1.5 Sleep

- 1.5.A Explain how the sleep/wake cycle affects behavior and mental processes throughout the day and night.
    - 1.5.A.1 Consciousness has varying levels of awareness of thoughts, feelings, behavior, and events in individuals' internal and external worlds. Sleep and wakefulness are two types of consciousness.
    - 1.5.A.2 The sleep/wake cycle is a circadian rhythm, which in humans is about a 24-hour cycle. Jet lag and shift work are disruptions of the circadian rhythm.
    - 1.5.A.3 The stages of sleep are identified by their specific EEG patterns.
        - 1.5.A.3 .i NREM sleep occurs in Stages 1 through 3 and decreases in duration throughout the cycle. Hypnogogic sensations occur as one enters Initial Stage 1 sleep.
        - 1.5.A.3 .ii REM sleep is considered paradoxical because it produces waves similar to wakefulness, but the body is at its most relaxed. Dreaming typically occurs in REM sleep. The frequency of REM sleep typically increases as the cycle progresses. When deprived of REM sleep, REM rebound can occur.
    - 1.5.A.4 Theories regarding the structure and function of dreams include activation-synthesis and consolidation theory.
      Exclusion Statement: The psychoanalytic theory of dreams is outside of the scope of the AP Psychology Exam.
    - 1.5.A.5 Memory consolidation and restoration are current theories about why sleep occurs. These theories suggest that sleep is useful for organizing and consolidating memories or restoring depleted resources used throughout a given day.
    - 1.5.A.6 Many disorders interrupt healthy sleep, and their effects on waking behavior and health vary. Sleep disruptions can affect physical and cognitive performance during wakefulness. Treating sleep disorders and following regular schedules for sleeping can improve waking performance and overall well-being. Disorders commonly studied in introductory psychology include insomnia, narcolepsy, REM sleep behavior disorder, sleep apnea, and somnambulism.
      Exclusion Statement: The AP Psychology Exam will only address the listed disorders in EK 1.5.A.6.

Vocabulary Terms

- *1.5.A Explain how the sleep/wake cycle affects behavior and mental processes throughout the day and night.*

    - Consciousness
        - Sleep
        - Wakefulness
    - Circadian rhythm
        - Jet lag

- EEG patterns
- Sleep stages
    - (Awake) alpha waves
    - N-REM 1
        - Hypnagogic sensations
    - N-REM 2
        - Sleep spindles
    - N-REM 3
        - Delta waves
        - Night terrors
            - Sleepwalking/talking
    - REM
        - Sleep paralysis
        - Paradoxical sleep
        - REM rebound
- Suprachiasmatic nucleus (SCN)
- Melatonin
- Theories of sleep
- Sleep deprivation/sleep loss (not a term but know what happens)
- Sleep disorders
    - Insomnia
    - Narcolepsy
    - REM sleep behavior disorder
    - Sleep apnea
    - Somnambulism
- Dreams and Dream theories
    - Information-processing
    - Physiological function
    - Activation-synthesis
    - Cognitive development

1.3.C Psychoactive Drugs

- *1.3.C Explain how psychoactive drugs affect behavior and mental processes.*

    - Psychoactive Drugs
        - Antagonists
        - Agonists
            - Reuptake inhibitors
        - Stimulants
            - Caffeine
            - Cocaine
        - Depressants

        - Alcohol
        - Opioids
- Hallucinogens
    - Marijuana
- Addiction
    - Withdrawal symptoms