Stages of Sleep

Stage 1
It is a transition stage from wakefulness to sleep. It usually lasts between one to seven minutes. It many times is called the light sleep stage or “half-awake, half-asleep” stage. The person may show hypnic jerk - a reflex muscle contraction throughout the body. The EEG pattern - it is marked by the presence of theta waves, which are lower in amplitude and frequency than alpha waves. Someone in stage 1 is fairly easy to awaken. Many individuals who are aroused from stage 1 report they were awake.

Stage 2
It is considered the onset of true sleep. Someone awakened from stage 2 reports having been asleep. The EEG pattern - displays high frequency bursts of brain activity called sleep spindles (theta waves are prominent). Near the end of stage 2, delta waves may begin to show. The person’s muscle tension, heart rate, respiration, and temperature start to decline. The person’s eyes move slowly from side to side.

Stage 3
The person’s muscle tension, heart rate, respiration, and temperature continue to decline. The EEG pattern - delta waves start to show more (20% of total wave pattern). Stage 3 and 4 are sometimes called slow wave sleep.

Stage 4
It is also called delta sleep or slow wave sleep. The EEG pattern - displays high amplitude and very low frequency (delta waves). Delta waves must be at least 50% of the EEG pattern eventually will constitute 100% of pattern. It is considered the deepest stage of sleep, as it the most difficult to wake someone from. Sleepwaking and sleeptalking usually present in this stage. Children with night terrors tend to have them in this stage. Most people who do wake at this time don’t remember the experience or waking up.

REM Sleep
It makes up approximately 20% of a person’s sleep time. The person’s eye move rapidly back and forth. The EEG pattern - displays fast frequency and low amplitude which looks just like beta waves (beta waves normally occur when a person is awake). It is often called paradoxical sleep. Heart rate and blood pressure have increases sometimes twice as high as non-REM sleep. The person loses muscle tension and movement (thought to be so we do not act out our dreams). Most dreams are reported during REM sleep, though some people report dreams in stage 4. The REM rebound - if a person is deprived of REM sleep during a night, their REM sleep increases the next night.