# Extra LightUp Workshop – Clean Up Game Part 2

**In this added workshop users will continue to change the game to make the user's game experience better. 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. Please make sure to follow the previous parts to the workshop before continuing.**

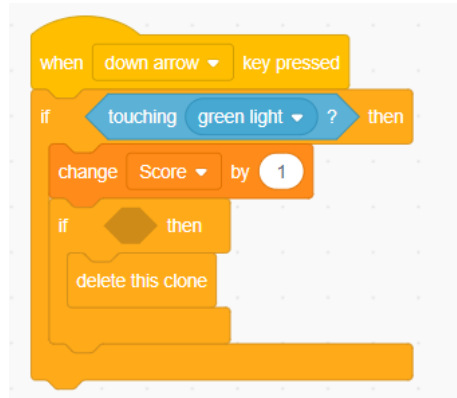## Guided Steps:

1. Click the green arrow sprite.
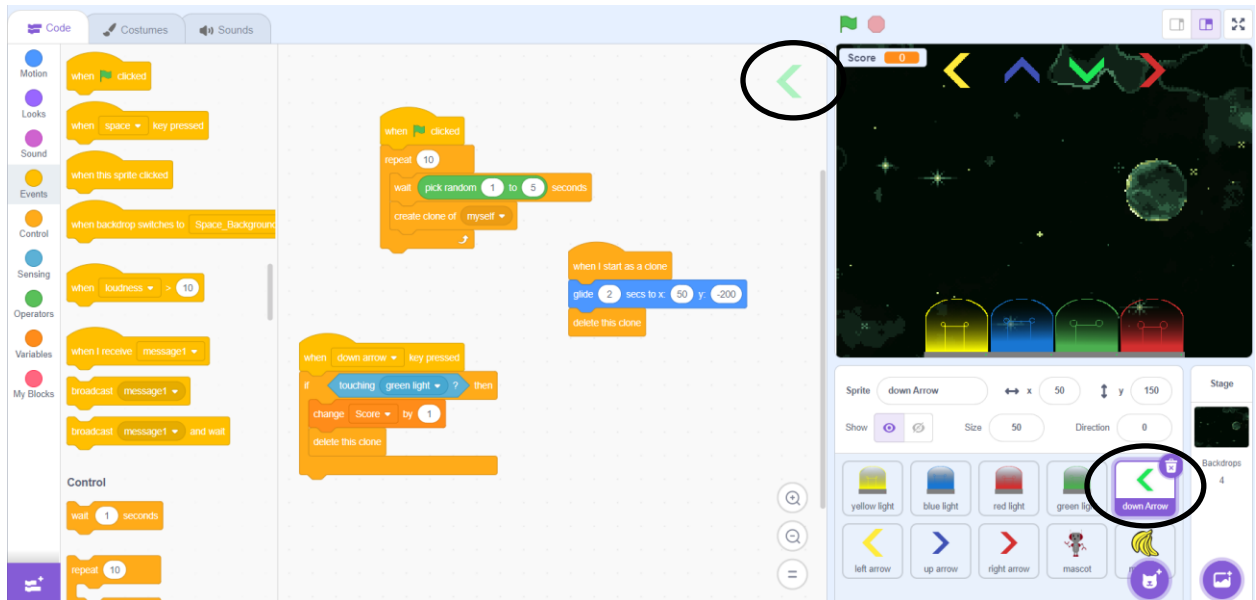


2. Under the "When _____ key pressed" block we are going to add some more code to the "If touching _____ ? then" block.
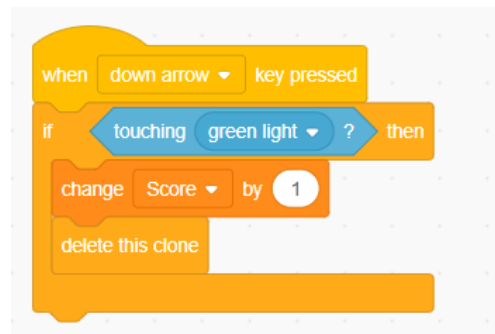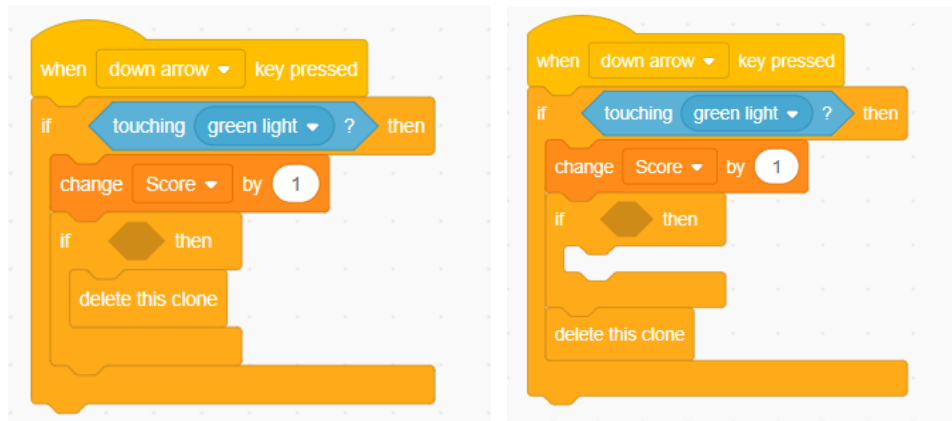


3. Go to the "Control" category and find the "If _____ then" block.

Control

4. Drag it to your workspace under the "Change Score by 1" block.



5. If the "Delete this clone" block appears in the new "If _____ then" block, drag it out and place it under the block.



6. Next go to the "Operators" block and find the "_____ = 50 " block.



Operators

7. Drag it to your workspace and place it in the empty space of the "If _____ then" block.

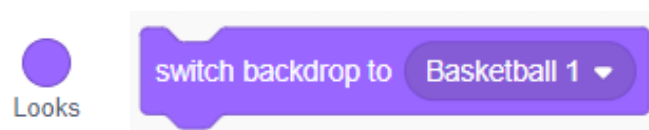8. Next go to the "Variables" category and find the small block called "Score".



9. Drag it to your workspace and place it in the first empty space of the "_____= 50 " block.



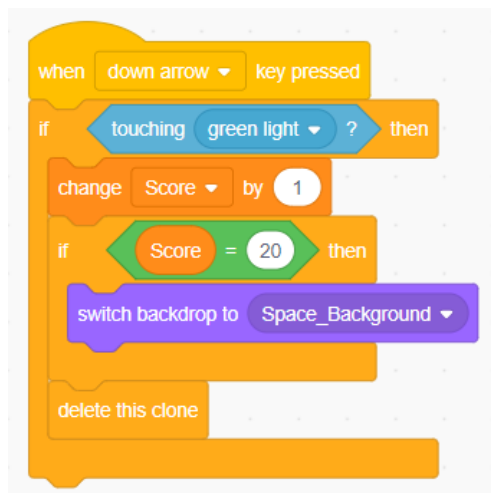10. In the second empty space change the 50 to 20. This is going to be our second level that we are creating.



11. Finally go to the "Looks" category and find the "Switch backdrop to _____".

12. Drag it to the workspace and place it in the "If _____ then" block.



13. Change the drop-down arrow to "Space_Background" or to the name of whatever background you used.



14. 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.

15. 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.

16. Go to the "Looks" category and find the "Switch backdrop to _____" block.

Looks

switch backdrop to Space_Background ▼

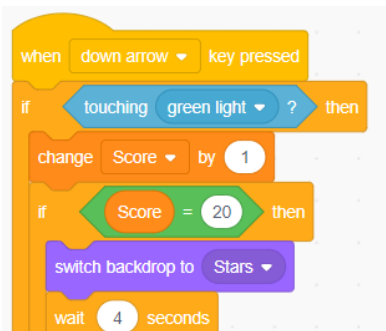17.  Drag it under the "If Score = 20 then" block. Click the dropdown arrow and change the backdrop to "Stars".



18.  Go to the "Control" category and find the "Wait ____ seconds" block.
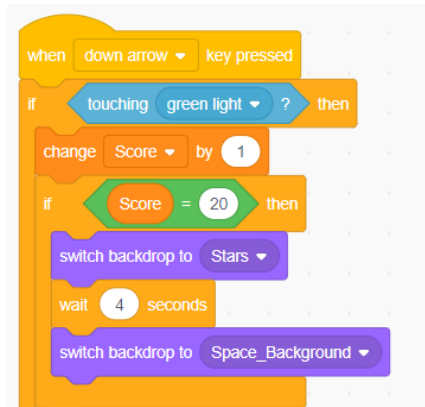


Control

wait 1 seconds
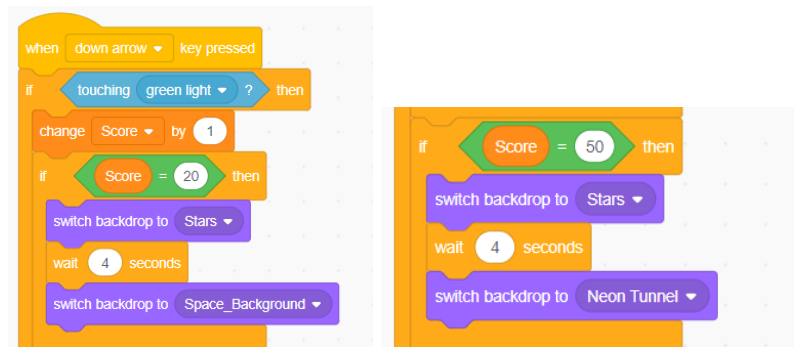
19.  Drag it under the "If Score = 20 then" block and the "Switch backdrop to Stars" block. Then change the number to 4 seconds.
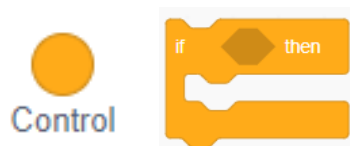


20.  Your final score "If Score = 20 then" block should look like this.
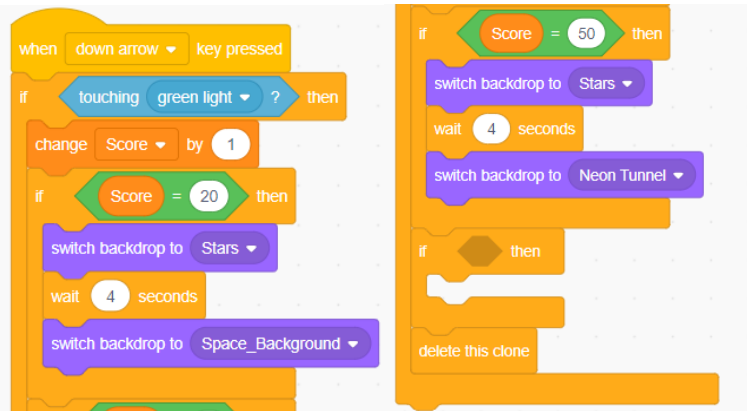
21.    Do this same thing for the second "If Score = 50 then" block, which is going to be our third level transition and when you're done it should something like this.
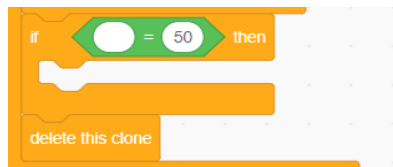


22.    The last thing we will do under this block is add a new "If _____ then" block.

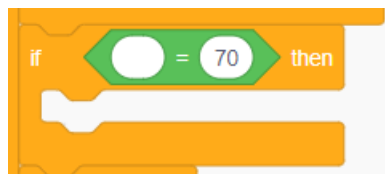23.    Go to the "Control" category and find the "If _____ then" block.



24.    Drag it to your workspace underneath the "If Score = 50 then" block.

25. Next go to the "Operators" category and find the "_____ = 50 " block and place it in the gap on the "If _____ then" block.
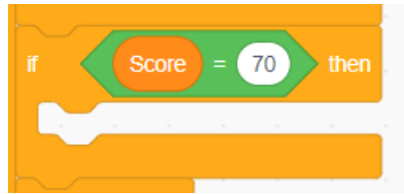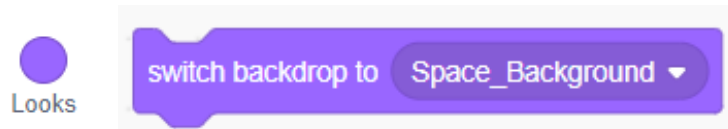




26. Change the 50 to 70.



27. Then to fill in the first blank of the "_____ = 50 " block go to the "Variables" category and find the "Score" block.
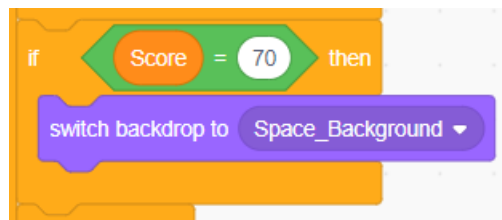


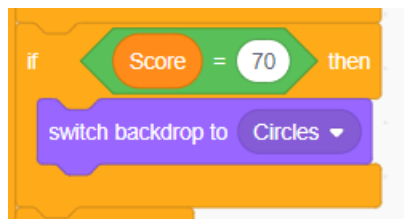28. Drag it to your workspace and place it in the first gap of your block.

29. Finally go to the "Looks" category and find the "Switch backdrop to _____" block.
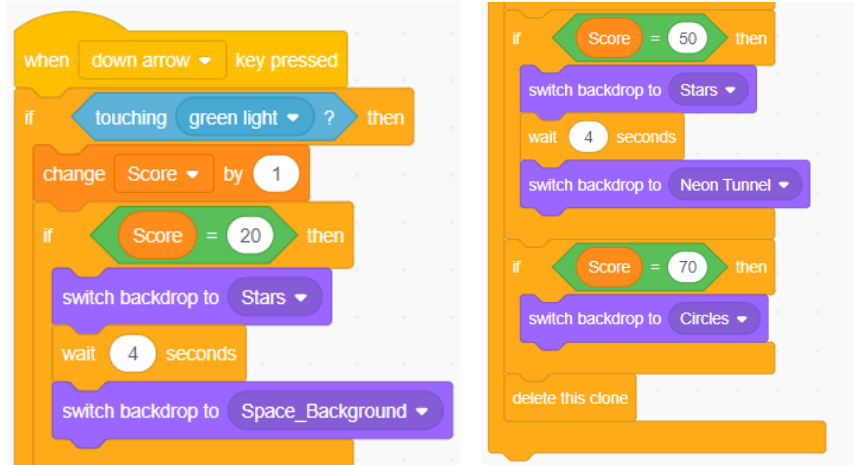


30. Drag it to your workspace and place it in the gap of the "If _____ then" block.
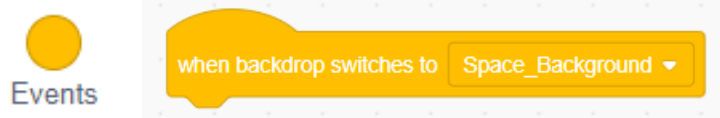


31. Click the dropdown arrow and change the backdrop to "Circles". This is going to be our "last level" that the user is going to see.
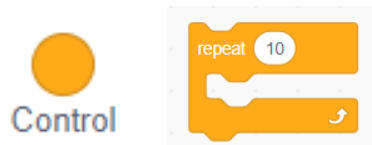


32. Your final code under the "When _____ key pressed" block should look something like this.
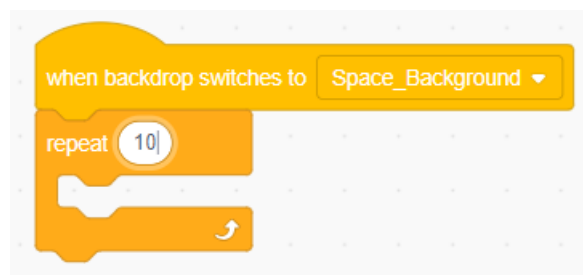
33. Go to the "Events" category and find the "When backdrop switches to _____" block and drag it to your workspace.
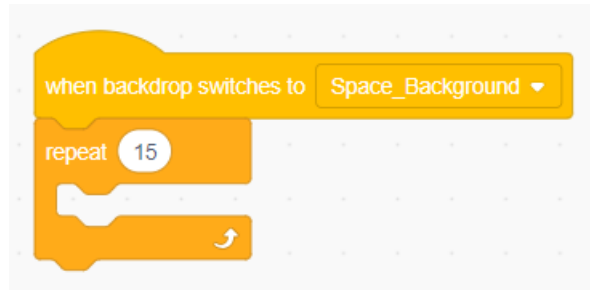


34. Now for level two we want to loop a new set of arrow clones for this level.

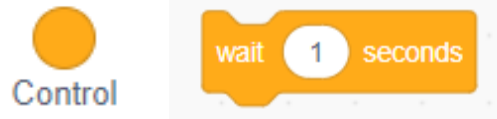35. Go to the "Control" category again and find the "Repeat _____" block.



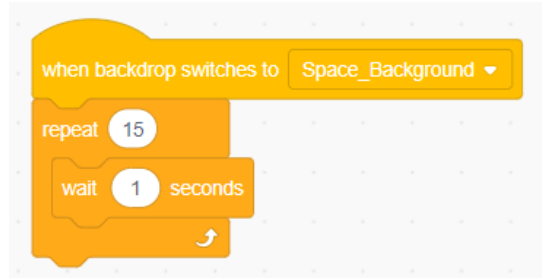36. Place the block under the "When backdrop switches to _____" block.

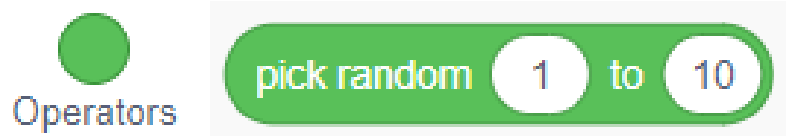

37. Change the number for the "Repeat _____" block to 15.

38. Again, under the "Control" category find the "Wait _____ seconds" block.
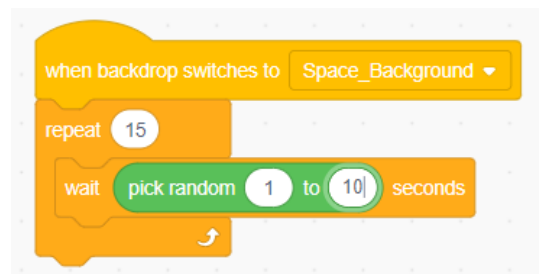


Control

39. Drag it to your workspace and place it in the empty section of the "Repeat _____" block.
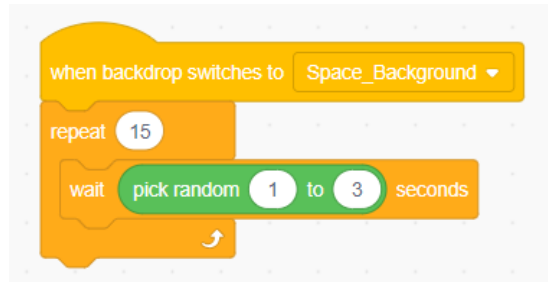


40. Next go to the "Operators" category and find the "Pick random ___ to ___" block.
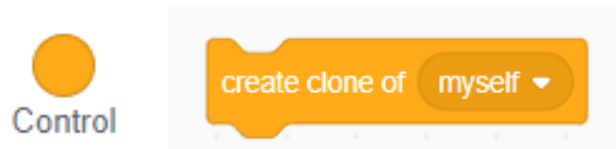


Operators

41. Place it in the black area of the "Wait _____ seconds" block.
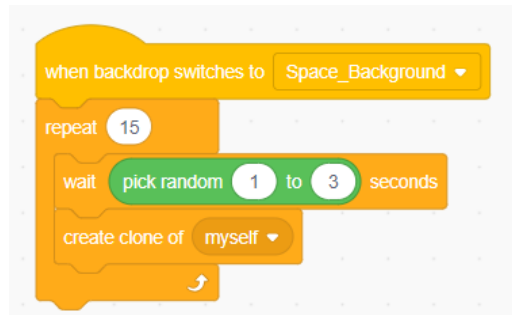


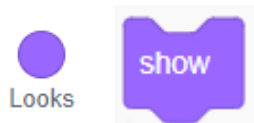42. Change the pick seconds to say 1 to 3.

43.    Again, scroll to the "Control" category and find the "Create clone of _____".



44.    Drag it to your workspace and place it under your "Wait pick random 1 to 3 seconds" block.
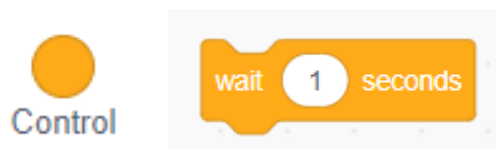


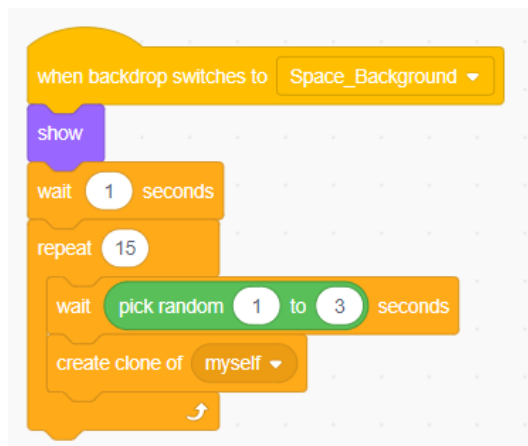45.    Next under the "Looks" category and find the "Show" block.



46.    Put the "Show" block directly under the "When backdrop switches to Space_Background" block.

47.  Lastly, under the "Control" category find the "Wait _____ seconds" block.


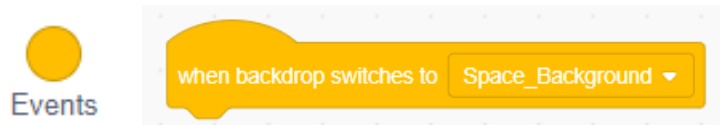
48.  Put it underneath the show block and your final block of code should look like this.



49.  Now we will do the same thing again to create our "third" level when the background switches to the "Neon Tunnel" backdrop.

50.  Go to the "Events" category and find the "When backdrop switches to _____" block and drag it to your workspace.
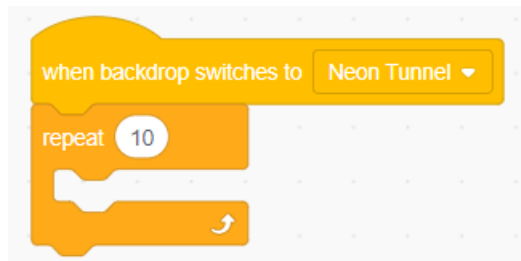


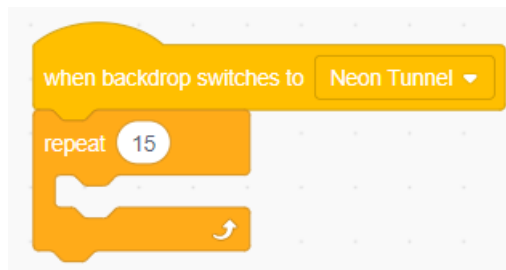51.  Now for level two we want to loop a new set of arrow clones for this level.

52.  Go to the "Control" category again and find the "Repeat _____" block.
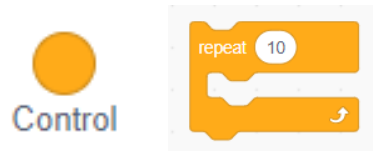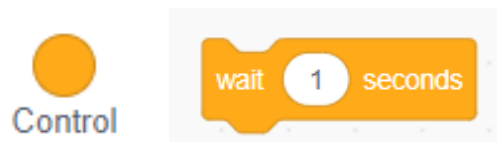


53.  Place the block under the "When the backdrop switches to _____" block.



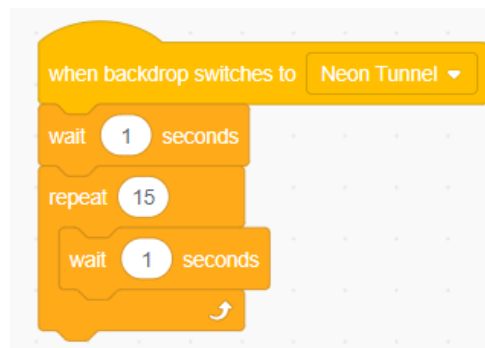54.  Change the number for the "Repeat _____" block to 15.



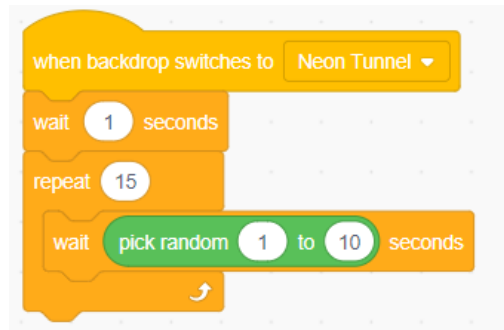55.  Again, under the "Control" category find the "Wait _____ seconds" block.



56.  Drag it two to your workspace and place one under the "When backdrop switches to _____" block and the second one in the empty section of the "Repeat _____" block.
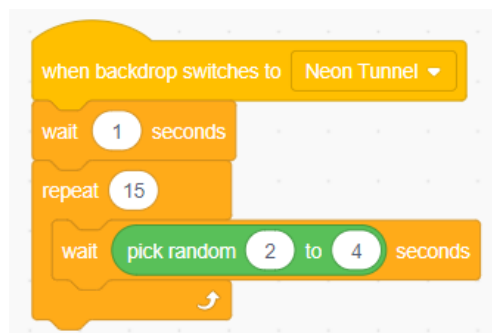


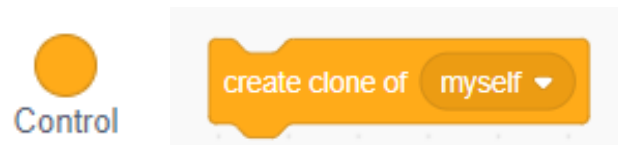57.  Next go to the "Operators" category and find the "Pick random ___ to ___" block.

Operators

pick random 1 to 10

58. Place it in the black area of the "Wait _____ seconds" block.



when backdrop switches to    Neon Tunnel ▾

wait   1   seconds

repeat   15

wait   pick random   1   to   10   seconds

59. Change the pick seconds to say 2 to 4.



when backdrop switches to    Neon Tunnel ▾

wait   1   seconds

repeat   15

wait   pick random   2   to   4   seconds

60. Again, scroll to the "Control" category and find the "Create clone of _____".
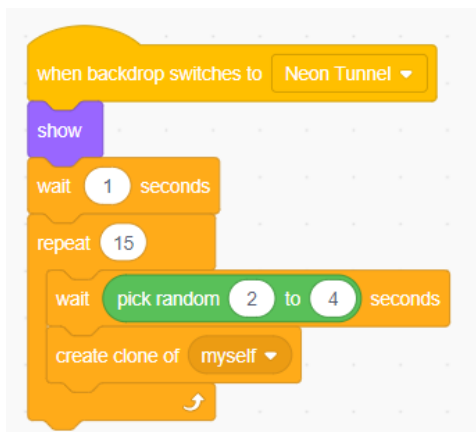


Control

create clone of   myself ▾

61. Drag it to your workspace and place it under your "Wait pick random 2 to 4 seconds" block.
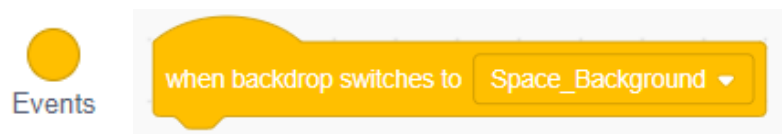
62.  Next under the "Looks" category and find the "Show" block.



Looks
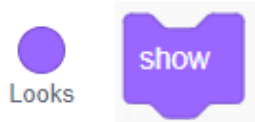
show

63.  Put the "Show" block directly under the "When backdrop switches to Neon Tunnel" block.



64.  Finally, go to the "Events" category and drag two of the "When backdrop switches to _____" block.



Events

when backdrop switches to   Space_Background ▾

65.  Change one of the blocks to have "Light2" and the other to have "Stars".



when backdrop switches to   Light2 ▾          when backdrop switches to   Stars ▾

66.  Next go to the "Looks" category and scroll down till you find the "Show" and "Hide" blocks.

Looks — show — hide

67. Grab one "Show" block and place it under the "When backdrop switches to Light2".



when backdrop switches to Light2 ▾
show
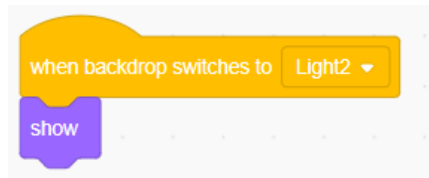
68. Grab the "Hide" block and place it under the "When backdrop switches to Stars".
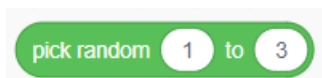


when backdrop switches to Stars ▾
hide
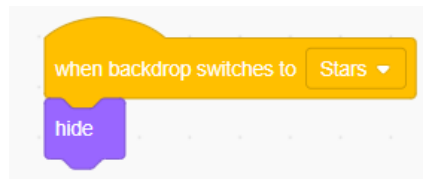
69. Now you will need to do the same thing for the rest of the arrows (yellow, blue, and red). When you are creating your code for the two "When the backdrop switches to _____" background make sure that you keep the random wait seconds for the "Space_Background" the same as the green arrows, but for the "Neon Tunnel"'s wait seconds you may use whatever numbers you want. Below is an example of the seconds used in the game for each of the arrows.
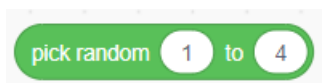
Yellow Arrow



pick random 3 to 5

Blue Arrow



pick random 1 to 3

Red Arrow



pick random 1 to 4

Happy Coding!