

REVIEW OF KEY TERMS

Alcohol
Ascending reticular activating system (ARAS)
Biological rhythms
Cannabis
Circadian rhythms
Dissociation
Electroencephalograph (EEG)
Electromyograph (EMG)
Electrooculograph (EOG)
Hallucinogens

Hypnosis
Insomnia
Latent content
Lucid dreams
Manifest content
Meditation
Narcolepsy
Narcotics or opiates
Nightmares
Night terrors
Non-REM (NREM) sleep

Physical dependence
Psychoactive drugs
Psychological dependence
REM sleep
Sedatives
Sleep apnea
Slow-wave sleep (SWS)
Somnambulism
Stimulants
Tolerance

1. A device that monitors the electrical activity of the brain.
2. A device that records muscle activity and tension.
3. A device that records eye movements.
4. Periodic fluctuations in physiological functioning.
5. The 24-hour biological cycles found in humans and many other species.
6. Sleep involving rapid eye movements.
7. Sleep stages 1 through 4, which are marked by an absence of rapid eye movements.
8. Consists of the afferent fibers running through the reticular formation that influence physiological arousal.
9. Drugs that are derived from opium that are capable of relieving pain. These drugs are also called narcotics.
10. Involves chronic problems in getting adequate sleep.
11. A disease marked by sudden and irresistible onsets of sleep during normal waking hours.
12. Reflexive grasping for air that awakens a person and disrupts sleep.
13. Abrupt awakenings from NREM sleep accompanied by intense autonomic arousal and feelings of panic.
14. Anxiety arousing dreams that lead to awakening, usually from REM sleep.
15. Occurs when a sleeping person arises and wanders about in deep NREM sleep.
16. A systematic procedure that typically produces a heightened state of suggestibility.
17. Involves a splitting off of mental processes into two separate, simultaneous streams of awareness.
18. A family of medical exercises in which a conscious attempt is made to focus attention in a nonanalytical way.
19. Chemical substances that modify mental, emotional or behavioral functioning.
20. Sleep stages 3 and 4 in which low-frequency delta waves become prominent in EEG recordings.
21. Drugs that have sleep-inducing and behavioral depression effects.

- _____ 22. Drugs that tend to increase central nervous system activation and behavioral activity.
- _____ 23. A diverse group of drugs that have powerful effects on mental and emotional functioning, marked most prominently by distortions in sensory and perceptual experience.
- _____ 24. The hemp plant from which marijuana, hashish, and THC are derived.
- _____ 25. A variety of beverages containing ethyl alcohol.
- _____ 26. A progressive decrease in a person's responsiveness to a drug.
- _____ 27. A condition that exists when a person must continue to take a drug to avoid withdrawal illness.
- _____ 28. A condition that exists when a person must continue to take a drug to satisfy mental and emotional craving for the drug.
- _____ 29. Freud's term that refers to the plot of a dream at the surface level.
- _____ 30. Freud's term that refers to the hidden or disguised meaning of events in a dream.
- _____ 31. Dreams in which persons are aware that they are dreaming.

Answers: 1. electroencephalograph (EEG) 2. electromyograph (EMG) 3. electro-oculograph (EOG) 4. biological rhythms 5. circadian rhythms 6. REM sleep 7. non-REM sleep 8. ascending reticular activating system (ARAS) 9. narcotics or opiates 10. insomnia 11. narcolepsy 12. sleep apnea 13. night terrors 14. nightmares 15. somnambulism 16. hypnosis 17. dissociation 18. meditation 19. psychoactive drugs 20. slow-wave sleep (SWS) 21. sedatives 22. stimulants 23. hallucinogens 24. cannabis 25. alcohol 26. tolerance 27. physical dependence 28. psychological dependence 29. manifest content 30. latent content 31. lucid dreams.

REVIEW OF KEY PEOPLE

Theodore Barber
Rosalind Cartwright
William Dement

Sigmund Freud
Calvin Hall
Ernest Hilgard

J. Alan Hobson
William James

- _____ 1. Originated the term, "the stream of consciousness".
- _____ 2. Argued for the existence of the unconscious and the hidden meaning of dreams.
- _____ 3. As one of the pioneers in early sleep research, he coined the term REM sleep.
- _____ 4. After analyzing thousands of dreams, he concluded that their contents are generally quite mundane.
- _____ 5. Proposes a problem-solving view as a reason for dreaming.
- _____ 6. One of the authors of the role playing theory of hypnosis.
- _____ 7. A proponent of the altered state (divided consciousness) theory of hypnosis.
- _____ 8. His activation-synthesis model proposes that dreams are only side effects of neural activation.

Answers: 1. James 2. Freud 3. Dement 4. Hall 5. Cartwright 6. Barber 7. Hilgard 8. Hobson.

SELF-QUIZ

1. Which brain wave is probably operating while you are taking this quiz?
 - a. alpha
 - b. beta
 - c. theta
 - d. delta

2. What did William James mean by his term "the stream of consciousness"?
 - a. consciousness always remains at the same level
 - b. consciousness never stops
 - c. consciousness is constantly changing
 - d. consciousness is beyond personal control

3. The circadian rhythm operates around a:
 - a. 1-year cycle
 - b. 28-day cycle
 - c. 24-hour cycle
 - d. 90-minute cycle

4. The most vivid dreams generally occur during:
 - a. REM sleep
 - b. NREM sleep
 - c. the early hours of sleep
 - d. when alpha brain waves are present

5. What appears to be responsible for regulating the circadian rhythm?
 - a. amount of time spent sleeping
 - b. amount of time spent awake
 - c. cultural practices
 - d. exposure to light

6. Severing the ascending reticular activating system in cats caused them to:
 - a. become very aggressive
 - b. become very fearful
 - c. remain in continuous wakefulness
 - d. remain in continuous sleep

7. The content of most dreams is usually:
 - a. mundane
 - b. exotic
 - c. exciting
 - d. erotic

8. Which of the following sleep disorders is most life threatening?
 - a. nightmares
 - b. narcolepsy
 - c. sleep apnea
 - d. somnambulism

9. Persons can be made to act as if they are hypnotized even without the use of hypnotic induction. This statement is:
 - a. true
 - b. false

10. Which of the following physiological changes is unique to meditation?
 - a. increased alpha rhythms
 - b. decreased heart rate
 - c. decreased oxygen consumption
 - d. All of these things are common to many forms of relaxation.
11. Psychoactive drugs exert their effect on the brain by:
 - a. decreasing blood supply to the brain
 - b. altering neurotransmitter activity
 - c. breaking down essential brain amino acids
 - d. penetrating the nucleus of the neurons
12. The most widely abused drug in the United States is:
 - a. alcohol
 - b. cocaine
 - c. heroin
 - d. hallucinogens
13. Which of the following is likely to produce highly subjective events?
 - a. hypnosis
 - b. meditation
 - c. psychoactive drugs
 - d. All of the above can produce highly subjective events.
14. Which of the following statements is correct?
 - a. Most people do not dream in color.
 - b. Practice will not improve the ability to recall dreams.
 - c. From birth until death everyone dreams.
 - d. Dreams generally last only 1 or 2 minutes.
15. What was found in the Featured Study regarding the effects of sleep deprivation in college students?
 - a. sleep deprivation had little effect on their ability to perform cognitive tasks
 - b. sleep deprivation had a substantial negative effect on their mood
 - c. sleep deprivation had a substantial positive effect on their ability to perform cognitive tasks because the students compensated by increasing their effort
 - d. the students were unaware of the actual negative effect of the deprivation

Answers: 1. b 2. c 3. c 4. a 5. d 6. d 7. a 8. b 9. a 10. d 11. b 12. a 13. d 14. c 15. d.