

The Mystery of Sleep Unveiled

VOCABULARY WORDS

1. mysterious (adjective) /mɪ'stɪər.i.əs/: Something that is difficult to understand, explain, or explain due to its enigmatic or puzzling nature.
Example: The ancient artifact had a mysterious aura, and its origin remained a mystery.
2. cognitive (adjective) /'kɒɡ.nɪ.tɪv/: Relating to the processes of thought, perception, memory, and reasoning within the mind.
Example: Cognitive therapy helps individuals identify and change negative thought patterns.
3. theory (noun) /'θɪə.ri/: A coherent and systematic explanation or framework used to describe a set of facts, observations, or phenomena.
Example: Einstein's theory of relativity revolutionized our understanding of space and time.
4. instinct (noun) /'ɪn.stɪŋkt/: An innate, automatic, and unlearned behavior or response to a specific stimulus or situation.
Example: The instinct for self-preservation is strong in most living creatures.
5. predator (noun) /'pred.ə.tər/: An animal that hunts, kills, and feeds on other animals (prey) for its survival.
Example: Lions are known as major predators in the African savanna.
6. hemisphere (noun) /'hem.ɪ.sfɪər/: One half of a sphere
Example: Australia is located in the southern hemisphere of the Earth.



Humans spend approximately a third of their lives sleeping, but the exact reason for this important activity remains largely **mysterious**.

Scientific research has shed light on the importance of sleep. The American Sleep Foundation advises that most adults need between seven and nine hours of sleep each night to maintain good health. Lack of sleep can lead to tiredness and impact **cognitive** functions, including memory. Furthermore, too little sleep is linked to serious health issues such as diabetes and mental disorders.

While the effects of sleep are understood, the underlying purpose remains a topic of exploration. The Division of Sleep Medicine at Harvard Medical School outlines various

theories, including energy conservation. One theory suggests that sleep helps conserve energy for daytime activities. Additionally, sleep may serve as a period for bodily repair, as studies show muscle growth, tissue repair, and the release of growth hormones primarily occur during sleep.

Another theory focuses on the role of sleep in brain function and information processing. Sleep might aid in the brain's organization and development, particularly in children. A study from 2018 revealed that sleep strengthens connections to important information while weakening connections to less significant data.

Sleep's connection to ancient survival **instincts** is also considered. It may have initially served to protect individuals from night **predators** or accidents in the dark. However, some argue that remaining awake would be safer for escaping threats.

Particularly, certain animals, like birds and dolphins, adopt a unique approach to sleep, allowing one **hemisphere** of their brain to rest at a time while keeping the other active to stay watchful for potential dangers.

DISCUSSION

1. If you had the option to eliminate the need for sleep from your life, would you choose to do so? Why or why not?
2. Sleep is often linked to vivid dreams and nightmares. What's the most memorable dream you've had recently?
3. In some cultures, there are rituals and practices associated with sleep. Are there any bedtime rituals or practices you follow to improve your sleep quality?
4. Imagine a world where people didn't need to sleep. What do you think people would do with all the extra time?
5. Sleep deprivation can lead to humorous situations. Share a funny anecdote from a time when you or someone you know was extremely sleep-deprived.
6. Discuss the concept of polyphasic sleep (multiple short naps instead of one long sleep). Could this sleep pattern be more efficient, and would you be willing to try it?
7. How does the idea of animals having unique sleep patterns, like birds keeping one eye open, relate to human adaptations?