1. Any factor that can be measured is called a/an ______________.
   a. afferent signal
   b. control center
   c. effector
   d. stimulus
   e. variable

2. What is the best definition of homeostasis?
   a. Keeping a constant body temperature.
   b. Taking in oxygen and getting rid of carbon dioxide.
   c. Getting rid of wastes from the body.
   d. The maintenance of a constant internal environment.

3. Homeostasis is:
   a. carried on by the endocrine system and the nervous system only.
   b. characterized by control mechanisms that are negative and positive feedback mechanisms.
   c. improved as we age.
   d. characterized by having homeostatic control mechanisms made up of two only two components - a receptor and an effector.
   e. the body's ability to maintain absolutely stable internal conditions at all times.

4. An organ that corrects a deviation from homeostasis is called a(n):
   a. afferent
   b. control center
   c. effector
   d. sensor
   e. efferent

5. Information going from a sensor to a control center is called the:
   a. afferent pathway
   b. control center
   c. effector
   d. variable
   e. efferent pathway

6. Simply means “change”:
   a. afferent
   b. stimulus
   c. effector
   d. variable
   e. efferent

7. Simply means “towards”:
   a. afferent
   b. stimulus
   c. effector
   d. variable
   e. efferent
8. Negative feedback loops:
a. maintain a variable at the exact set point.
b. allow a variable to fluctuate within a narrow range.
c. usually decrease a variable.
d. usually increase a variable.

9. The pathway that goes from the sensor to the control center:
a. is the afferent pathway.
b. is the efferent pathway.
c. is usually mediated by an enzyme.
d. is sometimes called the "latent pathway".
e. rarely involves the nervous or endocrine system.

10. Positive feedback control mechanisms are:
a. more rare than negative feedback mechanisms and tend to decrease the original stimulus.
b. less rare than negative feedback mechanisms and tend to decrease the original stimulus.
c. less rare than negative feedback mechanisms and tend to have no effect on the original stimulus.
d. more rare than negative feedback mechanisms and tend to have no effect on the original stimulus.
e. more rare than negative feedback mechanisms and tend to increase the original stimulus.

11. Homeostatic imbalance:
a. is usually caused by a negative feedback mechanisms.
b. is the cause of most pathologies.
c. is when the internal conditions of the body become more stable.
d. only occurs when positive feedback mechanisms are overwhelmed.

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The next 2 questions involve this scenario: When cells are damaged, they begin to undergo mitosis. Cells undergoing mitosis release chemicals that cause neighboring cells to undergo mitosis.

12. This is an example of a/an:
a. negative feedback loop.
b. positive feedback loop.
c. anabolic reaction.
d. reverberating system.
e. system controlled via the nervous system.

13. In the scenario given, damage to the tissues was the:
a. afferent signal
b. control center
c. effector
d. stimulus
e. efferent signal

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The next 4 questions involve this scenario: If your body temperature goes up due to exercise, the hypothalamus of your brain mandates that your blood vessels dilate, which causes you to sweat more, thereby lowering your body temperature.

14. This is an example of a/an:
   a. negative feedback loop.
   b. positive feedback loop.
   c. anabolic reaction.
   d. reverberating system.
   e. system controlled via the endocrine system.

15. In the scenario, the hypothalamus was the:
   a. afferent signal
   b. control center
   c. effector
   d. stimulus
   e. efferent signal

16. In the scenario, the blood vessels are the:
   a. afferent signal
   b. control center
   c. effector
   d. stimulus
   e. efferent signal

17. In the scenario, the increase in body temperature is the:
   a. afferent signal
   b. variable
   c. effector
   d. stimulus
   e. efferent signal