Sleep Theories

- **Making Memories**: sleep restores and rebuilds our fading memories of the day’s experience
Sleep Theories

- **Creativity**: sleep boosts thinking and learning
- **problems are often solved after a night’s sleep**
Sleep Deprivation

- Effects of Sleep Loss
  - fatigue
  - impaired concentration
  - depressed immune system
  - greater vulnerability to accidents
Sleep Disorders

- **Insomnia**
  - persistent problems in falling or staying asleep

- **Narcolepsy**
  - uncontrollable sleep attacks
More Sleep Disturbances

- Sleepwalking (Somnambulism): Occurs in NREM sleep during Stages 3 and 4
- Sleeptalking: Speaking while asleep; occurs in NREM sleep

- Sudden Infant Death Syndrome (SIDS; Crib Death): Sudden, unexplained death of healthy infant (infants should sleep on back or on side to try to prevent)
Even More Sleep Disturbances

- Nightmares: Bad dreams
  - Occur during REM sleep
  - May occur once or twice a month; brief and easily (unfortunately) remembered
  - Imagery Rehearsal: Mentally rehearse the changed dream before you go to sleep again; may help to eliminate nightmares
Physiological Sleep Problems

- Sleep Apnea: Interrupted breathing during sleep; cause of very loud snoring
  - Hypersomnia: Extreme daytime sleepiness
- Apnea can be treated by
  - Surgery
  - Weight loss
  - Breathing mask
Night Terrors and Nightmares

- **Night Terrors**
  - occur within 2 or 3 hours of falling asleep, usually during Stage 4
  - high arousal--appearance of being terrified
  - Total panic and hallucinations may occur
Dreams: Freud

- Dreams
  - sequence of images, emotions, and thoughts passing through a sleeping person’s mind
  - hallucinatory imagery
  - discontinuities
  - incongruities
  - delusional acceptance of the content
  - difficulties remembering
Dreams: Freud

- Sigmund Freud--The Interpretation of Dreams (1900)
  - wish fulfillment
  - discharge otherwise unacceptable feelings
Normal or waking consciousness – active conscious that you are currently thinking about

Preconscious – information that is not conscious but is retrievable into conscious awareness

**also includes nonconscious: automatic behaviors (breathing, blinking, etc.)

Unconscious – information processing of which we are unaware
Dreams

- Early dreams – daily events
- Late dreams – longest, most vivid, strangest
- 8 out of 10 dreams are negative in feeling
- 5 most common dream themes:
  - Falling, Being Chased, Teeth Falling Out, Back at School, Spouse Cheating on You
Lucid Dreaming

- **Lucid Dreaming**: dreams where you realize you are dreaming and are able to control the dream
- **Incubated Dreaming**: conscious suggestion to the unconscious to dream about certain content
Dream Theories

- Wish Fulfillment
  - Dreams express otherwise unacceptable feelings; “psychic safety valve”
Dream Theories

- Information-Processing
  - Dreams help us sort out the day’s events and consolidate memories
    - Ex: High grades – high sleep correlation
Dream Theories

- Physiological Functioning
  - Brain stimulation from REM sleep may help develop and preserve neural pathways
    - Explains why infants spend so much time in sleep and REM
Dream Theories

- Activation-Synthesis
  - Dream is your brain trying to make sense out of random neural firings
  - Limbic system (emotion) and visual cortex have increased activity while dreaming
Dream Theories

- Cognitive Theory
  - Dream content reflects dreamer’s cognitive development
  - Children under 9: Dreams are like slideshows that don’t make sense
  - Older: Coherent storylines in which we are actors
Dreams

- REM Rebound
  - REM sleep increases following REM sleep deprivation