1. Sleep
   1. Average about 8 hours per night
   2. Sleep Deprivation
      1. Your speech will become slurred
      2. Difficulty concentrating
      3. Memory lapses
      4. Hallucinations
      5. Paranoia
      6. Driving is almost as dangerous as drunk driving
      7. Example
         1. Keep a rat awake for 2-3 weeks they will eventually die
         2. Can be fatal in animals
      8. Microsleep
         1. Your brain has shut down for a period of time although you talk and walk
         2. Your bodies way to make sure you don’t die
         3. More likely to get sick
      9. Increases obesity
      10. Increase stress hormones, stimulates body to make fat
      11. Watch “Hands on a hard body”
   3. Why do we sleep?
      1. Restoration theory
         1. Sleeps help recharge your battery
         2. Enables you to get ready for the next days activities
         3. Restores energy
         4. REM sleep is vital
         5. Example
            1. Let a rat sleep through stages 1-4, but never let them into REM sleep. Their brain will be less developed
         6. Growth hormones are secreted at night when sleeping
         7. Muscles are rebuilt and repaired during sleep
      2. Memory processing theory
         1. Sleep helps you consolidate/strengthen what you learned throughout the day
         2. Helps encode it into long-term memory
         3. Example
            1. If we taught you something, let you sleep stages 1-4, but woke you up during REM. You’re less likely to remember what you learned.
   4. Sleep Disorders
      1. Insomnia
         1. For most people it’s temporary
         2. Symptom of something else, not a disease
            1. Depression, stress, etc
      2. Narcolepsy
         1. Sudden, irresistible attack of REM sleep throughout the day
         2. Hereditary
         3. Typically between 5 and 20 minutes
         4. Symptoms
            1. Cataplexy

Involves complete paralysis even when you’re still awake

The person will just fall over, but fully awake

Usually precipitated by strong emotions or physical activity

Can happen just before normal sleep

* + - * 1. Hypnagogic hallucinations

The person is lying in bed, fully awake, paralyzed and they are dreaming

The part of your brain that is responsible for producing images

* + 1. Apnea
       1. Occurs when an individual will stop breathing throughout the night, dozens of times throughout the night, waking up gasping for air.
       2. Often don’t realize they woke up in the night.
    2. REM sleep behavior disorder
       1. Occurs when the skeletal muscles do not become paralyzed at night during REM sleep
       2. NOT sleep walking
       3. Can become dangerous, as they might kick the bed, pounding the bed
       4. Demonstrated with cats
          1. They were clumsy
          2. Looked as if they were looking for prey
       5. More common in men over the age of 50
       6. 1/3 will develop Parkinson’s disease
    3. Night terrors
       1. Not a nightmare
       2. Occur during stage 4
       3. More common in children
       4. A child in stage 4, may let out a horrific bloody scream, but then fall right back asleep
       5. Terrifying for the family
       6. They’re not reliving a dream, no explanation
    4. Sleepwalking and sleep talking
       1. Occur in stage 4
       2. They’re not going to occur in REM sleep
       3. More common in children than adults
       4. For the most part it’s not really dangerous to wake a sleepwalker
       5. Relatively easier to guide the person back to bed
       6. Not dangerous unless they’re putting themselves in a dangerous situation like leaving the house, walking up and down the stairs
  1. Dreams
     1. The nature of dreams
        1. REM sleep is biologically adaptive
           1. We need REM sleep to survive
           2. Therefore, dreaming is biologically adaptive
        2. REM rebound
           1. You are essentially spending more time percentage wise in REM sleep that next night
           2. Your bodies attempt to get rid of the deficit for the lack of sleep
           3. Too much REM sleep may cause you to even be tired when awoken
        3. Lucid dreaming
           1. Awareness that the dream is a dream
           2. The ability to control a dream
     2. Why do we dream?
        1. Freud’s interpretation
           1. Manifest content

Dream you remember in the morning

* + - * 1. Latent content

What it really means

* + - 1. Activation-synthesis theory
         1. Random signals then go to your cortex, then tries to sense out of those random signals
         2. It will try to create stories out of images
         3. This explains why our dreams are so bizarre
         4. Part of our brain that controls emotion is very active, however our brain that largely controls logic, attention, inhibitions are inactive