**Conventional Rules**

* In classes:
  + No white spaces
  + No java key words
  + Cannot start with number, no \_ or $
  + The name of the file must be identical to the name of the class

**Compiler**

* Will tell you if there are syntax errors (green plus in jgrasp)
* Translates to machine code. This will also create another file called (classname).class which has the machine code in it

**Running**

* You need a method, javafx, application, or applet, OR midlet to run a file
* A method is just code
* The main method will store most of the code for now

**Classes and Functions**

* System is a class

**Primitive Data Types**

* Integer
  + Byte- only 8 bits, between -128 and 127
  + Short- 16 bits, between -32768 and 32727
  + Int- 32 bits, between -32 int limit and 32 int limit
  + Long- 64 bits
* Floating point
  + Float
    - 32 bits
  + Double
    - 64 bits
* character (single letter)
* Boolean

**Literals**

* Variables
  + Used to store values
  + Same name rules as classes
  + Standard convention
    - Descriptive names
      * Ex; TotalCost
    - camelCase for variables UpperCase for classes
* Objects
  + A class
    - A class can hold variables that define the class
    - Ex; class Cat has variables for name, age, color, sex, etc
    - Objects don’t reserve a set amount of data, it will create an address and save it as it grows larger
  + String
    - …literally a string, java makes it special for some reason, theyre declared differently I guess
    - They also can be made simpler so I don’t know why its special
  + Methods
    - End with parentheses like python functions