1. The Jim twins were raised apart from four weeks old.

   ☐ True ☐ False

2. The central nervous system consists of...

   ☐ the brain only

   ☐ the brain and the spinal cord

   ☐ the sympathetic and parasympathetic branches

   ☐ all nerves outside the brain

3. The all-or-nothing principle means that a neuron...

   ☐ fires only in the brain

   ☐ never fires twice

   ☐ fires harder for a stronger stimulus

   ☐ fires completely or not at all

4. Breathing and heart rate are controlled mainly by the...

   ☐ cerebellum

   ☐ brain stem

   ☐ cerebral cortex

   ☐ corpus callosum

5. The roughly 24-hour sleep/wake cycle is called a _____ rhythm.

   _____

6. Converting a physical stimulus into a neural signal is called _____.

   _____

7. What does heritability describe?

   ☐ The number of genes for a trait

   ☐ How much of one person's trait comes from genes

   ☐ How much variation in a trait within a population is linked to genetic differences

   ☐ Whether a trait can change

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☐ True ☐ False

9. The gap between two neurons, crossed chemically, is the _____.

   _____

10. Split-brain surgery was developed as a treatment for severe epilepsy.

    ☐ True ☐ False

1. **True**

   They met again at 39.

2. **the brain and the spinal cord**

   The CNS is the **brain** plus the **spinal cord**; everything else is peripheral.

3. **fires completely or not at all**

   Strength is coded by the **rate** of firing and the **number** of neurons, not the force of one firing.

4. **brain stem**

   The **brain stem**, including the **medulla**, controls basic functioning.

5. **circadian**

   The **circadian rhythm** runs about 24 hours and is disrupted by jet lag and shift work.

6. **transduction**

   Transduction is the conversion step; below **threshold** no signal is produced at all.

7. **How much variation in a trait within a population is linked to genetic differences**

   Groups, not individuals.

8. **False**

   That is the **sympathetic** branch. The parasympathetic branch calms the body afterwards.

9. **synapse**

   Neurons do not touch; neurotransmitters carry the signal across the **synapse**.

10. **True**

    Severing the **corpus callosum** treated epilepsy; the research findings came afterwards.

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