Manager	Presenter	
Recorder	Reflector(s)	

FEELING FEVERISH - GROUP ASSIGNMENT (40 POINTS)

 How does your body normally control for body temperature? Draw the normal (healthy) homeostatic feedback loop for thermoregulation. Indicate which organs or organ systems function as each component of the loop. *Hint: Be mindful of time for this assignment and do not get super specific and detailed in this answer, I am looking for the basic understanding of the components and responses in a negative feedback loop.* (10 points).

2. Specifically explain **how this feedback loop changes** when a patient has a bacterial infection and that causes a fever (3 points).

3. What is the difference between a sign and a symptom? (2 points)

4. What are three signs of a fever? (3 points)

- 5. What are three symptoms of a fever? (3 points)
- 6. Think about the last time you had a fever. Complete the following table with the voluntary and involuntary responses an individual will demonstrate to cope with the signs and symptoms caused by the altered homeostatic loop for thermoregulation (4 points). Example: putting on blankets

Feverish State	Voluntary Responses	Involuntary Responses
During the fever		
After the fever breaks (recovery)		

7. Sequence the events **a through g** in the correct order as indicated on the graph in Figure 1. Three of the events occur twice in the figure. (5 points)



8. Propose a basic biological mechanism by which treatment with anti-pyretic medications, such as ibuprofen, works to reduce a fever (2 points).

9. Using the above graph, explain why the patient's body temperature increases around the 12-hour time point. (3 points)

10. What biological rationale would you use to explain to a mother of a young child that she should not give her toddler medication to reduce body temperature during a low-grade fever? (4 points)