* Flow of information
  + Bus
    - A set of wires that connect all major sections
* Bits and Addition
  + The first 4 bits, are the OP Code
  + The remaining 12 bits are the operand
* The Fetch-Execute Cycle
  + Fetch the next instruction
  + Decode the instruction
  + Get data if needed
  + Execute the instruction
  + Called a cycle because it continuously repeats
* Example
  + IR = instruction
  + PC = location (memory address) of the next instruction
* Random Access Memory (RAM)
  + Memory in which each location can be accessed and change
* Read only memory (ROM)
  + Memory in which each location can be accessed but not change
* RAM is volatile, ROM is not
* Seek time
  + Time it takes for the read/write head to be over the right track
* Latency
  + Time it takes for the sector to be in position
* Access time
  + Seek time + latency
* CD
  + A compact disk that uses a laser to read information stored optically on a plastic disk; data is evenly distributed around track
    - CD ROM
    - CD DA
    - CD WORM
    - RW or RAM
* DVD
  + Digital Versatile Disk, used for storing audio and video
* Flash memory
* Touch screen
  + Resistive
    - A screen named of up two layers of electrically conductive material
      * One layer has vertical lines, the other horizontal
      * When top layer is pressed it comes in contact with the second layer which allows electrical current to flow
      * The specific vertical and horizontal lines that make contact dictate the location of the screen that was touched
  + Capactive
  + Infrared
    - A screen with crisscrossing horizontal and vertical beams of infrared light
  + Surface acoustic wave (SAW)
    - A screen with crisscrossing high frequency sound waves across the horizontal and vertical axes
* Synchronous processing
  + One approach to parallelism is to have multiple processors apply the same program to multiple data sets
* Pipelining
  + Arranges processors in tandem, where each processor contributes one part to an overall computation
* Embedded systems
  + Computers that are dedicated to perform a narrow range of functions as part of a larger system
* Computer hoaxes and scam