**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 : represents integers, like in Algebra, in Java; an int will hold only whole numbers data, without decimals or fractions** |
| **Double: used to hold decimal numbers; it will hold any real number (including decimals) that you will need in this course** |
| **Boolean: can hold the values true or false; used as an on/off switch in Java programs** |
| **float: used for double numbers and if you need to save memory in large arrays of floating point numbers; should never be used for precise values** |
| **char: has a minimum value of 0 and maximum value of 65, 535** |
| **short: has a minimum value of -32,768 and a maximum value of 32, 767; can be used to save memory in large arrays** |
| **long: has a minimum value of -2^63 and a maximum value of**  **(2^63) - 1; used when you need a range of values wider than those provided by “int”; supports arithmetic operations for unsigned long** |