**Primitive Data Types**

After learning about variable initialization and assignment, you should be aware that data types are serious business. They can determine the success or failure of your project. Therefore, you should know them extremely well. This document should serve as a quick reference guide for the data types we will be using most often in this class. Research each of the terms below and write their definitions in the boxes below

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| **int : Integer**  Integers in Java are shown by the int datatype. They are very similar to integers in Algebra. An int will hold **only** whole numbers data in java, without decimals or fractions. To store numbers type; int then a space and a the name for the integer. |
| **double:**  This is a data type that is used to store decimals in java. Like the integer, it can hold any real numbers including decimals. It is 64 bit so that means is 15-16 digits |
| **boolean:**  A data type used to hold true/false in java. Works like a on/off switch in java. 1=true 0=false |
| **float:**  This is a data type that stores floating point values. Similar to a double values. It is a 32 bit. Float is mainly used to save memory in large arrays of floating point numbers. Default value is 0.0f. |
| **char:**  The char datatype is used to store characters. char data type is a single 16-bit Unicode character. It can store any character |
| **short:**  Not commonly used because it doesnt have very large number range like the other data types. It is an integer data type.  It is 16 bit. |
| **long:**  Long data type is a 64-bit signed two's complement integer. This type is used when a wider range than int is needed.Default value is 0L. |