

The Human Body The Human Brain

The brain is the control center for the entire human body. Everything the body does, every action, is **initiated**¹ in the brain. The brain works a lot like a computer. It constantly receives information. It analyzes and processes the information. Then it responds instantly by sending out signals that cause the body to take actions. When you lift your left pinky finger, the signal first went through your brain. You stand up and already the signal went through the brain. There is nothing you do that does not involve your brain. Your breathing and **circulation**² originate in the brain. Your five senses all send information to the brain.

The brain is split up into three main parts: the cerebrum, the cerebellum and the brain stem. They are each responsible for different functions in your body. The cerebrum is the largest part of the brain. It is in charge of muscular activity, the five senses, and general maintenance of the internal organs.

The cerebellum is in charge of balance, posture and coordination. It is divided into two sides, the right and the left. The left side of the cerebellum controls the **functions**³ of the right side of the body and the right side of the cerebellum controls the functions of the left side of your body.

The brain stem connects the cerebrum to the spinal cord. The brain stem controls breathing, circulation, hunger, and other body processes. This is also the part of the brain that controls the eyes. The brain stem is the command center of the nervous system. The spinal cord is the messenger. It carries messages between the brain and other parts of the body.

¹ **Initiated**- introduced

² **Circulation**- the movement of blood throughout the body

³ **Functions**- purpose or role

Name: _____

Date: _____

1. Which part of the brain controls circulation?

- a. The cerebrum.
- b. The cerebellum.
- c. The brain stem.
- d. The spinal cord.

2. Which paragraph(s) describes specific parts of the brain?

- a. Paragraphs 3 and 4.
- b. Paragraphs 2, 3, and 4.
- c. Paragraph 1.
- d. Paragraph 4.

3. What can be concluded about the spinal cord based on the information in the passage?

- a. It is connected to the brain and other body parts.
- b. It is the largest part of the brain.
- c. It controls breathing and circulation.
- d. It is connected directly to the cerebrum.

4. Read the following sentences: "The brain works a lot like a computer. It constantly receives information. It analyzes and processes the information. Then it responds instantly by sending out signals that cause the body to take actions."

The word **signal** most nearly means

- a. functions
- b. computers
- c. commands
- d. diseases

5. What is this passage mostly about?

- a. The main parts of the brain and their functions.
- b. Common diseases and disorders of the brain.
- c. The different functions of the left side and right side of the brain.
- d. How the brain tells your limbs to move.

6. Describe the cerebellum and its function.

7. Based on evidence in the passage, how might an injury to the left side of the cerebellum affect a person's ability to move?

8. The question below is an incomplete sentence. Choose the answer that best completes the sentence.

The brain controls everything, _____ how you move your body.

- a. excluding
- b. similarly
- c. sometimes
- d. including

9. Read the following sentence.

The brain is the control center of the entire human body because everything the body does is initiated in the brain.

Answer the following questions based on the information provided in the sentence you just read. One of the questions has already been answered for you.

1. What is the main subject of the sentence? the brain

2. What is the brain? _____

3. Why? _____

10. **Vocabulary Word:** initiate (*verb*): to start something or cause it to happen.

Use the vocabulary word in a sentence: _____

Teacher Guide and Answers

Passage Reading Level: Lexile 760

Featured Text Structure: Descriptive – the writer explains, defines, or illustrates a concept or topic

Passage Summary: The passage explains that the brain is the control center for the entire body and describes the three main parts of the brain - the cerebrum, the cerebellum and the brain stem.

1. Which part of the brain controls circulation?
 - a. The cerebrum.
 - b. The cerebellum.
 - c. The brain stem.**
 - d. The spinal cord.
2. Which paragraph(s) describes specific parts of the brain?
 - a. Paragraphs 3 and 4.
 - b. Paragraphs 2, 3, and 4.**
 - c. Paragraph 1.
 - d. Paragraph 4.
3. What can be concluded about the spinal cord based on the information in the passage?
 - a. It is connected to the brain and other body parts.**
 - b. It is the largest part of the brain.
 - c. It controls breathing and circulation.
 - d. It is connected directly to the cerebrum.
4. Read the following sentences: “The brain works a lot like a computer. It constantly receives information. It analyzes and processes the information. Then it responds instantly by sending out signals that cause the body to take actions.”

The word **signal** most nearly means

- a. functions
 - b. computers
 - c. commands**
 - d. diseases
5. What is this passage mostly about?
 - a. The main parts of the brain and their functions.**
 - b. Common diseases and disorders of the brain.
 - c. The different functions of the left side and right side of the brain.
 - d. How the brain tells your limbs to move.

6. Describe the cerebellum and its function.

Suggested answer: The cerebellum is one of the three main parts of the brain and it is in charge of balance, posture and coordination. It is divided into two sides, the right and the left. The left side of the cerebellum controls the functions of the right side of the body and the right side of the cerebellum controls the functions of the left side of the body.

7. Based on evidence in the passage, how might an injury to the left side of the cerebellum affect a person's ability to move?

Suggested answer: An injury to the left side of the cerebellum might make it difficult for a person to control movement on the right side of his or her body.

8. The question below is an incomplete sentence. Choose the answer that best completes the sentence.

The brain controls everything, _____ how you move your body.

- a. excluding
- b. similarly
- c. sometimes
- d. including**

9. Read the following sentence.

The brain is the control center of the entire human body because everything the body does is initiated in the brain.

Answer the following questions based on the information provided in the sentence you just read. One of the questions has already been answered for you.

- 1. What is the main subject of this sentence? the brain
- 2. What is the brain? **the control center of the entire human body**
- 3. Why? **because everything the body does is initiated in the brain**

10. **Vocabulary Word:** initiate (*verb*): to start something or cause it to happen.

Use the vocabulary word in a sentence: answers may vary.