

## AP CSP Vocabulary – Missions beyond 9

<b>Mission 10 – Reaction Time</b>	
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.
<b>Mission 11 – Spirit Level</b>	
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> .
<b>Mission 12 - Night Light (Blue vocabulary is optional -- not required to complete the mission)</b>	
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
<b>Mission 13 - Sounds Fun</b>	
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.
<b>Mission 14 - Line Art</b>	
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.
<b>Mission 15 - Handball</b>	
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
<b>Mission 16 - Breakout</b>	
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