

Vocabulary By Mission

Mission 0 -- Getting Started	
browser	Software that displays web pages
cloud	A place to save files and data through the Internet
Mission 1 -- Welcome	
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
debugging	the process of understanding what the computer is actually doing and then changing the code to do what you want it to do
Mission 2 -- Introducing CodeX	
CPU	Central Processing Unit or the brain of the computer
peripheral	A device that interacts with the CPU (common peripherals are LED lights, display screen, buttons, mouse, keyboard, and printer)
Mission 3 -- Light Show	
RGB	Red, Green, Blue; the colors that make up a single pixel on the screen
sequential	Executing code line by line, one after another, in order
literal	A specific value, like 1 or "hello"
bug	An error in the code (like a typing mistake, indenting problem, missing punctuation, etc.)
variable	A name you assign to some data used in code instead of the literal, or actual, values
assign	Give a variable a value (bind a name to a value)
Mission 3 Remix	
remix	Creating something original based on other projects, or using pieces of other projects
tuple	A triplet of numbers that represents an RGB value -- example: (47, 147, 181)
Mission 4 -- Display Games	
integer	A whole number that can be positive, negative or zero
string	A sequence of characters, like words or sentences
Conversion function	a built-in function that converts a value to a different (and specific) data type

branching	Decision points in code; a condition
boolean	True or False data type (values that can be True or False)
indentation	Structuring blocks of code in Python; statements ending with a colon (:) execute the block of code indented four spaces beneath it
Mission 5 – Micro Musician	
readability	Making code easy to understand for humans.
comments	Notes in code that are ignored by the computer but can explain what the code does These vocab words are not specifically in the Mission instructions, but are included in the warm-up and can be added either in warm-up or wrap-up. Should be covered for the AP exam
Analog (optional)	Smooth and continuous signals that represent a quantity, like sound waves
Digital (optional)	A numerical representation of an analog signal, represented in increments
Mission 6 - Heartbeat	
loop	Repeats a block of code, subject to a given condition.
condition	An expression that evaluates to True or False (example: num < 5 or choice == 1)
while loop	Repeats a block of indented code as long as the condition is true.
infinite loop	A loop that never ends because the loop is always true.
float	A real number, or a number with a decimal point (called a floating point)
increment	Increase the value of a variable by a set amount (example: num = num + 1)
decrement	Decrease the value of a variable by a set amount (example: num = num - 1)
Mission 7 – Personal Billboard	
Comparison operator	Operators that let you compare two values; the result is True or False. Comparison operators include: ==, <, >, <=, >=, !=
Index	A number that keeps track of what choice should be displayed.
List	A sequence of items you can access with an index.
Mission 8 – Answer Bot	
Item	An individual element or value in a list
Mission 9 – Game Spinner	
Logical Operator	Operators that handle combinations of Boolean results: and , or (not)
Function	A named chunk of code you can run anytime just by calling its name; also called a procedure
Parameter	A local variable in a function that receives a value passed into the function when it is called; information the function needs to complete its task

Argument	The value passed into a function – information the function needs to complete its task. An argument can be a literal value, a variable, or an expression.
Control Variable	A variable used in a condition that determines when a loop will end; must be incremented or changed inside the loop.
Mission 10 – Reaction Time	
Computer clock	Electronic clock circuits; the heartbeat of the computer. The tick of the clock moves through the code one line at a time. It is also used in the sleep function, scheduled activities within the CPU, and everything timing related on the computer.
Mission 11 – Spirit Level	
Accelerometer	A sensor chip that detects motion, impacts, and orientation; a device that measures proper acceleration.
Tuple	A read-only version of a list, indicated with parenthesis, and has items you can access with an <i>index</i> .
Mission 12 - Night Light (Blue vocabulary is optional -- not required to complete the mission)	
Light Sensor	A sensitive electronic device that measures the amount of light falling on it.
Analog	Infinite variation in something, like hot to cold or light to dark; smooth and continuous signals that represent a quantity, like sound waves
Digital	A numerical representation of an analog signal, represented in increments
ADC	analog to digital conversion
Mission 13 - Sounds Fun	
User Interface (UI)	The area where a person interacts with a physical device, often through a screen
Bitmap	Graphics bits – drawing images and text. A bitmap is an object that can hold a 2D image of a given width and height; a list of pixel RGB values.
Local variable	A variable that is “private” to a function. It only exists while the function is running, and is separate from any other variable outside the function.
Global variables	Variables defined outside of a function. They exist the entire life of the program and can be accessed and used inside a function.
initialization	Set the initial or first value of a global variable when the program starts. Also, set the screen to its beginning look.
Soundlib module	Functions for creating music and sound effects, including different types of tones.
For loop	Looping across a range of numbers, or iterating over a list. A for loop uses a built-in range function to specify the sequence of numbers you need. It is simpler than a while loop because you don’t need to initialize and update a loop variable; it happens automatically.
Blocking function	Functions that block your code from continuing until they are finished. The code has to wait while a song plays, for example.

Non-blocking function	A function that doesn't make your code wait for the function to finish. For example, other lines of code can execute while a song is playing.
Toggle	Flip the state of a variable (True to False or False to True) that is used to either do or not do something.
Nested for loop	A for loop with a for loop inside, or nested. The second loop is nested inside the first one. Every time the outer loop executes, the inner loop completes all its cycles.
Mission 14 - Line Art	
Bitmap (review)	Graphics bits – drawing images and text. A bitmap is an object that can hold a 2D image of a given width and height; a list of pixel RGB values.
Pixel	Elements of a picture, short for “picture element.” They are the tiny dots that make up larger images.
Magic number	Numbers that just appear in code with no explanation. When something changes in the future, the number doesn't work anymore and you have to change it.
Literal (review)	A specific value, like 1 or “hello”
envelope	In geometry – a curve created by straight lines moving down and across a grid.
Mission 15 - Handball	
Physics engine	A device that uses the mechanics of velocity, distance and time.
Initialization (review)	Set the initial or first value of a global variable when the program starts. Also, set the screen to its beginning look.
Delta time	Elapsed time in milliseconds (or change in time)
UX	User experience
Mission 16 - Breakout	
Prototype	A model of something from which the final thing is developed, or an early sample created to test a concept
Matrix	A structure with rows and columns – a 2D array