

Formative Assessment
Homeostasis and Feedback Mechanisms
Grade 10 Science

Name:	Date:
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Part I. Vocabulary Check

Write the letter of the matching definition on the blank before each term.

_____	1. Homeostasis	A. The normal, ideal value the body works to maintain
_____	2. Stimulus	B. Detects a change in the body's internal environment
_____	3. Receptor	C. The body's ability to stay balanced and stable
_____	4. Control Center	D. Carries out the response to a change
_____	5. Effector	E. Decides how the body should respond to a change
_____	6. Negative Feedback	F. A change that starts a feedback response
_____	7. Positive Feedback	G. A response that reduces change and restores balance
_____	8. Set Point	H. A response that increases change until a goal is reached

Part II. Negative or Positive?

Read each scenario. Write whether it is an example of Negative Feedback or Positive Feedback.

No.	Scenario	Negative or Positive?
1	Sweating when body temperature rises	
2	Contractions grow stronger during childbirth, until the baby is born	
3	Insulin is released when blood sugar rises	
4	Blood clotting speeds up faster and faster until a wound is sealed	
5	Shivering when body temperature drops	
6	The parathyroid gland releases PTH when blood calcium drops	

Part III. Complete the Feedback Loop

A person steps outside on a cold day. Identify which part of the feedback loop each event represents.

What Happens	Loop Part (Choose from the WORD BANK)
Brain decides how to respond	
Skin senses the cold	
Muscles shiver to produce heat	
Body temperature drops	

WORD BANK

Stimulus	Receptor	Control Center	Effector
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