

Chapter 21

Use with Section 3

ENRICHMENT**● The Endocrine System****Negative Feedback****Materials**

furnace thermostat at home
 a room thermometer
 clock or watch

Procedure

1. On a cold day, study or read in the room with the thermostat, listening for the sound of the furnace.
2. Place the thermometer on a table or chair beside or just below the thermostat (as close as possible). Observe the thermostat reading.
3. In the table below, record the time and temperatures when the furnace comes on. Do this three times.

Observations

	Beginning temperature	Ending temperature	Length of run
1st running			
2nd running			
3rd running			

Conclude and Apply

1. At what temperature was the thermostat set? _____
2. At what temperature did the furnace come on? _____

3. At what temperature did the furnace shut off? _____
4. The endocrine system has target tissues. What is the "target" of the furnace? _____

5. In the endocrine system, the gland stops producing hormones when the target tissue sends a message by chemicals. How does the furnace know when to shut down? _____

6. What happens to make the furnace run again? _____

7. What causes a gland to begin producing a hormone again? _____
