

Unit 3 Vocabulary (Missions 9-12)

Select the best computer science definition for each vocabulary word	
Logical operator	<ul style="list-style-type: none"> a) The condition that controls a loop b) A way to loop through a list c) Operators that handle combinations of Boolean results: and / or d) Operators that create a Boolean expression: <, >, ==
Function	<ul style="list-style-type: none"> a) A type of iteration with a loop b) A named chunk of code you can run anytime by calling it c) A type of selection with an if statement d) A way to input information by pressing a button
Argument	<ul style="list-style-type: none"> a) The value passed into a function - information needed to complete a task b) A read-only version of a list c) A local variable in a function that gets a value when the function is called d) A variable used in a condition that determines when a loop will end
Parameter	<ul style="list-style-type: none"> a) The value passed into a function - information needed to complete a task b) A read-only version of a list c) A local variable in a function that gets a value when the function is called d) A variable used in a condition that determines when a loop will end
Tuple	<ul style="list-style-type: none"> a) The value passed into a function - information needed to complete a task b) A read-only version of a list c) A local variable in a function that gets a value when the function is called d) A variable used in a condition that determines when a loop will end
Control variable	<ul style="list-style-type: none"> a) The value passed into a function - information needed to complete a task b) A read-only version of a list c) A local variable in a function that gets a value when the function is called d) A variable used in a condition that determines when a loop will end
Accelerometer	<ul style="list-style-type: none"> a) Electronic circuits that are the heartbeat of the computer b) An electronic sensor that measures infrared and visible wavelengths c) A sensor chip that detects motion, impacts and orientation d) A number randomizer embedded on CodeX
Light sensor	<ul style="list-style-type: none"> a) Electronic circuits that are the heartbeat of the computer b) An electronic sensor that measures infrared and visible wavelengths c) A sensor chip that detects motion, impacts and orientation d) A number randomizer embedded on CodeX
Computer clock	<ul style="list-style-type: none"> a) Electronic circuits that are the heartbeat of the computer b) An electronic sensor that measures infrared and visible wavelengths c) A sensor chip that detects motion, impacts and orientation d) A number randomizer embedded on CodeX
ADC	<ul style="list-style-type: none"> a) A sensor on CodeX b) A way to input information by pressing a button c) A type of electricity d) Analog to digital conversion

Unit 3 Concepts and Coding (Missions 9-12)

<p>The code is an example of:</p> <pre>if choice == 1 and x < 120: color = RED</pre>	<ul style="list-style-type: none"> a) Function b) Parameter c) Control variable d) Logical operator
<p>When will the loop stop?</p> <pre>index = 0 while index < 5: index = index + 1</pre>	<ul style="list-style-type: none"> a) When index = 5 b) When index = 4 c) When index = 6 d) When index is incremented
<p>How many times will the loop execute?</p> <pre>index = 0 while index < 8: display.show(index) index = index + 1</pre>	<ul style="list-style-type: none"> a) 1 time b) 7 times c) 8 times d) Infinite loop
<p>The highlighted code is an example of:</p> <pre>def turn_on(pix): count = 0 while count < pix: pixels.set(pix, GREEN) count = count + 1 turn_on(2)</pre>	<ul style="list-style-type: none"> a) A function definition b) A function call c) An argument d) A parameter
<p>The highlighted code is an example of:</p> <pre>def turn_on(pix): count = 0 while count < pix: pixels.set(pix, GREEN) count = count + 1 turn_on(2)</pre>	<ul style="list-style-type: none"> a) A loop control variable b) A function call c) An argument d) A parameter
<p>The highlighted code is an example of:</p> <pre>def turn_on(pix): count = 0 while count < pix: pixels.set(pix, GREEN) count = count + 1 turn_on(2)</pre>	<ul style="list-style-type: none"> a) A loop control variable b) Increment a control variable c) An argument d) A parameter
<p>The highlighted code is an example of:</p>	<ul style="list-style-type: none"> a) A function definition b) A function call c) An argument

<pre>def turn_on(pix): count = 0 while count < pix: pixels.set(pix, GREEN) count = count + 1 turn_on(2)</pre>	<p>d) A parameter</p>
<p>The highlighted code is an example of:</p> <pre>def turn_on(pix): count = 0 while count < pix: pixels.set(pix, GREEN) count = count + 1 turn_on(2)</pre>	<p>a) A function definition b) A function call c) An argument d) A parameter</p>
<p>The highlighted code is an example of:</p> <pre>def turn_on(pix): count = 0 while count < pix: pixels.set(pix, GREEN) count = count + 1 turn_on(2)</pre>	<p>a) A function definition b) A function call c) An argument d) A parameter</p>
<p>What code correctly defines a function with a parameter?</p>	<p>a) def turn_on(pix): b) def turn_on(3) c) turn_on(3) d) turn_on(pix):</p>
<p>What code correctly calls a function with a parameter?</p>	<p>a) def turn_on(pix): b) def turn_on(3) c) turn_on(3) d) turn_on(pix):</p>
<p>What variable is the loop control variable?</p> <pre>def display_score(num): end_value = 10 count = 0 score = num while count < end_value: display.print(score) count = count + 1</pre>	<p>a) num b) end_value c) score d) count</p>
<p>What code will turn off all pixels?</p>	<p>a) pixels.off() b) pixels.set([BLACK, BLACK, BLACK, BLACK]) c) display.pixels_off() d) pixels.set([BLACK])</p>
<p>What programming concept can you use to turn on all</p>	<p>a) A variable b) A function</p>

pixels with one line of code?	<ul style="list-style-type: none"> c) A parameter d) A list
What code will turn the display screen black?	<ul style="list-style-type: none"> a) <code>display.clear()</code> b) <code>clear.display()</code> c) <code>display.black()</code> d) <code>display.off()</code>
What function will get the current clock time?	<ul style="list-style-type: none"> a) <code>time()</code> b) <code>ticks()</code> c) <code>ticks_ms()</code> d) <code>clicks()</code>
What function will subtract two clock times?	<ul style="list-style-type: none"> a) <code>ticks_subtract()</code> b) <code>ticks_diff()</code> c) <code>diff_ticks()</code> d) <code>ticks_ms()</code>
What function returns data from the accelerometer?	<ul style="list-style-type: none"> a) <code>read.accel()</code> b) <code>accel.data()</code> c) <code>accel.read()</code> d) <code>return.accel()</code>
<p>Given this code, what direction value will "tilt" be assigned?</p> <pre style="background-color: #333; color: #eee; padding: 5px;">val = accel.read() tilt = val[1]</pre>	<ul style="list-style-type: none"> a) x b) y c) z d) (x, y, z)
Which of the following values is NOT a tuple?	<ul style="list-style-type: none"> a) "Hello" b) (x, y) c) (red, green, blue) d) (x, y, z)
<p>What is the purpose of this code?</p> <pre style="background-color: #333; color: #eee; padding: 5px;">X = CENTER</pre>	<ul style="list-style-type: none"> a) A variable that determines the center of the circle b) A variable that determines the center of the display c) A variable that is assigned the tilt of the circle d) A variable that is assigned the x position of the circle
<p>What is the purpose of this code:</p> <pre style="background-color: #333; color: #eee; padding: 5px;">display.draw_circle(x, CENTER, 15, WHITE) x = CENTER + degrees display.draw_circle(x, CENTER, 15, ORANGE)</pre>	<ul style="list-style-type: none"> a) Determines the center of the display b) Draws a new circle and then erases it c) Draws two circles on the display d) Erases the circle, gets a new value for x, and then draws a new circle
What function is used to read a light sensor?	<ul style="list-style-type: none"> a) <code>read.light()</code> b) <code>light.read()</code> c) <code>read()</code> d) <code>light()</code>
What function is used to set all pixels the same color?	<ul style="list-style-type: none"> a) <code>pixels.set(BLUE)</code> b) <code>pixels.set(0, BLUE)</code>

	<ul style="list-style-type: none">c) <code>pixels.fill(BLUE)</code>d) <code>fill.pixels(BLUE)</code>
What code will vary the brightness of pixels?	<ul style="list-style-type: none">a) <code>pixels.BLUE(20)</code>b) <code>fill.pixels(RED, brightness=20)</code>c) <code>brightness(20)</code>d) <code>pixels.fill(BLUE, brightness=20)</code>