

Balloon Popper Game

Information Technology Career Cluster Activity



Step 1

Go to <https://tinyurl.com/Newclickergame>.

This will take you to Scratch, MIT's coding website.

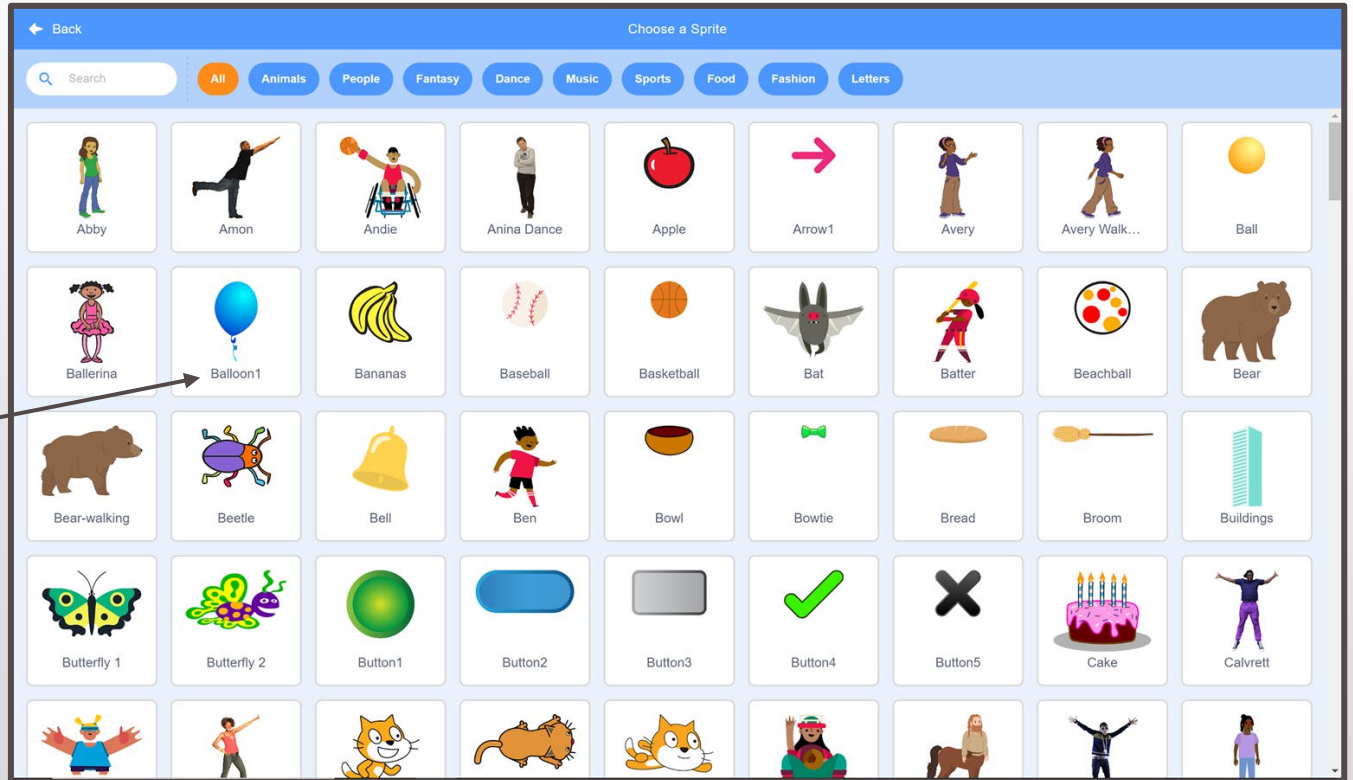


Step 2

Click the cat icon to get started.

The screenshot displays the Scratch IDE interface. The top menu bar includes 'Scratch', 'File', 'Edit', 'Tutorials', 'Join Scratch', and 'Sign In'. The left sidebar contains a 'Code' tab and a 'Sounds' tab. The 'Code' tab is active, showing a script area with several blocks: 'switch backdrop to backdrop1', 'switch backdrop to backdrop1 and wait', 'next backdrop', 'change color effect by 25', 'set color effect to 0', and 'clear graphic effects'. The 'Sounds' tab is also visible, showing a script with 'play sound pop until done', 'start sound pop', 'stop all sounds', 'change pitch effect by 10', 'set pitch effect to 100', and 'clear sound effects'. The main stage area shows a purple background with two balloons (yellow and blue) and a play button icon. A 'Tutorials' window is open over the stage, and a 'Sprite' window is open on the right. A callout box with the text 'Click the cat icon to get started.' points to the cat icon in the bottom right corner of the interface.

Step 3

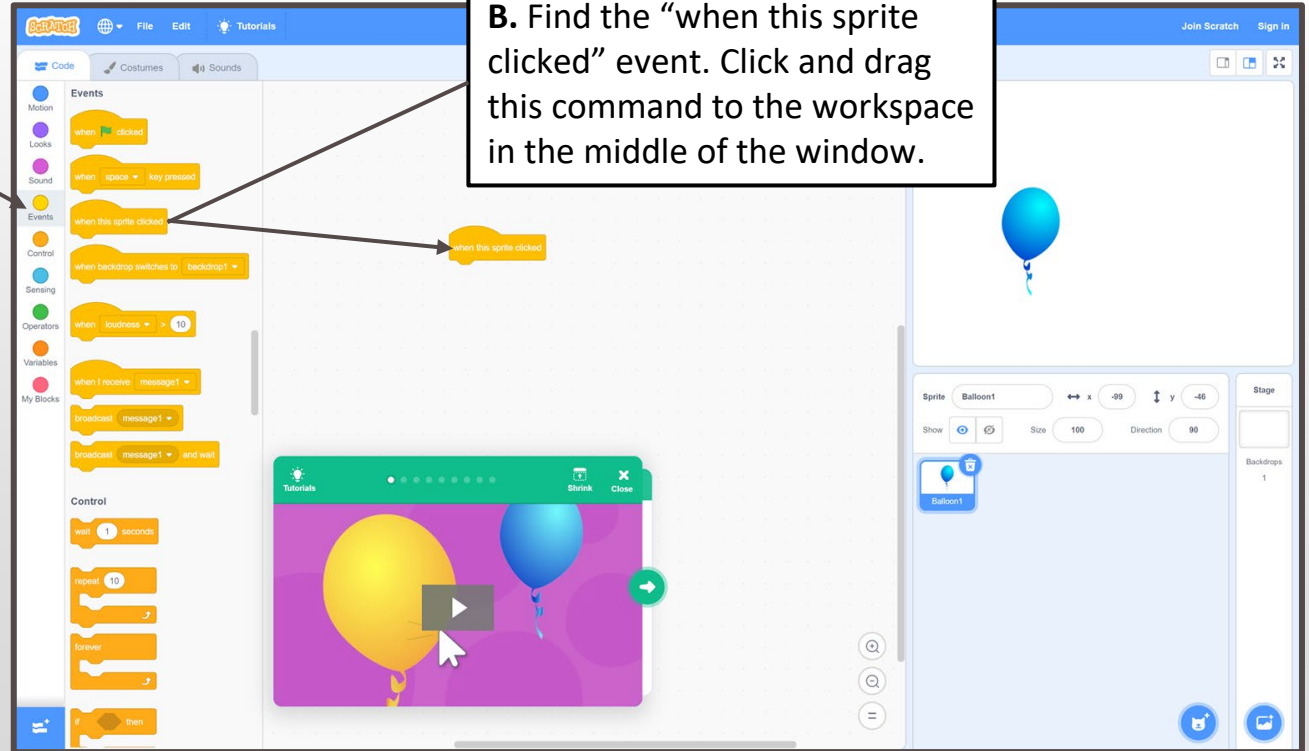


Select the
"Balloon1" Sprite.

Step 4

A. In the left pane, select the “Events” tab.

B. Find the “when this sprite clicked” event. Click and drag this command to the workspace in the middle of the window.



Step 4, Cont.

A. Select the “Sound” tab.

B. Find the “start sound (pop)” command. Click and drag this event to the area below the “when this sprite clicked” command so that the two connect.

The image shows the Scratch code editor interface. The 'Sound' tab is selected in the left sidebar. In the code area, a 'when this sprite clicked' event block is connected to a 'start sound (pop)' block. A yellow callout box labeled 'A.' points to the 'Sound' tab in the sidebar. Another yellow callout box labeled 'B.' points to the 'start sound (pop)' block in the code area, which is being dragged from the 'Sound' tab. The stage area shows a blue balloon sprite. The bottom right corner shows the 'Balloon1' sprite's properties, including size (100) and direction (90).

Step 5

A. Select the "Variables" tab.

B. Click "Make a Variable."

The screenshot displays the Scratch IDE interface. On the left sidebar, the 'Variables' tab is selected, indicated by a callout box labeled 'A. Select the "Variables" tab.'. Within the 'Variables' section, the 'Make a Variable' button is highlighted by a callout box labeled 'B. Click "Make a Variable."'. The main workspace shows a blue balloon sprite on a stage. The code area contains a 'when this sprite clicked' event block followed by a 'start sound: Pop' block. A tutorial window titled 'Tutorials' is open at the bottom, showing a video player with a play button and a close button. The right sidebar shows the 'Sprite' panel with 'Balloon1' selected, and the 'Stage' panel with 'Backdrops 1'.

Step 5, Cont.

In the window that appears, enter "Score" in the "New variable name" field, and then click OK.

New Variable

New variable name:

Score

For all sprites For this sprite only

Cancel OK

Step 6

Drag and drop the “change my variable by (1)” command under the “start sound (pop)” command so that the two connect.

The screenshot displays the Scratch code editor interface. On the left, the 'Code' area shows a script for a sprite named 'Balloon1'. The script consists of three blocks: a yellow 'when this sprite clicked' block, a purple 'start sound: Pop' block, and an orange 'change my variable by 1' block. A callout box with a black border and white background points to the 'change my variable by 1' block, containing the text: 'Drag and drop the “change my variable by (1)” command under the “start sound (pop)” command so that the two connect.' The 'Score' variable is visible in the top right corner of the stage area, currently at 0. The stage area shows a blue balloon sprite. The bottom right corner of the stage area has a 'Sprite' panel with 'Balloon1' selected, showing its size (100) and direction (90). A 'Tutorials' window is open at the bottom center, showing a yellow and blue balloon on a purple background with a play button and a close button.

Step 7

Let's make the balloon move!

B. Drag and drop the "when clicked" event into the workspace, but don't connect it to the existing commands.

A. Select the "Events" tab.

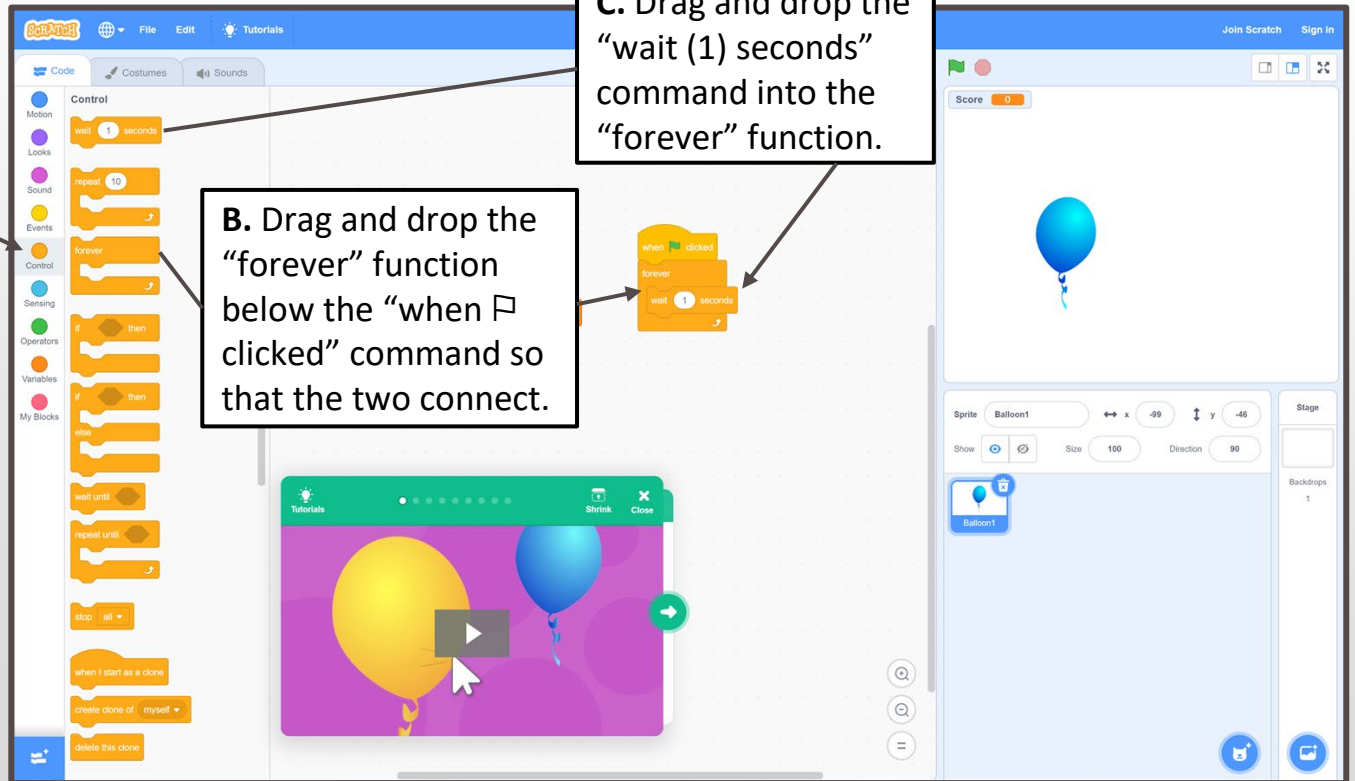
The screenshot displays the Scratch code editor interface. On the left, the 'Events' tab is selected in the block palette. A yellow 'when clicked' event block is being dragged from the palette into the workspace. In the workspace, there is already a script containing 'when this sprite clicked', 'start sound: Pop', and 'change my variable by 1'. A second 'when clicked' block is being placed above the existing script without connecting to it. The stage area shows a blue balloon sprite. The bottom right panel shows the sprite's properties, including its name 'Balloon1', size (100), and direction (90). A small video player window is visible in the bottom center of the workspace.

Step 7, Cont.

A. Select the “Control” tab.

B. Drag and drop the “forever” function below the “when clicked” command so that the two connect.

C. Drag and drop the “wait (1) seconds” command into the “forever” function.



Step 7, Cont.

A. Select the “Motion” tab.

B. Drag and drop the “go to random position” command into the “forever” function above “wait 1 seconds.”

The image shows the Scratch code editor interface. On the left, the 'Motion' tab is selected in the 'Code' area. The script area contains a 'when this sprite clicked' event block, followed by 'start sound: Pop', 'change my variable by 1', and a 'forever' loop. Inside the loop, there is a 'go to random position' block and a 'wait 1 seconds' block. A video player window is visible in the bottom center, showing a balloon animation. The right side of the screen shows the stage with a blue balloon and the sprite control panel.

Step 7, Cont.


A. Select the “Looks” tab.

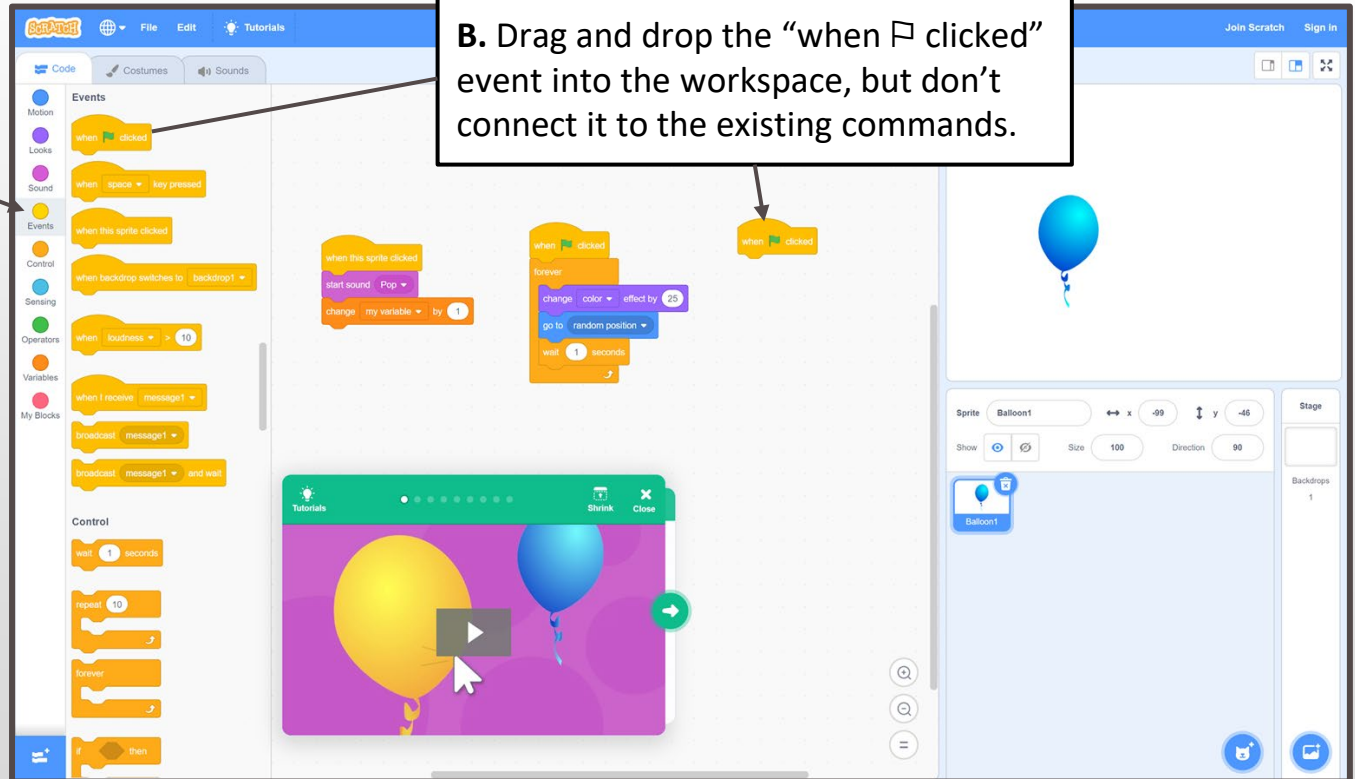
The image shows the Scratch code editor interface. On the left, the 'Looks' tab is selected in the sidebar. The main workspace contains a script for a 'Balloon1' sprite. The script starts with 'when this sprite clicked', followed by 'start sound Pop', and 'change my variable by 1'. A 'forever' loop contains a 'change color effect by 25' block, a 'go to random position' block, and a 'wait 1 seconds' block. A callout box points to the 'change color effect by 25' block with the text: 'B. Drag and drop the “change color effect by (25)” command into the “forever” function above “go to random position.”' The right sidebar shows the 'Sprite' panel with 'Balloon1' selected and the 'Stage' panel with 'Backdrops 1'.

B. Drag and drop the “change color effect by (25)” command into the “forever” function above “go to random position.”

Step 8

A. Select the “Events” tab.

B. Drag and drop the “when  clicked” event into the workspace, but don’t connect it to the existing commands.



The screenshot displays the Scratch 3.0 interface. On the left, the 'Events' tab is selected in the sidebar. A 'when clicked' event block is being dragged from the sidebar into the workspace. The workspace contains several other event blocks: 'when this sprite clicked' with 'start sound Pop' and 'change my variable by 1'; 'when clicked' with a 'forever' loop containing 'change color effect by 25', 'go to random position', and 'wait 1 seconds'; and another 'when clicked' block. A preview window at the bottom shows a yellow balloon and a blue balloon on a purple background with a play button. The right sidebar shows a 'Balloons' sprite and its properties.

Step 8, Cont.

A. Select the “Variables” tab.

B. Drag and drop the “set my variable to (0)” command below the “when clicked” command.

The image shows the Scratch IDE interface. On the left, the 'Variables' tab is selected in the sidebar. The code editor shows a 'when clicked' block with a 'set my variable to 0' block added below it. A callout box labeled 'B.' points to this 'set my variable to 0' block. Another callout box labeled 'A.' points to the 'Variables' tab in the sidebar. The stage shows a blue balloon sprite and a score of 0. A tutorial window is open at the bottom, showing a yellow balloon and a blue balloon.

Step 9

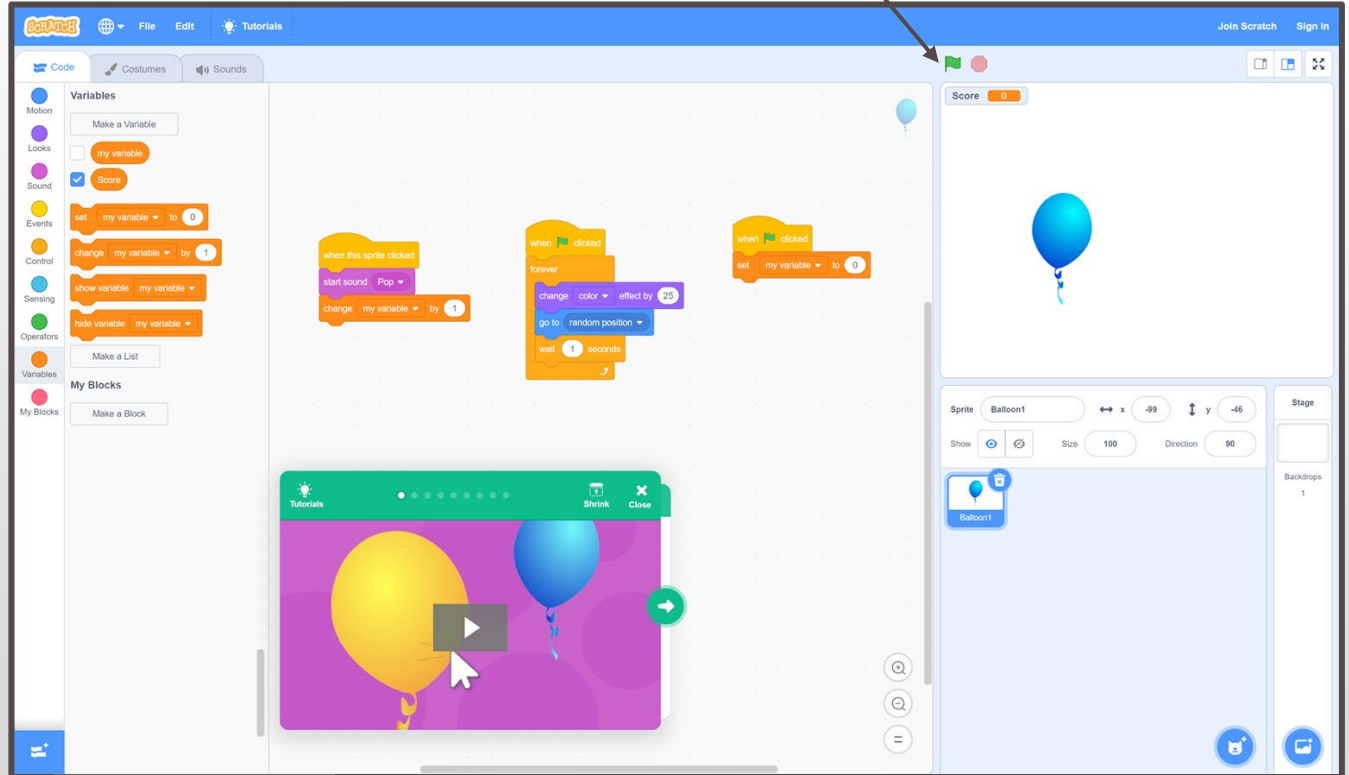
The image shows the Scratch code editor interface. On the left, the 'Variables' panel is open, showing a variable named 'Score' with a value of 0. The code area contains several blocks: a 'when the sprite clicked' block with 'start sound: Pop' and 'change Score by 1'; a 'when green flag clicked' block with a 'forever' loop containing 'change color effect by', 'go to random position', and 'wait 1 seconds'; and another 'when clicked' block with 'set my variable to 0'. A large orange variable block is also visible, containing 'my variable', 'Score', 'Rename variable', and 'Delete the "my variable" variable'. A video player is overlaid on the code area, showing a play button and a green arrow. A text box with a black border and white background contains the text: 'For both variable functions, change "my variable" to "Score."'.

For both variable functions, change "my variable" to "Score."

Step 10

If something isn't working the way you expect, check your code again and see what the issue might be. Don't worry if you don't get something right the first time. Keep trying until you find a combination that works!

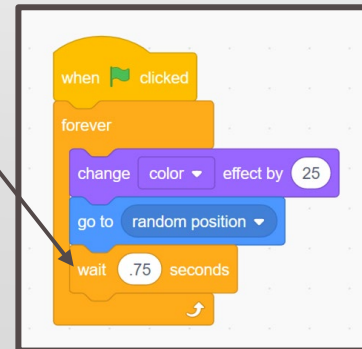
Click the green flag to test your code!



Step 11

Challenge your friends or family to play your game!

Who can click the most balloons in 30 seconds? If the balloon is too slow, try going back to your second code set—change “wait (1) seconds” to “wait (.75) seconds” by clicking the number and typing in a new one. You can adjust the number higher or lower as needed like this:



What's Next?

Next, complete the “How Am I Feeling? What Am I Thinking?” activity found in the activity guide to reflect on your exploration in Scratch.

