**SCRATCH MAZE INSTRUCTIONS**

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**Step 1: This is Scratch.**

- Find the cat face on the left side of the home screen and click on it. The name of the program is Scratch.
- This is what you should see when the program opens:

* Don't click on anything you don't know and we'll walk you through how to make your very own maze game *
Step 2: Make the cat (sprite) start at the top left corner of the stage.

- Go to the panel in the top left screen and click the “Control” button. *Make sure the sprite is selected, NOT the stage.*
- Drag the \textit{go to x: 0 y: 0} button to the big screen in the middle.
- Click the \textit{go to x: 0 y: 0} on the “Motion” button in the control panel.
- Drag the button to the middle screen and connect it to the “when [flag] clicked” button.
- Change x to “-205”. Change y to “166”

Step 3: Make the controls for the cat.

- Click on the the “Control” button in the control panel.
- Drag 4 \textit{when space key pressed} buttons to the middle screen
- Click on the “Motion” button in the control panel.
- Drag 4 \textit{point in direction 90} buttons to the middle screen and connect one of each to a “when [space] clicked button.

- For the 1\textsuperscript{st} set, change the [space] to [up arrow] and the direction to [0]
- For the 2\textsuperscript{nd} set, change the [space] to [down arrow] and the direction to [180]
- For the 3\textsuperscript{rd} set, change the [space] to [right arrow] and the direction to [90]
- For the 4\textsuperscript{th} set, change the [space] to [left arrow] and the direction to [-90]
- Drag 4 \textit{move 10 steps} buttons to the middle screen and connect one of each to each of the groups.

- It should look like this when you’re finished:
Step 4: Make the maze for the cat.

- Click on “Stage” in the bottom right screen.
- Click the “Backgrounds” tab in the middle screen.
- Click the “Edit” button.
- Select the paint bucket tool. Choose the color you want for your background and click on the editing space.

- Select the paintbrush tool. Choose the biggest brush size and a different color. Draw the path for your cat.

- Choose a 3rd color and draw a space at the end of the path.

- Your maze should look something like this:

![Image of painted maze](image)

- If you’re happy with your maze, click the “OK” button to return to the programming screen.
Step 5: Program the rules for the maze game. (Make the cat get through the maze)

- Click on “Sprite1” in the bottom right screen.
- Click on the “Scripts” tab in the middle screen.
- Go to the control panel and click on the “Motion” button.
- Drag 1 \text{point in direction [90]} to the middle screen and connect it to the “go to x: [-205] y: [166]” button.
- Click on the “Control” button.
- Drag 1 \text{forever if [sprite1] touching color ?} to the middle screen and connect it to the “point in direction [90]” button.
- Click on the “Sensing” button.
- Drag 1 \text{touching color ?} to the middle screen and place it in the space next to “forever if”.
- Click on the color inside the “touching color” button then click on the background color of your maze.
- Click on the “Motion” button.
- Drag another \text{go to x: 0 y: 0} button to the middle screen and place it inside of the “forever if” button.
- Change x to -205. Change y to 166.
- That entire block should look something like this:

\begin{center}
\includegraphics[width=0.5\textwidth]{maze_game.png}
\end{center}

- Click on the “Control” button.
- Drag another \text{when [sprite1] clicked} onto the middle screen.
- Drag another \text{forever if [flag] clicked} to the middle screen and connect it to the “when [flag] clicked” button.
- Click on the “Sensing” button, drag another \text{touching color ?} button to the middle screen, and place it in the space next to “forever if”.

• Click on the color inside the “touching color” button then click on the 3rd color at the end of your maze.

• Click on the “Looks” button in the control panel

• Drag a say Hello for 2 secs button onto the middle screen and change the message to “You Win!”

• Drag another go to x: y: button to the middle screen and connect it to the “say [You Win!] for 2 secs” button.

• Change x to -205. Change y to 166.

• Place both buttons inside of the “forever if” button.

• Your screen should look something like this when you’re done:

• Click on the green flag in the top part of the right screen, test out your game, and (most importantly) HAVE FUN!! :)}