within the normal range (homeostasis), I get a signal to stop secreting the hormone.

4. _____

Part 2: Modeling observations. In the space below, draw each feedback loop and label it with the cards you put in place on the diagram. Discuss it with your group and collectively, come up with the correct feedback loop. When completely finished, see Mr. F for an answer key to check your group's work!! (10 points)

Envelope 1 - Low Blood Oxygen Level

Envelope 2 - Dangerous Situation, ACT FAST!!!!

Part 3: Reflection Q's (6 points)

1. From the activity, why do you think homeostasis is crucial to our existence? Use specific examples from the models you drew. _____

2. What did you observe as the difference between the AFFERENT and EFFERENT pathways? Answer this by saying where did each started and where each ended? _____

3. Choose one model from above (envelope 1 or 2) and use it to help you describe why these are called FEEDBACK LOOPS? In your answer you must discuss what feedback means and what this means for the process._____