Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Brain States Word Jumble Worksheet

Instructions:

Read Chapter 9: Brain States in The Brain Facts Book. Use the clues below to **unscramble** the vocabulary words from the chapter. Write the correct vocabulary word on the line provided below each definition.

1. Two main factors drive your body to crave sleep: the time of day or night (**ardicina tssyme**) and how long you have been awake (homeostatic system).

Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. During times of rest and relaxation, you’re usually avoiding heavy thinking or complicated tasks, and parts of the brain called the **fealtud dome tewnrok** are more active.

Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. The level of arousal varies across a spectrum from low to high. When arousal falls below a certain threshold we can transition from wake to sleep, for example. But under heightened arousal, like intense **xteyian**, we cannot reach this threshold and we stay awake.

Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. In sleep studies, scientists now recognize two main states: slow wave sleep (SWS) and **drpai eey mmvento pesle** (REM). Dreaming happens mainly during REM sleep.

Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. Rather than merely being awake, **lousara** involves changes in the body and brain that provide motivations to do an action — teaching a class, speaking in public, or focusing your attention.

Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. **iantentot** is a fascinating ability, because it enables you to have so much control and the ability to finetune your focus to different locations, times, and topics. This ability triggers detectable changes in your heart rate, breathing, and blood flow.

Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. The circadian timing system is regulated by the **hmatacisiprcaus cluenus**, a small group of nerve cells in the hypothalamus that functions as a master clock. These cells express “clock proteins,” which go through a biochemical cycle of about 24 hours, setting the pace for daily cycles of activity, sleep, hormone release, and other bodily functions.

Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. The **ootniacum voersun yesmts** affects heart rate, blood flow, and breathing.

Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. People with **pleasycorn** have sleep attacks during the day, causing them to suddenly fall asleep, which is especially dangerous if they are driving.

Answer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10. Several complex brain systems and endocrine (hormone) systems contribute to sexual arousal and behaviors, but the brain regions, neurotransmitters, and body systems are similar to those involved in general arousal. The distinguishing factor is that sexual arousal also involves hormones such as **greenost** and **stooneseett**, which then activate neurons that release the same neurotransmitters that are released during general arousal.

Answers: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_