

Sleep Study Sheet

Biological _____: An internal timing mechanism responsible for various physiological and behavioral responses.

Melatonin: Hormone released by the body that brings on sleep. _____ triggers melatonin.

Chronically sleep deprived = frequently not getting enough sleep.

*** The brain is the first organ affected by the lack of sleep.***

Why are teens so sleep deprived?

- During puberty, melatonin is released at a later time. This is why teens are not sleepy until 2am and do not want to get up until 9am
- _____
- Inability to fall asleep until late at night
- Homework
- _____
- Jobs
- _____
- After school activities

Stages of sleep – nonREM

Stage 1:

- The _____ stage of sleep.
- The sleeper moves between conscious and unconsciousness.

Stage 2:

- Light sleep.
- About _____ of sleep is Stage 2 sleep.
*Heart rate slows, and body temperature drops.

Stage 3:

- This stage is essential for generating _____ for the next day.
- Tissue repair occurs in this stage and the body releases growth hormones.

Stage 4:

- _____ it's very difficult to _____ someone in this stage of sleep.
- This stage is also essential for energy; tissue repair and the release of growth hormones continue to occur.

The Non-REM sleep lasts 90-120 minutes
Each stage last anywhere from 15-20 minutes

REM (rapid eye movement) – AKA _____

*Heart rate and breathing increase and become erratic.

Brain is extremely active and muscles are _____.

(It is generally thought that REM – associated muscle paralysis is meant to keep the body from acting out the dreams that occur during this intensely cerebral stage.)

*Dreaming takes place.

*Short-term info is transferred to _____ memory.

*Non-important info is _____ from brain.

The first period of REM typically lasts 10 minutes, with each recurring REM stage lengthening, and the final one lasting an hour.

Normal sleep cycle pattern: Stage 1, 2, 3, 4, 3, 2, REM, repeats 4 times then to waking.

