



## Chapter 3 Exercises

### Review Questions

1. The body's biological clock is located in the \_\_\_\_\_.
  - a. hippocampus
  - b. thalamus
  - c. hypothalamus
  - d. pituitary gland
2. \_\_\_\_\_ occurs when there is a chronic deficiency in sleep.
  - a. Jet lag
  - b. Rotating shift work
  - c. Circadian rhythm
  - d. Sleep debt
3. \_\_\_\_\_ cycles occur roughly once every 24 hours.
  - a. Biological
  - b. Circadian
  - c. Rotating
  - d. Conscious
4. \_\_\_\_\_ is one way in which people can help reset their biological clocks.
  - a. Light-dark exposure
  - b. Coffee consumption
  - c. Alcohol consumption
  - d. Napping
5. Growth hormone is secreted by the \_\_\_\_\_ while we sleep.
  - a. pineal gland
  - b. thyroid
  - c. pituitary gland
  - d. pancreas
6. The \_\_\_\_\_ plays a role in controlling slow-wave sleep.
  - a. hypothalamus
  - b. thalamus
  - c. pons
  - d. both a. and b.
7. \_\_\_\_\_ is a hormone secreted by the pineal gland that plays a role in regulating biological rhythms and immune function.
  - a. Growth hormone
  - b. Melatonin
  - c. LH
  - d. FSH
8. \_\_\_\_\_ appears to be especially important for enhanced performance on recently learned tasks.
  - a. Melatonin
  - b. Slow-wave sleep
  - c. Sleep deprivation
  - d. Growth hormone
9. \_\_\_\_\_ is described as slow-wave sleep.
  - a. Stage 1
  - b. Stage 2
  - c. Stage 3
  - d. REM sleep
10. Sleep spindles and K-complexes are most often associated with \_\_\_\_\_ sleep.
  - a. stage 1
  - b. stage 2
  - c. stage 3
  - d. REM
11. Symptoms of \_\_\_\_\_ may be improved by REM deprivation.
  - a. schizophrenia
  - b. Parkinson's disease
  - c. depression
  - d. generalized anxiety disorder

12. The \_\_\_\_\_ content of a dream refers to the true meaning of the dream.
- latent
  - manifest
  - collective unconscious
  - important
13. \_\_\_\_\_ is loss of muscle tone or control that is often associated with narcolepsy.
- RBD
  - CPAP
  - Cataplexy
  - Insomnia
14. An individual may suffer from \_\_\_\_\_ if there is a disruption in the brain signals that are sent to the muscles that regulate breathing.
- central sleep apnea
  - obstructive sleep apnea
  - narcolepsy
  - SIDS
15. The most common treatment for \_\_\_\_\_ involves the use of amphetamine-like medications.
- sleep apnea
  - RBD
  - SIDS
  - narcolepsy
16. \_\_\_\_\_ is another word for sleepwalking.
- Insomnia
  - Somnambulism
  - Cataplexy
  - Narcolepsy
17. \_\_\_\_\_ occurs when a drug user requires more and more of a given drug in order to experience the same effects of the drug.
- Withdrawal
  - Psychological dependence
  - Tolerance
  - Reuptake
18. Cocaine blocks the reuptake of \_\_\_\_\_.
- GABA
  - glutamate
  - acetylcholine
  - dopamine
19. \_\_\_\_\_ refers to drug craving.
- Psychological dependence
  - Antagonism
  - Agonism
  - Physical dependence
20. LSD affects \_\_\_\_\_ neurotransmission.
- dopamine
  - serotonin
  - acetylcholine
  - norepinephrine
21. \_\_\_\_\_ is most effective in individuals that are very open to the power of suggestion.
- Hypnosis
  - Meditation
  - Mindful awareness
  - Cognitive therapy
22. \_\_\_\_\_ has its roots in religious practice.
- Hypnosis
  - Meditation
  - Cognitive therapy
  - Behavioral therapy
23. Meditation may be helpful in \_\_\_\_\_.
- pain management
  - stress control
  - treating the flu
  - both a. and b.

24. Research suggests that cognitive processes, such as learning, may be affected by \_\_\_\_\_.
- hypnosis
  - meditation
  - mindful awareness
  - progressive relaxation

## Critical Thinking Questions

25. Health care professionals often work rotating shifts. Why is this problematic? What can be done to deal with potential problems?
26. Generally, humans are considered diurnal, which means we are awake during the day and asleep during the night. Many rodents, on the other hand, are nocturnal. Why do you think different animals have such different sleep-wake cycles?
27. If theories that assert sleep is necessary for restoration and recovery from daily energetic demands are correct, what do you predict about the relationship that would exist between individuals' total sleep duration and their level of activity?
28. How could researchers determine if given areas of the brain are involved in the regulation of sleep?
29. Differentiate the evolutionary theories of sleep and make a case for the one with the most compelling evidence.
30. Freud believed that dreams provide important insight into the unconscious mind. He maintained that a dream's manifest content could provide clues into an individual's unconscious. What potential criticisms exist for this particular perspective?
31. Some people claim that sleepwalking and talking in your sleep involve individuals acting out their dreams. Why is this particular explanation unlikely?
32. One of the recommendations that therapists will make to people who suffer from insomnia is to spend less waking time in bed. Why do you think spending waking time in bed might interfere with the ability to fall asleep later?
33. How is narcolepsy with cataplexy similar to and different from REM sleep?
34. The negative health consequences of both alcohol and tobacco products are well-documented. A drug like marijuana, on the other hand, is generally considered to be as safe as, if not safer than, these legal drugs. Why do you think marijuana use continues to be illegal in some parts of the United States?
35. Why are programs designed to educate people about the dangers of using tobacco products just as important as developing tobacco cessation programs?
36. What advantages exist for researching the potential health benefits of hypnosis?
37. What types of studies would be most convincing regarding the effectiveness of meditation in the treatment for some type of physical or mental disorder?