

Links to Kahoots and Unit Tests

Mission 9	https://create.kahoot.it/share/firia-labs-mission-9/6d47a695-09a7-49f0-ac44-fce2d24f7fb1
Mission 10	https://create.kahoot.it/share/firia-labs-mission-10/e0201887-f391-492b-a743-8df3f937f76d
Mission 11	https://create.kahoot.it/share/firia-labs-mission-11/e88d6087-ab8b-4a68-a332-6bb6177a87ff
Mission 12	https://create.kahoot.it/share/firia-labs-mission-12/fa531904-7b0a-44e0-b68f-6c6eac181cf5
Unit 3 Vocabulary Review	https://create.kahoot.it/share/firia-labs-unit-3-vocabulary/a716d190-6071-4d9b-af58-86797cf4a731
Unit 3 Coding and Concepts Review	https://create.kahoot.it/share/firia-labs-unit-3-code-review/a498b56b-e8f6-4249-a0cf-7b0c8a4fd0c9
Unit 3 Vocabulary Test (MS Form)	https://forms.office.com/Pages/ShareFormPage.aspx?id=DQSlkWdsW0yxEjajBLZtrQAAAAAAAAAAAAAO_SjBvJpURjFB RFE2R1UwNUJRRINMN0NTVkvVaRIJTUy4u&sharetoken=OesFQHKQBwO7dOTBZddh
Unit 3 Coding and Concepts Test (MS Form)	https://forms.office.com/Pages/ShareFormPage.aspx?id=DQSlkWdsW0yxEjajBLZtrQAAAAAAAAAAAAAO_SjBvJpUOVcz MDc4S1RXMINHQ TjXWVRDNzQ2S0tRQy4u&sharetoken=AKQwmLC7EEBtCNsUkp8z

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

	<p>b) A read-only version of a list</p> <p>c) A local variable in a function that gets a value when the function is called</p> <p>d) A variable used in a condition that determines when a loop will end</p>
Control variable	<p>a) The value passed into a function - information needed to complete a task</p> <p>b) A read-only version of a list</p> <p>c) A local variable in a function that gets a value when the function is called</p> <p>d) A variable used in a condition that determines when a loop will end</p>
Accelerometer	<p>a) Electronic circuits that are the heartbeat of the computer</p> <p>b) An electronic sensor that measures infrared and visible wavelengths</p> <p>c) A sensor chip that detects motion, impacts and orientation</p> <p>d) A number randomizer embedded on CodeX</p>
Light sensor	<p>a) Electronic circuits that are the heartbeat of the computer</p> <p>b) An electronic sensor that measures infrared and visible wavelengths</p> <p>c) A sensor chip that detects motion, impacts and orientation</p> <p>d) A number randomizer embedded on CodeX</p>
Computer clock	<p>a) Electronic circuits that are the heartbeat of the computer</p> <p>b) An electronic sensor that measures infrared and visible wavelengths</p> <p>c) A sensor chip that detects motion, impacts and orientation</p> <p>d) A number randomizer embedded on CodeX</p>
ADC	<p>a) A sensor on CodeX</p> <p>b) A way to input information by pressing a button</p> <p>c) A type of electricity</p> <p>d) Analog to digital conversion</p>

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>	<p>a) Function</p> <p>b) Parameter</p> <p>c) Control variable</p> <p>d) Logical operator</p>
<p>When will the loop stop?</p> <pre>index = 0 while index < 5: index = index + 1</pre>	<p>a) When index = 5</p> <p>b) When index = 4</p> <p>c) When index = 6</p> <p>d) When index is incremented</p>
<p>How many times will the loop execute?</p> <pre>index = 0 while index < 8: display.show(index) index = index + 1</pre>	<p>a) 1 time</p> <p>b) 7 times</p> <p>c) 8 times</p> <p>d) Infinite loop</p>
<p>The highlighted code is an</p>	<p>a) A function definition</p>

<p>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"> 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> <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 function definition b) A function call 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 d) A parameter

<pre>def turn_on(pix): count = 0 while count < pix: pixels.set(pix, GREEN) count = count + 1 turn_on(2)</pre>	
<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 pixels with one line of code?</p>	<p>a) A variable b) A function c) A parameter d) A list</p>
<p>What code will turn the display screen black?</p>	<p>a) display.clear() b) clear.display() c) display.black() d) display.off()</p>
<p>What function will get the current clock time?</p>	<p>a) time() b) ticks() c) ticks_ms() d) clicks()</p>
<p>What function will subtract two clock times?</p>	<p>a) ticks_subtract() b) ticks_diff() c) diff_ticks() d) ticks_ms()</p>
<p>What function returns data from the accelerometer?</p>	<p>a) read.accel() b) accel.data()</p>

	<p>c) accel.read() d) return.accel()</p>
<p>Given this code, what direction value will "tilt" be assigned?</p> <pre>val = accel.read() tilt = val[1]</pre>	<p>a) x b) y c) z d) (x, y, z)</p>
<p>Which of the following values is NOT a tuple?</p>	<p>a) "Hello" b) (x, y) c) (red, green, blue) d) (x, y, z)</p>
<p>What is the purpose of this code?</p> <pre>x = CENTER</pre>	<p>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>
<p>What is the purpose of this code:</p> <pre>display.draw_circle(x, CENTER, 15, WHITE) x = CENTER + degrees display.draw_circle(x, CENTER, 15, ORANGE)</pre>	<p>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</p>
<p>What function is used to read a light sensor?</p>	<p>a) read.light() b) light.read() c) read() d) light()</p>
<p>What function is used to set all pixels the same color?</p>	<p>a) pixels.set(BLUE) b) pixels.set(0, BLUE) c) pixels.fill(BLUE) d) fill.pixels(BLUE)</p>
<p>What code will vary the brightness of pixels?</p>	<p>a) pixels.BLUE(20) b) fill.pixels(RED, brightness=20) c) brightness(20) d) pixels.fill(BLUE, brightness=20)</p>

