Unit 1 CodeBot Vocabulary

Mission 1 -- Welcome	
Browser	Software that displays web pages
Cloud	A place to save files and data through the Internet
Objective	The steps in the mission; has a goal to accomplish
Text editor	Where you type the code
Code	Instructions to the computer
Toolbox	A place in CodeSpace to keep information you learn about programming concepts so you can use it later when you need the information
Simulation	A 3D environment that lets you see the robot move and interact in a virtual world
Mission 2 – Introducing CodeBot	
CodeBot	A computer on wheels with lots of sensors and controls built-in
Peripherals	Devices that give input or output to CodeBot (some CodeBot peripherals are LED lights, speaker, motors, line sensors, proximity sensors, an accelerometer, and pushbuttons)
Motors	Programmable electric engines; powers the wheels
LEDs	Light emitting diodes; tiny and efficient electronic components that produce light
Wheel encoders	Discs that rotate, counting the invisible IR light beam pulses through its slots
Static electricity	A charge that can build up and causes a jolt and spark when grounded
Comment	Code that doesn't get run (more information in Mission 3)
Import	Provides access to a module (or library) of built-in Python functions to use in your code
Mission 3 – Time and Motion (Objectives 1-6)	
Physical computing	Writing code (instructions) for a physical device, like CodeBot or cars
Editor shortcuts	Keyboard hotkeys to write code faster; combinations of keys which complete a task
CPU	The "brain" of the computer that executes your code; the Central Processing Unit
Debugging	The process of understanding what the computer is actually doing and then changing the code to do what you want it to do
Delay	Functions that slow things down, like sleep(); the module must be imported first
Blocking functions	Functions that pause program execution; no other code will run during the pause
Literal	An actual value, like 1 or "hello" or True
Variable	A name to which you assign some data, any type of information your program uses; must be defined before it is used
Boolean	A value that is True or False

Argument	Passing data to a function, determined by the position in the list when the function is called; arguments can be literal values, like True, or variables, like delay
Binary	How a computer deals with digits; electrical connections, like switches, that are either on or off (2 states)
Byte	8-bits of binary data
Mission 3 – Time and Motion (Objectives 7-9)	
Comments	Notes in the code about what you are doing; increases the readability of code and is meant for humans, not the computer (they are not instructions to the computer and are not executed)
Whitespace	Adding blank lines and space around symbols to make the code more readable (ignored by Python, non-executable)
Algorithm	A precise sequence of instructions that the computer can follow exactly, one step at a time, to complete a task or solve a problem
Mission 3 – Time and Motion (Objectives 10-11)	
Control flow Branching	Decision points in code; code will take a different branch or path depending on a condition
Condition	A Boolean value (True or False), often the result of a comparison operator like <, > or = Use an if statement, optionally followed by an elif or else, for branching
Indenting	A way to structure blocks of code by offsetting a block of code four spaces; blocks of code are indented following a statement with a colon (:)