# Year 10 Science: The nervous system: brain, spinal cord and nerves

Name: _____ Date: _____

Try these without your notes first, then check the answer key.

## Practice

1. Name the two parts of the central nervous system.

2. A gymnast keeps her balance on a narrow beam. Which brain region is mainly responsible?

3. Sort into voluntary or automatic: sneezing, texting a friend, your stomach churning food, choosing a lunch.

4. Name the stimulus and the sense organ that detects it when you hear a fire alarm.

5. In the ruler drop test, why should the dropper not count down before letting go?

## Fix the mistake

6. Correct this statement: "The brainstem controls balance."

7. Correct this statement: "The spinal cord is part of the peripheral nervous system, because it runs down the back."

8. Correct this statement: "A nerve is one long nerve cell."

9. Correct this statement: "In the ruler drop, the stimulus is the eye."

## Answer key (for parents and tutors)

1. Name the two parts of the central nervous system.
   **The brain and the spinal cord.**
2. A gymnast keeps her balance on a narrow beam. Which brain region is mainly responsible?
   **The cerebellum, which coordinates movement and balance.**
3. Sort into voluntary or automatic: sneezing, texting a friend, your stomach churning food, choosing a lunch.
   **Automatic: sneezing, stomach churning food. Voluntary: texting a friend, choosing a lunch.**
4. Name the stimulus and the sense organ that detects it when you hear a fire alarm.
   **The stimulus is sound; the ear detects it.**
5. In the ruler drop test, why should the dropper not count down before letting go?
   **A countdown lets the catcher predict the moment, so you measure guessing rather than reaction; the drop must come without warning to measure the true reaction time.**
6. Correct this statement: "The brainstem controls balance."
   **The cerebellum coordinates movement and balance; the brainstem runs automatic functions such as breathing and heart rate.**
7. Correct this statement: "The spinal cord is part of the peripheral nervous system, because it runs down the back."
   **The spinal cord is part of the central nervous system with the brain; the peripheral nervous system is the nerves outside them.**
8. Correct this statement: "A nerve is one long nerve cell."
   **A nerve is a bundle of many neurons wrapped together, like a cable holding many wires.**
9. Correct this statement: "In the ruler drop, the stimulus is the eye."
   **The stimulus is the change, the ruler starting to fall; the eye is the sense organ whose receptors detect it.**