

A. Keywords:

REM sleep – part of the sleep cycle with rapid eye movements caused by movement behind the eyelids when dreaming occurs
Sleep cycle – a nightly pattern of deep sleep, light sleep and dreaming
NREM sleep – non-rapid eye movement sleep
Sensory blockade – in REM sleep, all incoming sensory information is stopped
Movement inhibition – in REM sleep when movement is prevented
Sleep deprivation – not having enough sleep
Circadian rhythms – human body rhythms that have a (24 hour) cycle
Sleep-wake cycle – a circadian/daily rhythm triggered by the day-night cycle
Ultradian rhythms – rhythms that occur in a period of less than 24 hours
Exogenous – external cues in the environment that affect the biological clock
Zeitgebers – external cues that synchronise our biological rhythms
Insomnia – problems sleeping at night that cause difficulties during the day
Narcolepsy – inability to control sleeping and waking
Unconscious mind – an inaccessible part of the mind that affects behaviour and feelings
Dreamwork – the transformation of unconscious thoughts into dream content

B. Features, functions and benefit of sleep

There are four stages of sleep with REM sleep forming the fifth part of the sleep cycle. These stages appear more than once throughout a night's sleep. Differences in brain activity help to characterise sleep stages. In one night's sleep we go through about five cycles of the stages and REM sleep. A cycle of sleep lasts about 90 minutes. Adults tend to need about 7-8 hours of sleep, while teenagers need about 9. Sleep deprivation means a person will not function as well at a high level.

C. Theories of dreaming Freud's theory states that we have an unconscious mind that holds thoughts and wishes not expressed consciously. Dreams reveal the unconscious mind; manifest content is the storey of the dream & the latent content is the true meaning. Dreamwork keeps the unconscious mind hidden through condensation, displacement & secondary elaboration. Activation synthesis theory is a scientific model which states neurons continue to fire when we are asleep and our brain puts these together to make sense of them which is what we dream.

D. Sleep Modelling Sleep cycles of about 90 minutes and there are about five such cycles. The sleep cycle is an ultradian rhythm as it lasts for less than 24 hours. The sleep cycle involves Stages 1 to 4, from very light sleep to deep sleep, as well as REM sleep, where dreaming takes place. The sleep-wake cycle is a circadian rhythm lasting around 24 hours where we are awake for part of it and sleep for part of the 24 hours. The sleep cycle which helps to underline the differences between the sleep cycle and the sleep-wake cycle

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E. Internal and external influences

The sleep-wake cycle consists of a daily cycle from being awake to sleeping; this is around a 24 hour cycle. Jet lag and shift work can affect the sleep-wake cycle. Internal influences on sleep include hormones; for example when we are stressed cortisol is released which causes alertness so in turn affects sleep. External influences are environmental such as light, food and drink and stress.

F. Sleep disorders Sleep disorders can be primary or secondary; primary sleep disorders are where the disorder is the problem such as insomnia. While secondary sleep disorders are where problems with sleep are symptoms of another disorder like depression. Narcolepsy is a where someone has no control over their sleep-wake cycle. Not only is their daytime is sleepiness but they can fall asleep suddenly at anytime with no control over this.

G. Wider thinking / further reading:

<https://qualifications.pearson.com/content/dam/pdf/GCSE/Psychology/2017/Teaching%20and%20learning%20materials/topic-guide-5-sleep-and-dreaming.pdf>