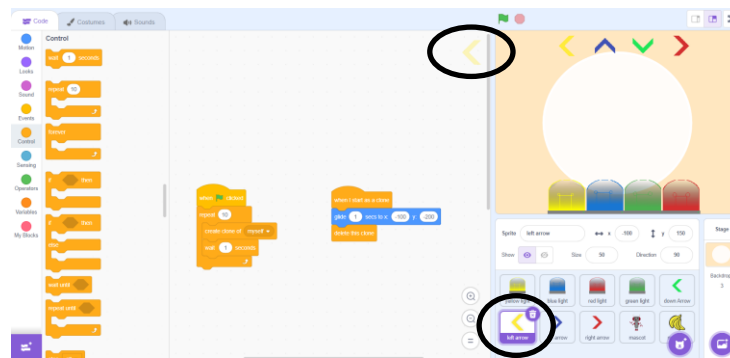


LightUp Workshop Part 3 – Hit Registry

Below are the detailed instructions intended to help guide you through the LightUp Workshop. A word that will be used often is the word **Sprite**. This is what Scratch calls an object or an image. They can be anything such as animals, shapes, or characters, but today we will be using lightbulbs and arrows.

Guided Steps:

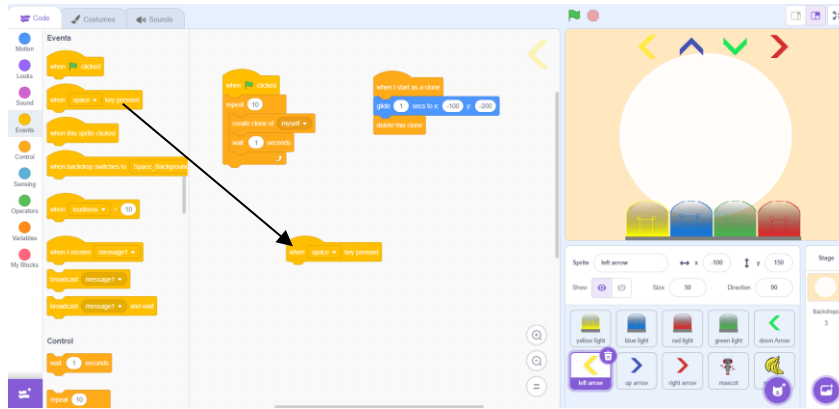
1. Before starting the third part of the workshop, make sure that you have completed the first and second part of the workshop.
2. To start, make sure that your left arrow sprite is selected. When you click back to the yellow arrow you should of course see your code.



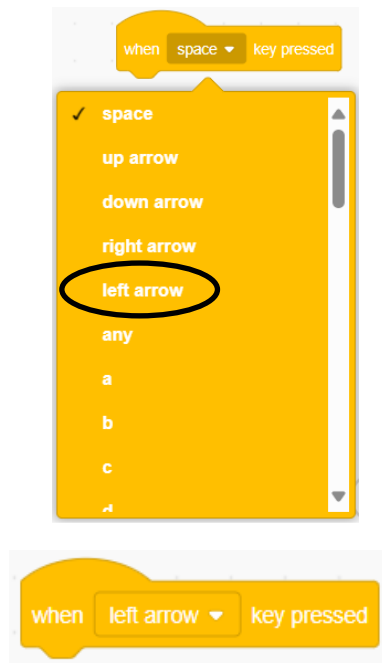
3. For this part of the workshop, we are going to change our code a little bit so that we can “track” when a user gets an answer correct by selecting the correct arrow.
4. To start we need to grab a beginning block to let Scratch know when we want our code to run. So go to the “Events” category on the far left and find the “When ____ key pressed” block.



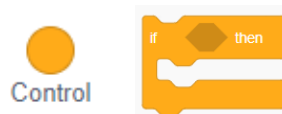
5. Drag the “When ____ key pressed” block to your work area in the middle of your screen.



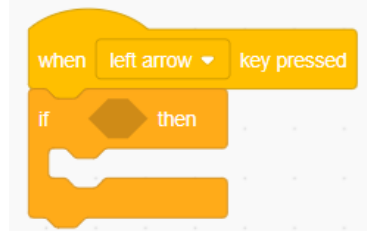
6. Next, click the dropdown menu for your block and select the “left arrow” option. This will be a trigger for your code letting Scratch know you want to run some code every time a user presses the left arrow.



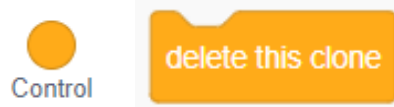
7. Now go to the “Control” category and find the first “If ____ then” block.



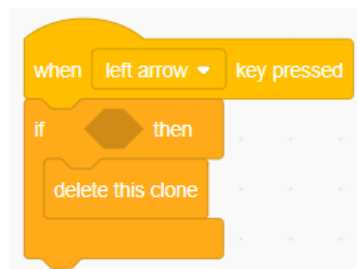
8. Drag the block to your work area and place it underneath the “When ____ key pressed” block.



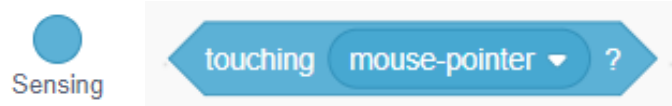
9. Again, in the “Control” category, find the “Delete this clone” block.



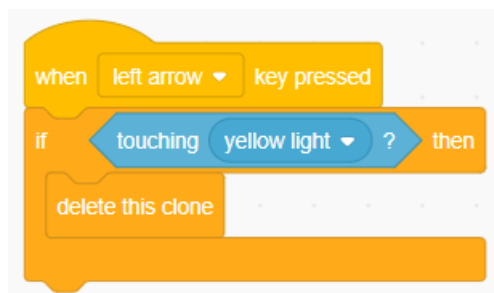
10. Drag that block to your work area in the middle of your screen and place it in the “If ____ then” block.



11. Scroll to the “Sensing” category, find the “Touching _____ ?”



12. Drag that block to your work area in the middle of your screen and place it in the empty space of the “If ____ then” block. Click the dropdown menu for your block and select the “yellow light” option.



13. What we have just added is called a Boolean condition. This is a condition that must either be true or false. If our condition is true, so the arrow is touching the lightbulb, then we will be able to enter the if block

and run the code we placed in there. If our condition is false, so the arrow is not touching the lightbulb, we will not do anything.

14. Run the code again and you will see the game runs as expected but nothing really happens because we are only deleting the clone. But in the next part we will add more code to make our game more difficult.
15. Now it's your turn to try! Use steps 2-12 to add the hit registry when the user clicks the correct arrow key.
16. Remember to use the correct light color and the correct arrows.

Happy Coding!