

Human Physiology

The Study of Body Function **Chapter 1**

Game Show

| | | | | |
|-------------------|-------------|-----------------|--------------------------|------------|
| Scientific Method | Homeostasis | Primary Tissues | Organs and Organ Systems | Body Fluid |
|-------------------|-------------|-----------------|--------------------------|------------|

LET'S PLAY *REVERSE* JEOPARDY!

| | | | | |
|------------|------------|------------|------------|------------|
| 100 | 100 | 100 | 100 | 100 |
| 200 | 200 | 200 | 200 | 200 |
| 300 | 300 | 300 | 300 | 300 |
| 400 | 400 | 400 | 400 | 400 |
| 500 | 500 | 500 | 500 | 500 |

Scientific Method

100

If the hypothesis survives its testing, it might be incorporated into a more general scientific _____ as it is based on reproducible data.

ANSWER

BACK TO GAME

Scientific Method

100

If the hypothesis survives its testing, it might be incorporated into a more general scientific theory as it is based on reproducible data.

[BACK TO GAME](#)

Scientific Method

200

A testable _____ must be formulated to design experiments to prove.

ANSWER

BACK TO GAME

Scientific Method

200

A testable hypothesis must be formulated to design experiments to prove.

[BACK TO GAME](#)

Scientific Method

Daily Double!!!

300

If the person conducting experiments does not know whether a subject is part of the experimental group or control group, it is called _____ measurement.

ANSWER

BACK TO GAME

Scientific Method

Daily Double!!!

300

If the person conducting experiments does not know whether a subject is part of the experimental group or control group, it is called blind measurement.

[BACK TO GAME](#)

Scientific Method

400

Match the following related to clinical trial:

| Answer | Phase | Drug testing |
|--------|--------------|---|
| 1. ___ | 1. Phase I | A. Test other potential uses of the drug. |
| 2. ___ | 1. Phase II | B. If successful, seek FDA approval. |
| 3. ___ | 1. Phase III | C. Drug testing on healthy. |

ANSWER

BACK TO
GAME

Scientific Method

400

Match the following related to clinical trial:

| Answer | Phase | Drug testing |
|-------------|--------------|---|
| 1. <u>C</u> | 1. Phase I | A. Test other potential uses of the drug. |
| 2. <u>D</u> | 1. Phase II | B. If successful, seek FDA approval. |
| 3. <u>B</u> | 1. Phase III | C. Drug testing on healthy. |
| 4. <u>A</u> | 1. Phase IV | D. Post-marketing surveillance. |

[BACK TO GAME](#)

Scientific Method

500

Arrange the following in the correct order:

- A. Experiment
- B. Conclusion(s)
- C. Hypothesis
- D. Results

Correct order: ___ → ___ → ___ → ___.

ANSWER

BACK TO GAME

Scientific Method

500

Arrange the following in the correct order:

- A. Experiment
- B. Conclusion(s)
- C. Hypothesis
- D. Results

Correct order: C → A → D → B.

[BACK TO GAME](#)

Homeostasis

100

If the blood concentration of sodium deviates below normal (normal range: 135-145 mEq/L), a typical response expected would be a(an) _____ in sodium concentration.

ANSWER

BACK TO GAME

Homeostasis

100

If the blood concentration of sodium deviates below normal (normal range: 135-145 mEq/L), a typical response expected would be a(an) increase in sodium concentration.

[BACK TO GAME](#)

Homeostasis

200

The increasingly forceful uterine contractions during childbirth are an example of

ANSWER

BACK TO GAME

Homeostasis

200

The increasingly forceful uterine contractions during childbirth are an example of positive.

[BACK TO GAME](#)

Homeostasis

Shiv is at a football **300**

game on a very cold

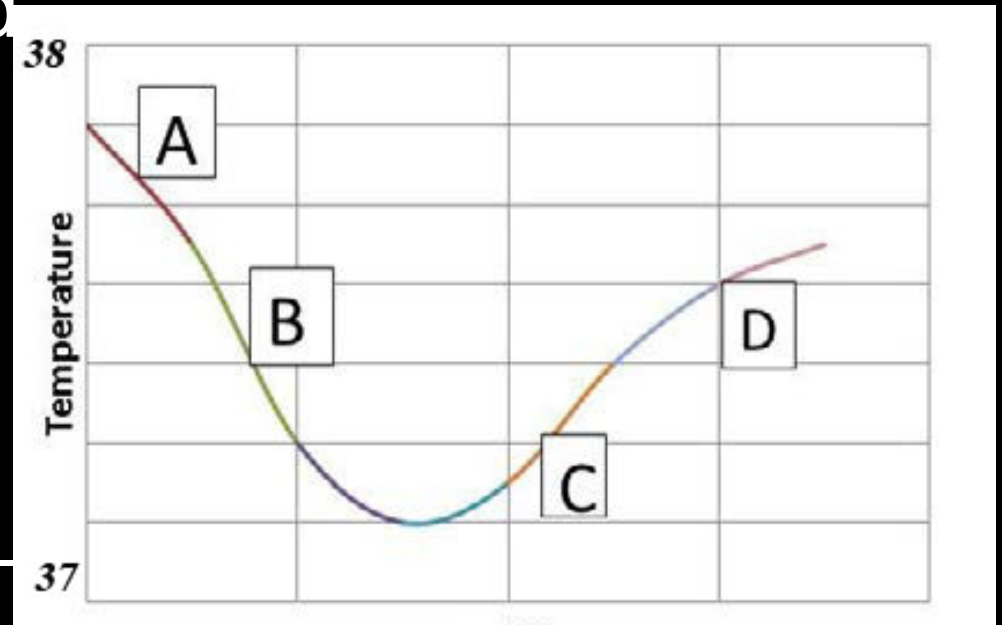
night and begins to

shiver. Mark the

letter(s) which

indicate(s) when he

began shivering _____



ANSWER

BACK TO GAME

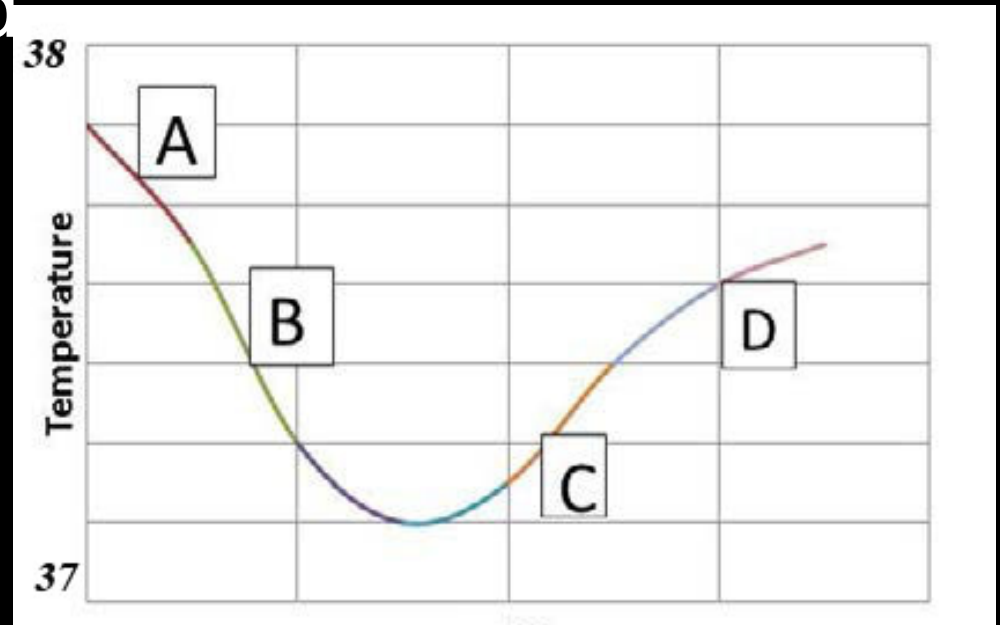
Homeostasis

Shiv is at a football **300**

game on a very cold night and begins to shiver.

Mark the letter(s) which indicate(s) when he began shivering **AB**

This graph is an example of **negative** feedback.



[BACK TO GAME](#)

Homeostasis

Daily Double!!!

400

Choose the term that best describes the following: “the internal environment is never absolutely constant... conditions are stabilized above and below the set point”.

- A. Negative feedback.
- B. Positive feedback.
- C. Dynamic constancy.
- D. Equilibrium.

ANSWER

BACK TO GAME

Homeostasis

Daily Double!!!

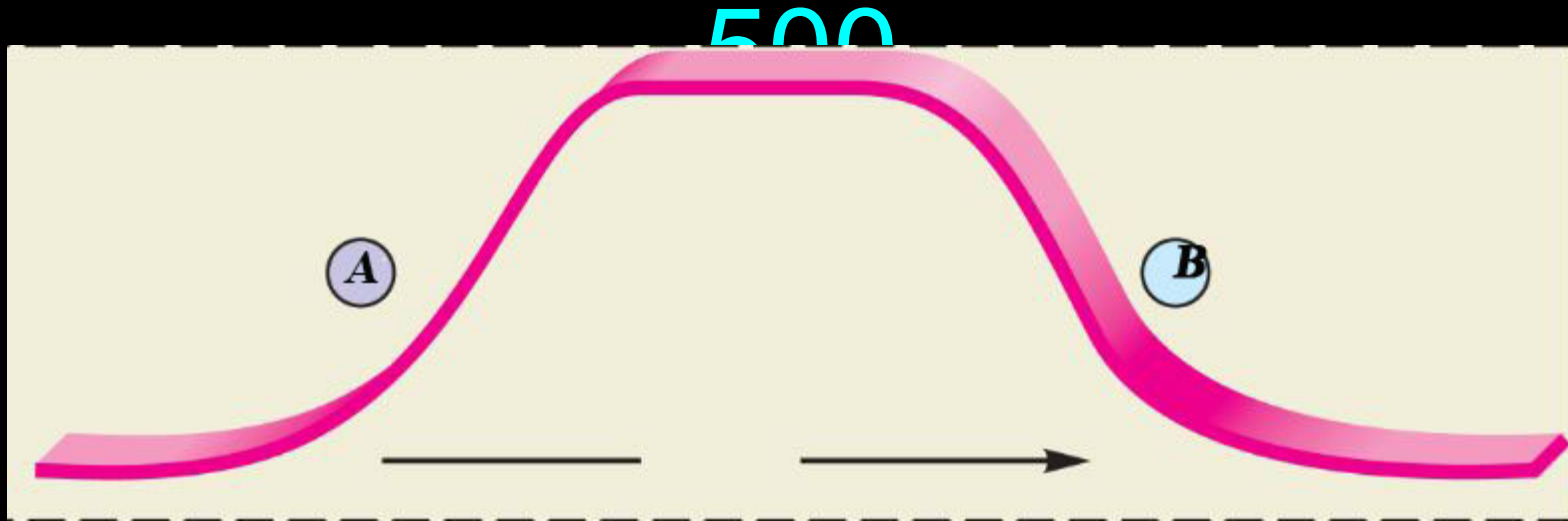
400

Choose the term that best describes the following: “the internal environment is never absolutely constant... conditions are stabilized above and below the set point”.

- A. Negative feedback.
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- C. Dynamic constancy.
- D. Equilibrium.

[BACK TO GAME](#)

Homeostasis

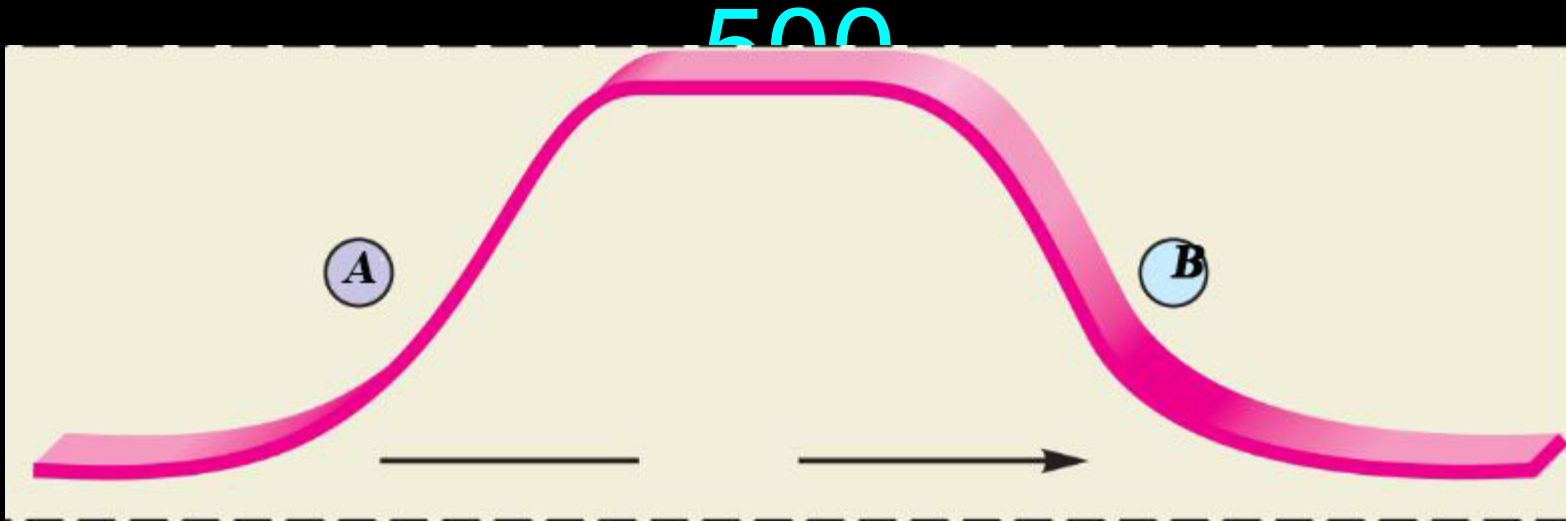


Assuming a normal range of a physiological condition above, mark the letter which represents the activation of a sensor _____ and mark the letter that represents the activation of an effector

ANSWER

[BACK TO GAME](#)

Homeostasis



Assuming a normal range of a physiological condition above, mark the letter which represents the activation of a sensor A and mark the letter that represents the activation of an effector B.

Primary Tissues

100

The loss of elastin will affect which of the following types of tissues?

- A. Epithelial tissue.
- B. Connective tissue.
- C. Muscular tissue.
- D. Nervous tissue.

ANSWER

[BACK TO GAME](#)

Primary Tissues

100

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A. Epithelial tissue.

B. Connective tissue.

C. Muscular tissue.

D. Nervous tissue.

[BACK TO GAME](#)

Primary Tissues

Daily Double!!!

200

Which of the following relationships between the tissue type and its major function is *incorrect*?

- A. Epithelial tissue: protection.
- B. Connective tissue: support.
- C. Muscular tissue: secretion.
- D. Nervous tissue: communication.

ANSWER

BACK TO GAME

Primary Tissues

Daily Double!!!

200

Which of the following relationships between the tissue type and its major function is *incorrect*?

A. Epithelial tissue: protection.

B. Connective tissue: support.

C. Muscular tissue: secretion.

D. Nervous tissue: communication.

[BACK TO GAME](#)

Primary Tissues

300

Match the tissue type to its characteristic feature:

| Tissue type | Characteristic |
|--------------------------|---|
| 1. ___ Nervous tissue | A. Forms membranes. |
| 2. ___ Muscular tissue | B. Supports and anchors body parts. |
| 3. ___ Connective tissue | C. Specialized for contraction. |
| 4. ___ Epithelial tissue | D. Specialized for generation and conduction of electrical impulses. |

ANSWER

[BACK TO GAME](#)

Primary Tissues

300

Match the tissue type to its characteristic feature:

Tissue type

Characteristic

- | | |
|-------------------------------|---|
| 1. <u>D</u> Nervous tissue | A. Forms membranes. |
| 2. <u>C</u> Muscular tissue | B. Supports and anchors body parts. |
| 3. <u>B</u> Connective tissue | C. Specialized for contraction. |
| 4. <u>A</u> Epithelial tissue | D. Specialized for generation and conduction of electrical impulses. |

[BACK TO GAME](#)

Primary Tissues

400

Antidiuretic hormone acts on kidney tubules to increase the reabsorption of water. Which of the specific epithelium is involved in this process?

- A. Simple columnar.
- B. Stratified squamous.
- C. Simple squamous.
- D. Simple cuboidal.
- E. Stratified cuboidal.

ANSWER

BACK TO GAME

Primary Tissues

400

Antidiuretic hormone acts on kidney tubules to increase the reabsorption of water. Which of the specific epithelium is involved in this process?

- A. Simple columnar.
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- C. Simple squamous.
- D. Simple cuboidal.**
- E. Stratified cuboidal.

[BACK TO GAME](#)

Primary Tissues

Daily Double!!!

500

A 40-year old male is diagnosed with GoodPasture's syndrome. The patient's immune system in this situation most likely attacks a structure which is part of the _____ membrane.

ANSWER

BACK TO GAME

Primary Tissues

Daily Double!!!

500

A 40-year old male is diagnosed with GoodPasture's syndrome. The patient's immune system in this situation most likely attacks a structure which is part of the basement membrane.

BACK TO GAME

Organs and Organ Systems

100

Regulation of blood volume and composition is part of the _____ system.

ANSWER

BACK TO GAME

Organs and Organ Systems

100

Regulation of blood volume and composition is part of the urinary system.

[BACK TO GAME](#)

Organs and Organ Systems

200

Thermoregulation is a function of all of the following systems *except* the

A. integumentary system.

B. skeletal system.

C. muscular system.

D. nervous system.

ANSWER

BACK TO GAME

Organs and Organ Systems

200

Thermoregulation is a function of all of the following systems *except* the

A. integumentary system.

B. skeletal system.

C. muscular system.

D. nervous system.

[BACK TO GAME](#)

Organs and Systems

300

Arrange the following from the simplest to the most complex order:

- a. Cells
- b. Organs
- c. Tissues
- d. Organ systems
- e. Molecules

Correct order: ___ → ___ → ___ → ___ →

___.

ANSWER

[BACK TO GAME](#)

Organs and Systems

300

Arrange the following from the simplest to the most complex order:

- a. Cells
- b. Organs
- c. Tissues
- d. Organ systems
- e. Molecules

Correct order: e → a → c → b → d.

[BACK TO GAME](#)

Organs and Systems

400

Daily Double!!!

Graying of hair with age is caused by the loss of _____ stem cells.

ANSWER

BACK TO GAME

Organs and Systems

Daily Double!!!

400

Graying of hair with age is caused by the loss of melanocyte stem cells.

[BACK TO GAME](#)

Organs and Systems

500

Damage to a specific neuron in the brain could control a vital function such as breathing. This example suggests that

- A. all neurons are involved in controlling breathing.
- B. different levels of organizations are interdependent.
- C. any cell can affect any function.
- D. the neuron's function is to regulate breathing only.

ANSWER

[BACK TO GAME](#)

Organs and Systems

500

Damage to a specific neuron in the brain could control a vital function such as breathing. This example suggests that

A. all neurons are involved in controlling breathing.

B. different levels of organizations are interdependent.

C. any cell can affect any function.

D. the neuron's function is to regulate breathing only.

[BACK TO GAME](#)

Body-Fluid Compartments

100

About 65% of the total body water is in the

- a. intracellular compartment
- b. plasma
- c. interstitial fluid
- d. extracellular fluid

ANSWER

BACK TO GAME

Body-Fluid Compartments

100

About 65% of the total body water is in the

- a. **intracellular compartment**
- b. plasma
- c. interstitial fluid
- d. extracellular fluid

[BACK TO GAME](#)

Body-Fluid Compartments

200

Extracellular fluid

A. consists of the interstitial fluid and plasma.

B. is part of the cytoplasm and surrounds the organelles.

C. makes up about two-thirds of the body fluids.

ANSWER

BACK TO GAME

Body-Fluid Compartments

200

Extracellular fluid

A. consists of the interstitial fluid and plasma.

B. is part of the cytoplasm and surrounds the organelles.

C. makes up about two-thirds of the body fluids.

[BACK TO GAME](#)

Body-Fluid Compartments

300

The connective tissue matrix is part of the

- A. intracellular fluid.
- B. extracellular fluid.
- C. plasma.

ANSWER

[BACK TO GAME](#)

Body-Fluid Compartments

300

The connective tissue matrix is part of the

A. intracellular fluid.

B. extracellular fluid.

C. plasma.

[BACK TO GAME](#)

Body-Fluid Compartments

400

The endocrine glands release their secretions

- A. into their own ducts.
- B. into plasma.
- C. into intracellular fluid.
- D. on the surface of their epithelial membranes.

ANSWER

BACK TO GAME

Body-Fluid Compartments

400

The endocrine glands release their secretions

A. into their own ducts.

B. into plasma.

C. into intracellular fluid.

D. on the surface of their epithelial membranes.

[BACK TO GAME](#)

Body-Fluid Compartments

Daily Double!!!

500

Internal environment refers to

- A. plasma.
- B. intracellular fluid.
- C. interstitial fluid.
- D. extracellular fluid.

ANSWER

BACK TO GAME

Body-Fluid Compartments

Daily Double!!!

500

Internal environment refers to

- A. plasma.
- B. intracellular fluid.
- C. interstitial fluid.
- D. extracellular fluid.

[BACK TO GAME](#)