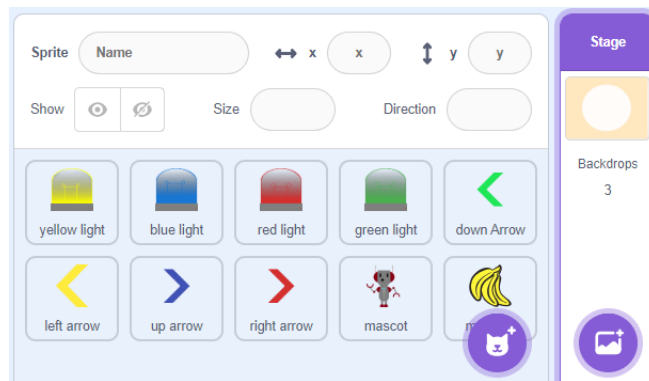


Extra LightUp Workshop Idea - Add Levels

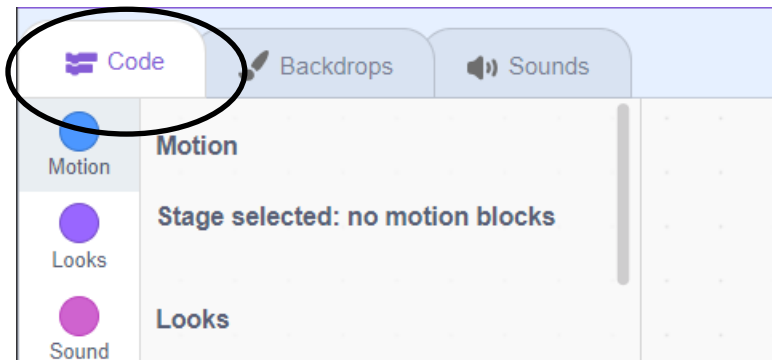
In this added workshop users will be able to create two new levels to their game to make it more difficult for users to play. The steps below are just a guide and you do not have to use the same numbers or Scratch blocks if you do not want to.

Guided Steps:

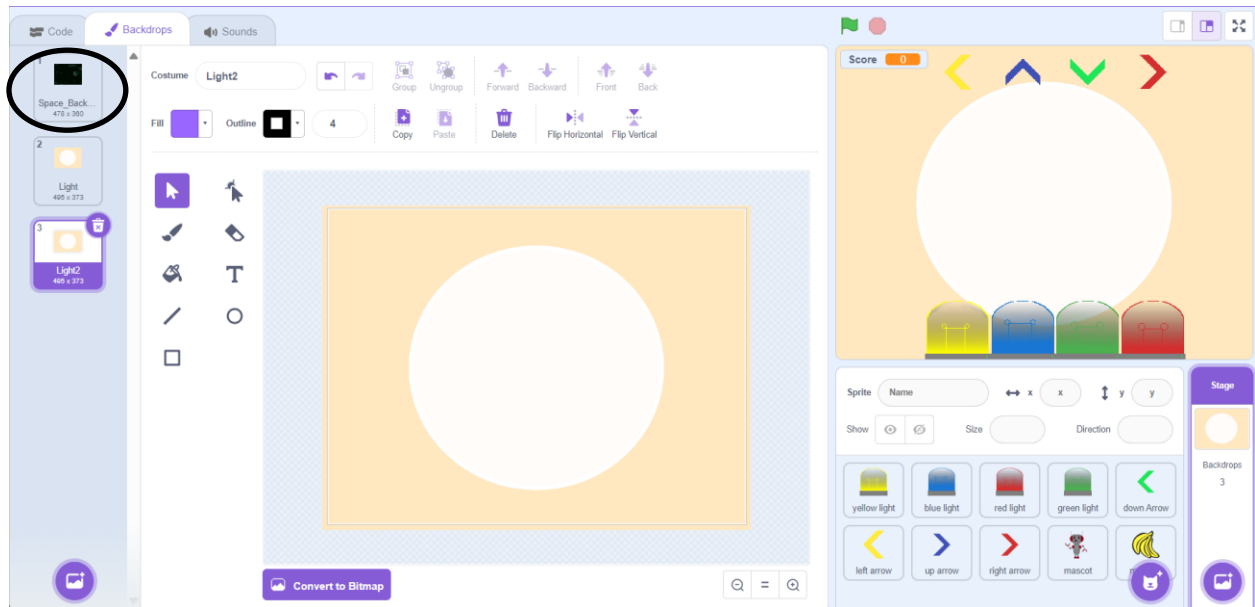
1. To start adding your levels, you will need to click the Stage sprite at the bottom corner of your screen.



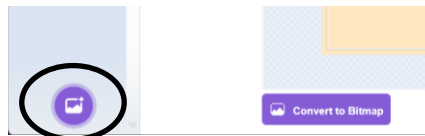
2. At the top left corner of your Scratch screen select the “Backdrops” banner.



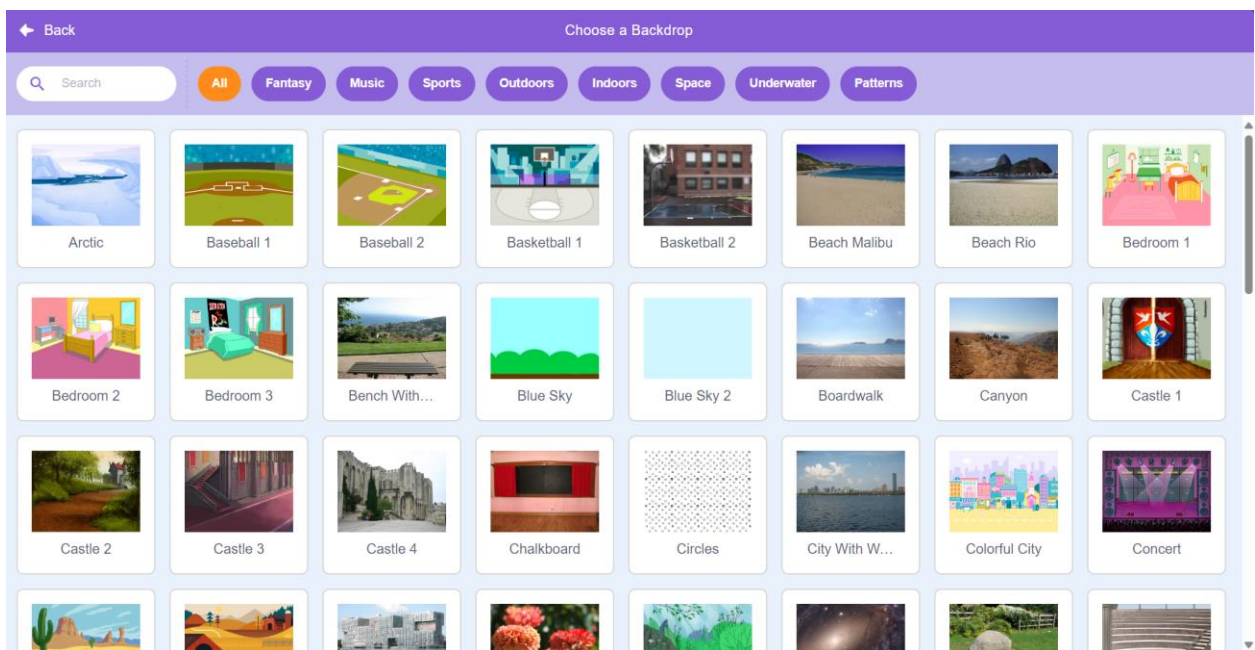
3. There you should see three backdrops present with the LightUp-2 one selected. What we want to select is the first one called “Space_Background”.



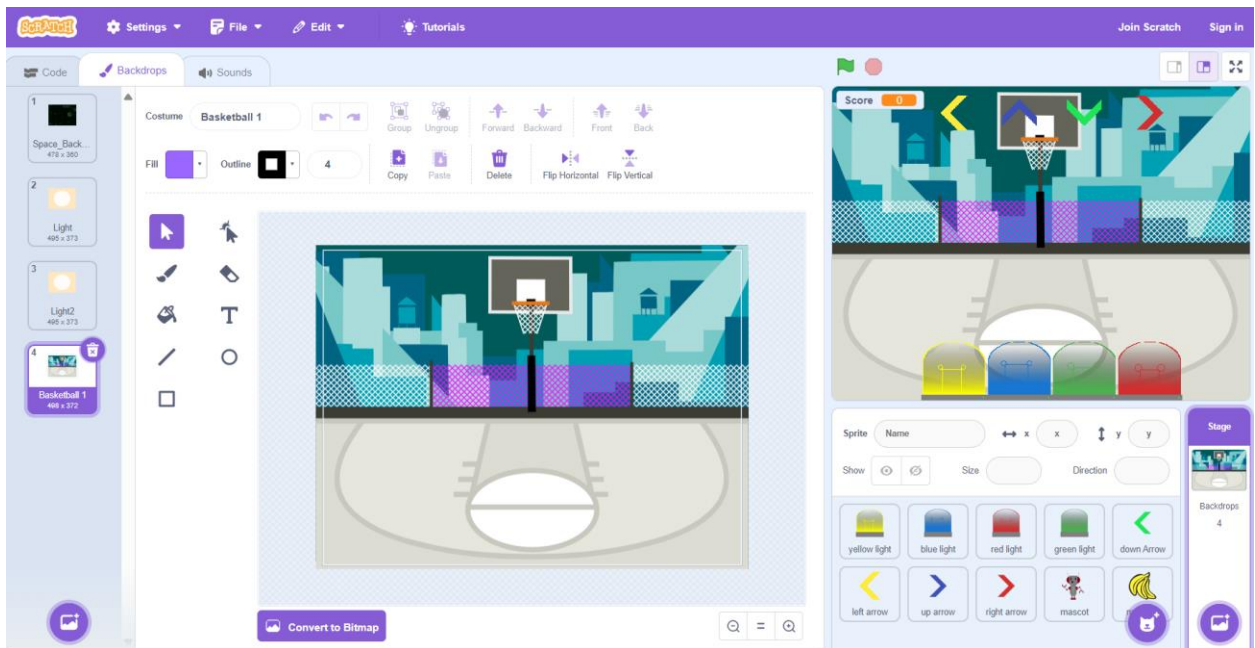
- If you do not see the “Space_Background” no worries to get a new background hover over the “Choose a Backdrop” feature on the bottom left of your screen and click the search button when it appears.



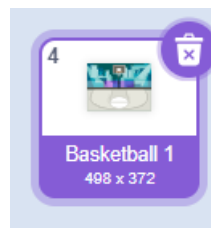
- You should now be taken to a new page with lots of backdrops for you to choose from.



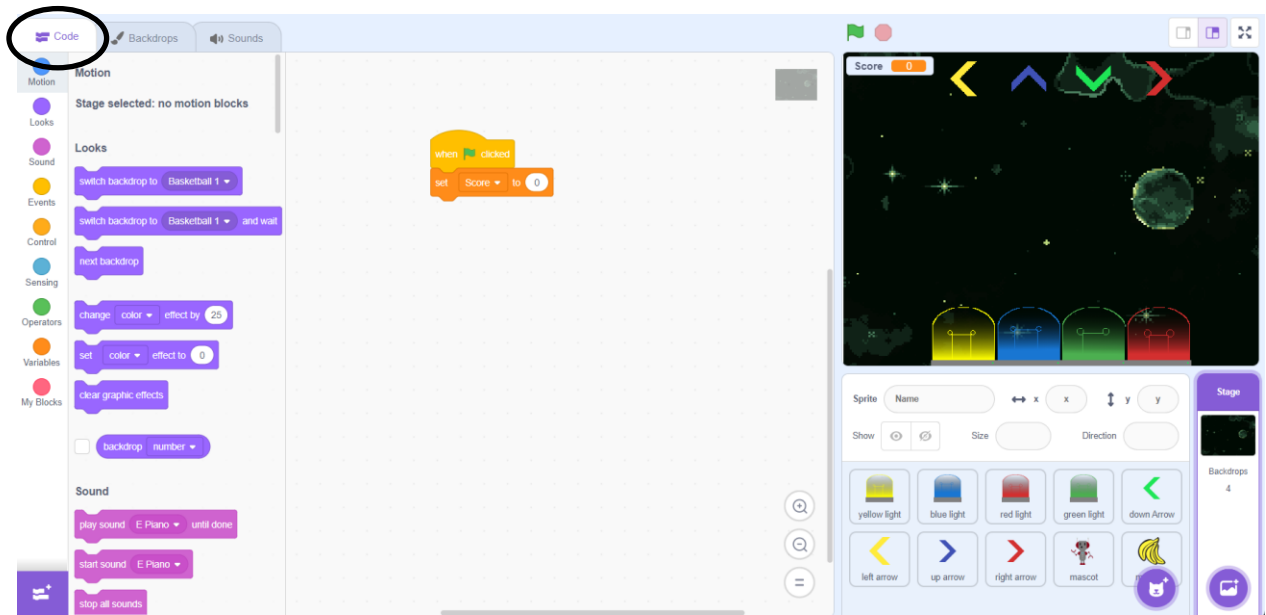
6. Scroll down to find more backdrops or use the search bar to find a backdrop you want to use.
7. When you find one that you want and click it you should be taken back to your backdrop screen, where your new backdrop should be highlighted on the left and you should see the backdrop appear in the middle of your screen and the top right.



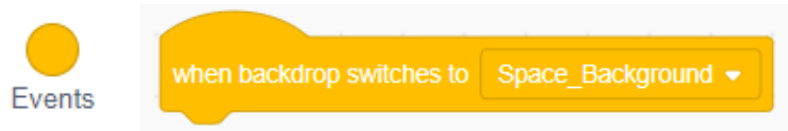
8. If you decide that you no longer want to use the backdrop, then select the little trash that will appear on the backdrop to delete it. For the purposes of this workshop, we will use the “Space_Background” instead but you may use whatever backdrop you wish.



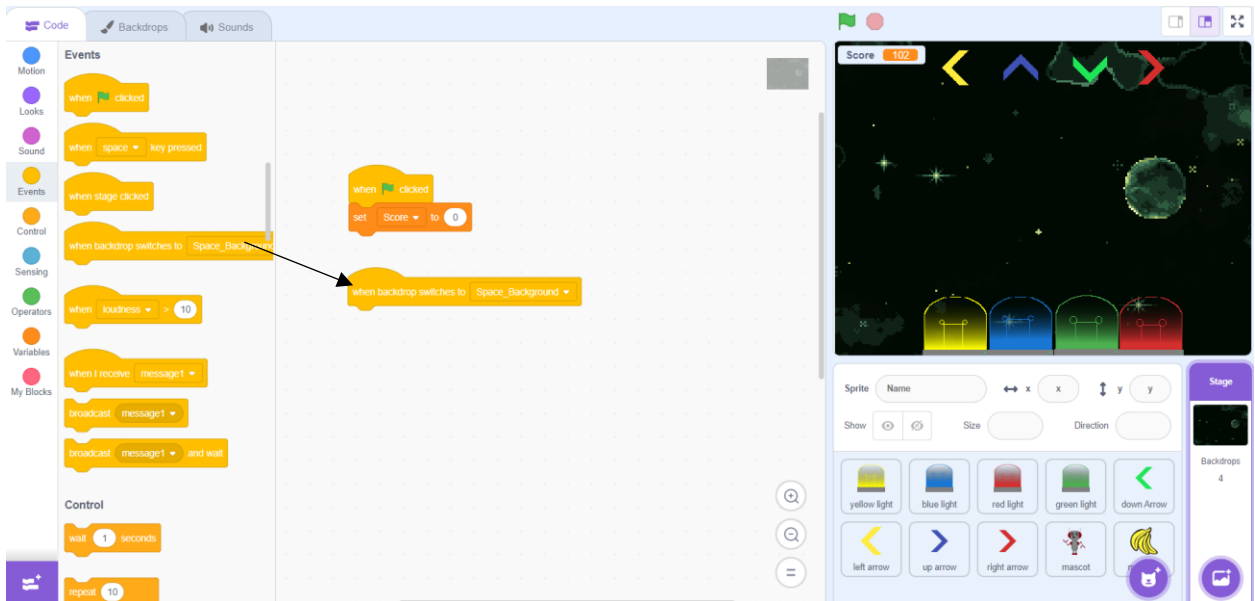
9. Once you have selected your backdrop and it is highlighted go back to your “Code” banner.



10. In the “Events” category, find the “When backdrop switches to _____” block.



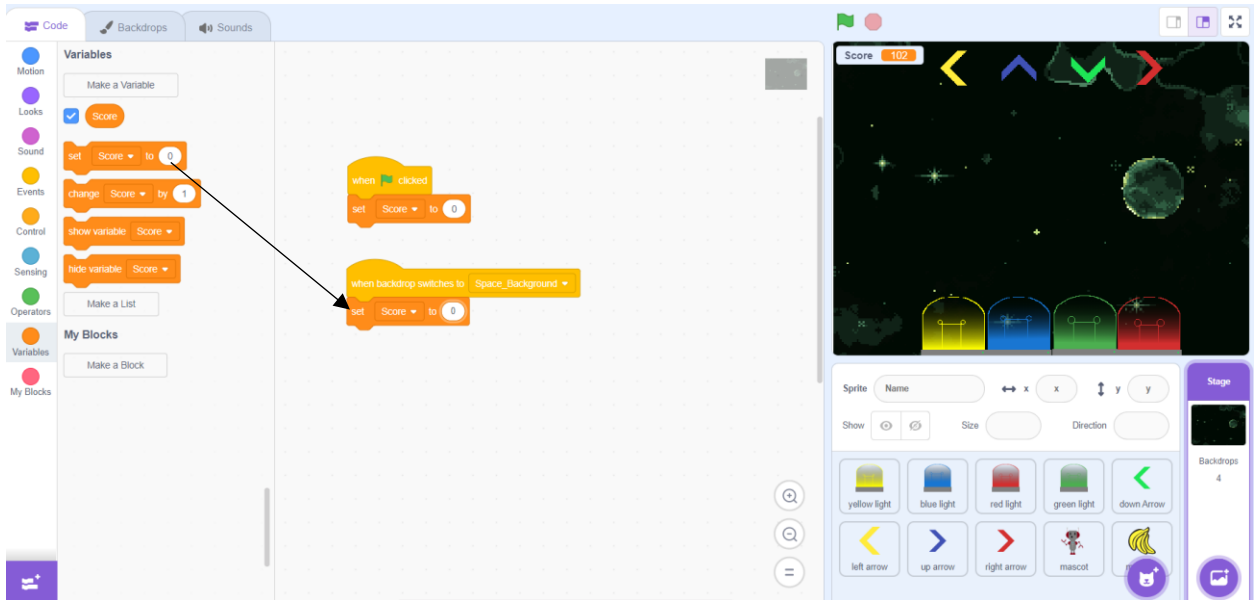
11. Drag it to your workspace.



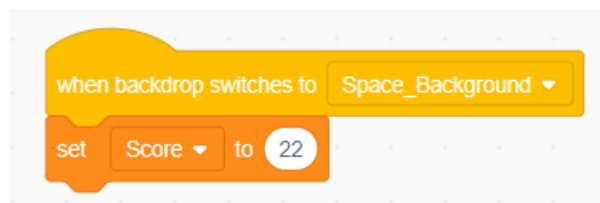
12. Next go to the “Variables” category and find the “Set _____ to _____” block.



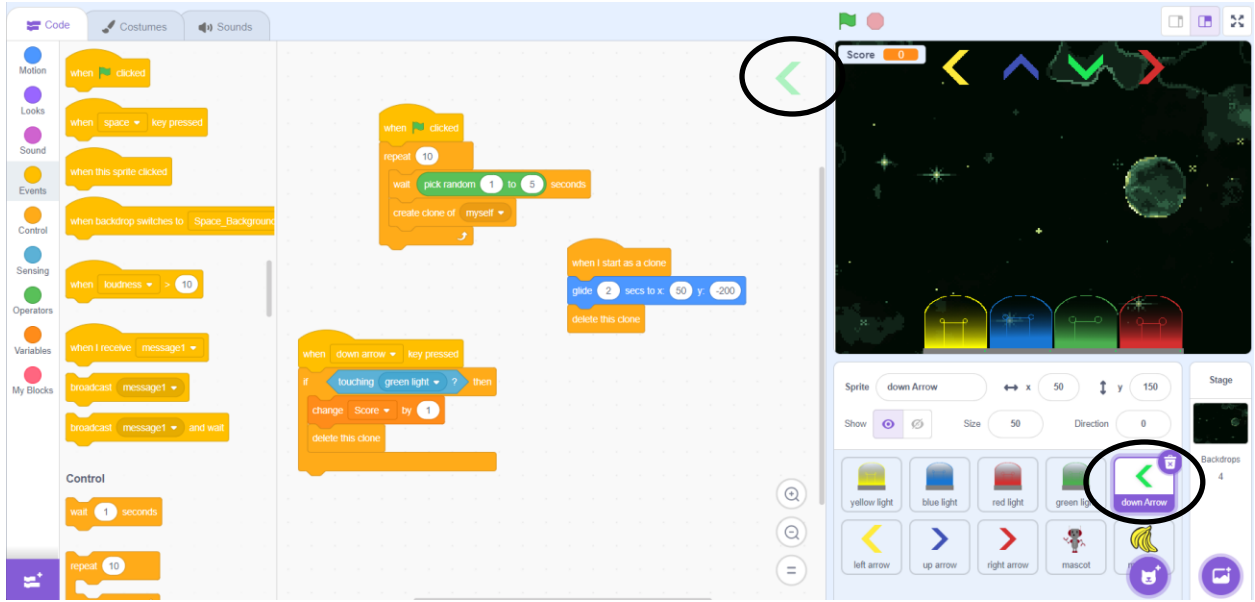
13. Drag it to your workspace and place it under the “When backdrop switches to _____” block.



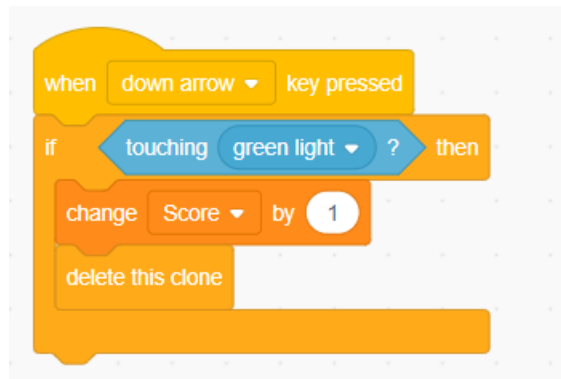
14. Click the arrow on the “When backdrop switches to _____” block and select the new backdrop that you want to use such as “Space_Background” if it is not already selected. If you are using another backdrop, make sure to select that one.
15. Next, change the number for the “Set _____ to ____” block to any number between 21-25.



16. What we just did was let Scratch know that when the background switches we are going to give the user 1-5 extra points when they beat the first level, because 20 points is what the user needs to get to the next level.
17. Now we will need to add the code for each of the arrow Sprites so we can add the logic to make sure we update a level for a user and let the user know.
18. Click the green arrow sprite.



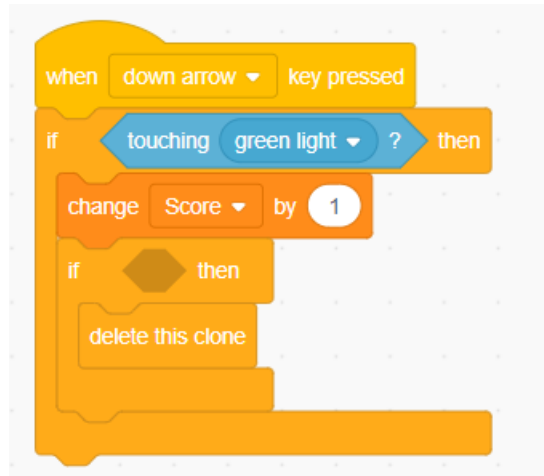
19. Under the “When _____ key pressed” block we are going to add some more code to the “If touching _____ ? then” block.



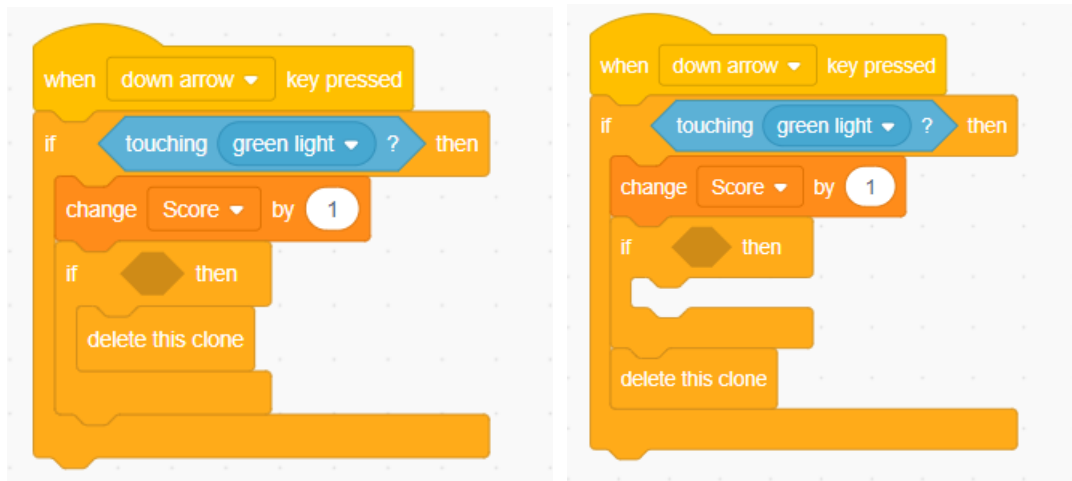
20. Go to the “Control” category and find the “If _____ then” block.



21. Drag it to your workspace under the “Change Score by 1” block.



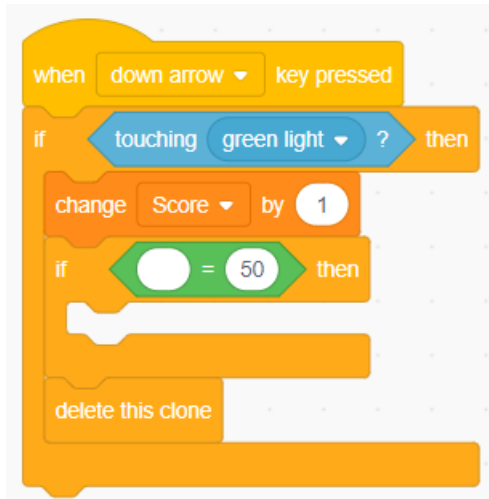
22. If the “Delete this clone” block appears in the new “If _____ then” block, drag it out and place it under the block.



23. Next go to the “Operators” block and find the “_____ = 50 ” block.



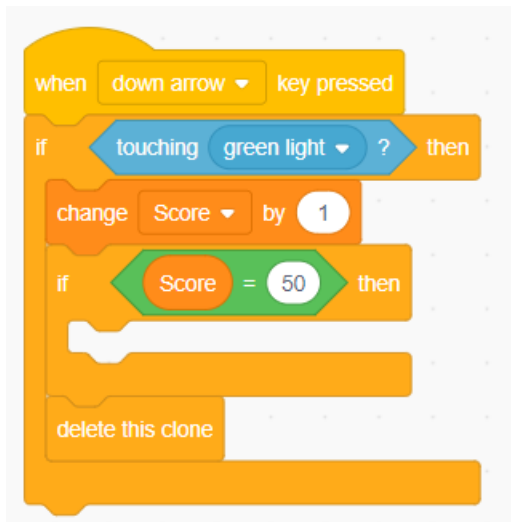
24. Drag it to your workspace and place it in the empty space of the “If _____ then” block.



25. Next go to the “Variables” category and find the small block called “Score”.



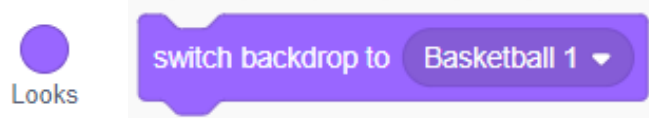
26. Drag it to your workspace and place it in the first empty space of the “____ = 50 ” block.



27. In the second empty space change the 50 to 20.



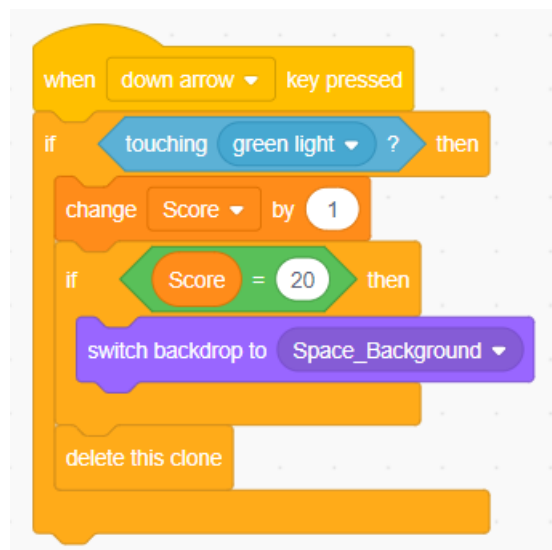
28. Finally go to the “Looks” category and find the “Switch backdrop to _____”.



29. Drag it to the workspace and place it in the “If _____ then” block.



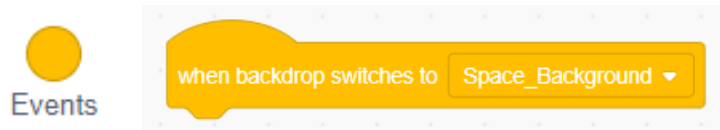
30. Change the drop-down arrow to “Space_Background” or to the name of whatever background you used.



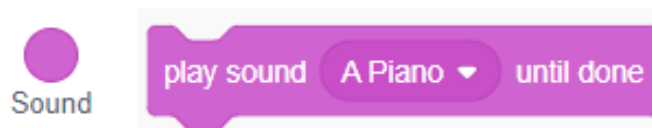
31. By placing the second if statement in the first if statement we have created what is called a “nested-if”. Our second if statements code will only run if our first if statement is true AND the second one is also true. So, if the green arrow is touching the green light, the score will change by 1, then Scratch will check if the Score at that point is equal to 20.

32. If the score is equal to 20, the game backdrop will change to show that the user is on a new level. But before the user can get to the new level, we need to add more code.

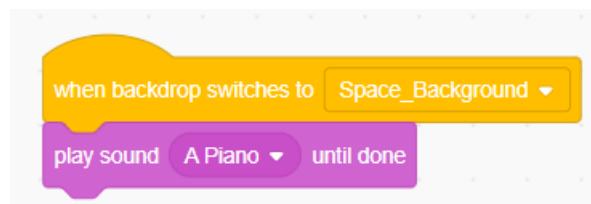
33. Go to the “Events” category and find the “When backdrop switches to _____” block and drag it to your workspace.



34. Next go to the “Sound” category and find the “Play sound _____ until done” block.

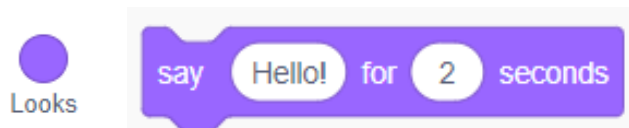


35. Drag it to your workspace and place it under the “When backdrop switches to _____” block.

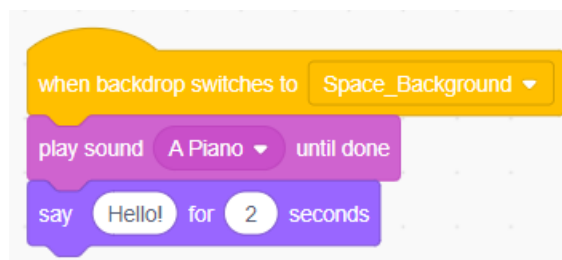


36. Select the drop-down arrow and select the “A Piano” option. So, every time the backdrop switches a sound will also play to let the user know they have started a new level.

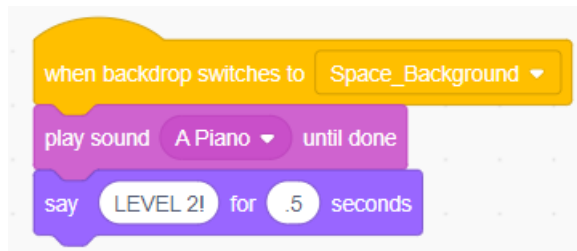
37. Next go to the “Looks” category and find the “Say _____ for _____ seconds” block.



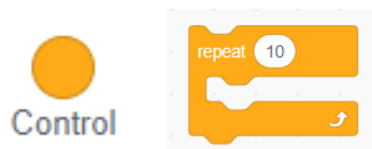
38. Drag it to your workspace and place it underneath the “Play sound _____ until done” block.



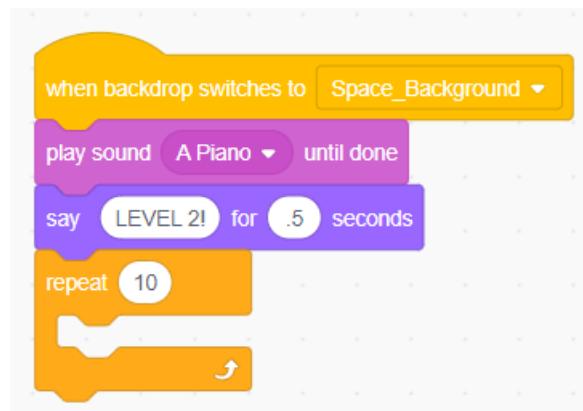
39. In the first blank spot of the “Say _____ for ____ seconds” block set your message to “LEVEL 2!” and set the second blank spot to “.5” seconds.



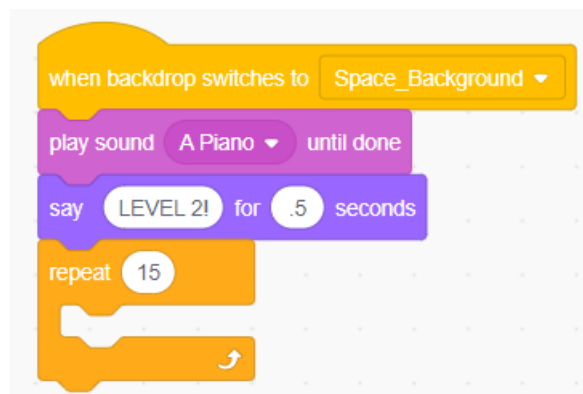
40. Now for level two we want to loop a new set of arrow clones for this level.
41. Go to the “Control” category and find the “Repeat _____” block.



42. Place the block under the “Say _____ for ____ seconds” block.



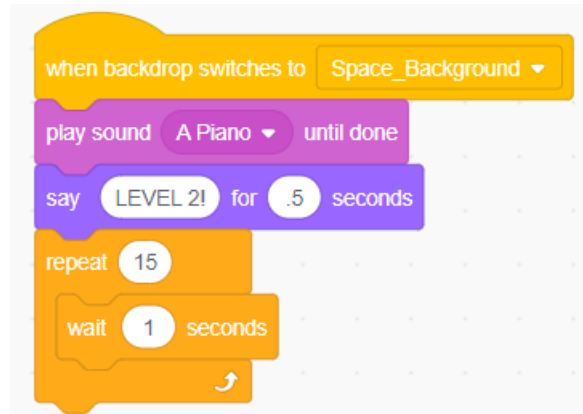
43. Change the number for the “Repeat _____” block to 15.



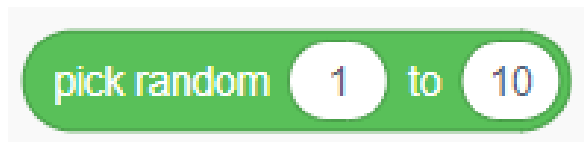
44. Again, under the “Control” category find the “Wait _____ seconds” block.



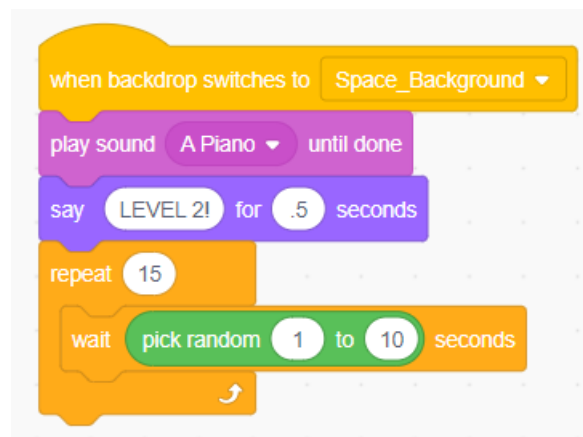
45. Drag it to your workspace and place it in the empty section of the “Repeat _____” block.



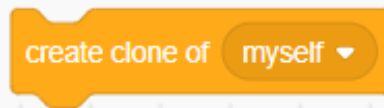
46. Next go to the “Operators” category and find the “Pick random ____ to ____” block.



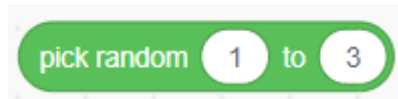
47. Place it in the black area of the “Wait _____ seconds” block.



48. Again, scroll to the “Control” category and find the “Create clone of _____”.



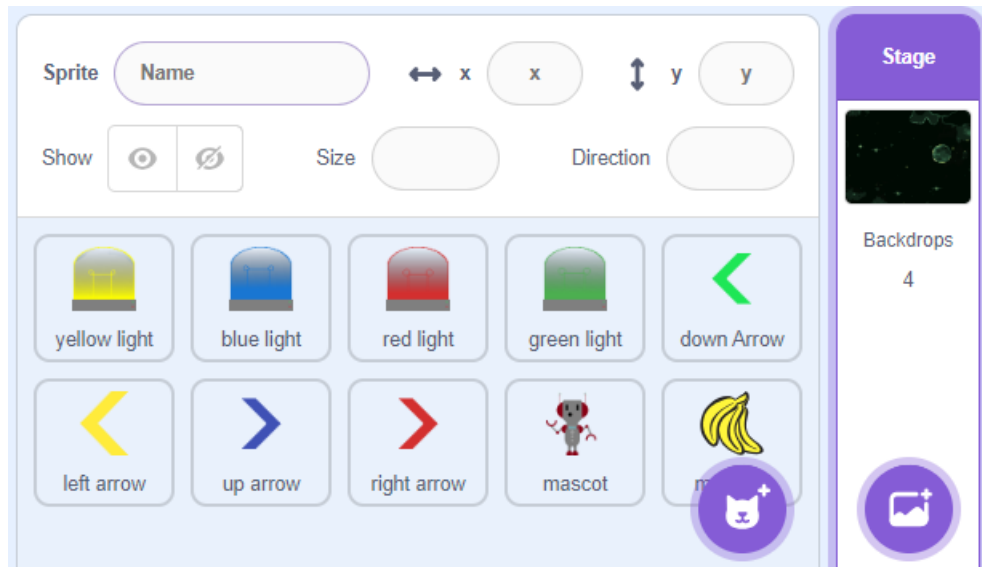
49. Change the pick seconds to say 1 to 3.



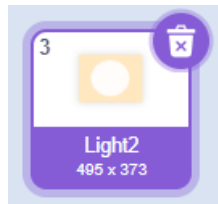
50. Drag it to your workspace and place it under your “Wait pick random 1 to 3 seconds” block.



51. Now do the same thing for the yellow, red, and blue arrows.
For the yellow arrow select the “G Piano” sound to play.
For the blue arrow select the “C Piano” sound to play.
For the red arrow select the “E Piano” sound to play.
52. Click the Stage Sprite again.



53. Go back to the “Backdrops” banner and select the “Light2” backdrop.



54. Now go back to the “Code” banner and click the green flag and start playing!
55. What happens when you reach 20 points?
56. Try and see if you can make a level 3 using the same steps. Hint: For the “When _____ key pressed” code block you will need to place your new if statement under your first “If Score = 20 then” block.

Happy Coding!