

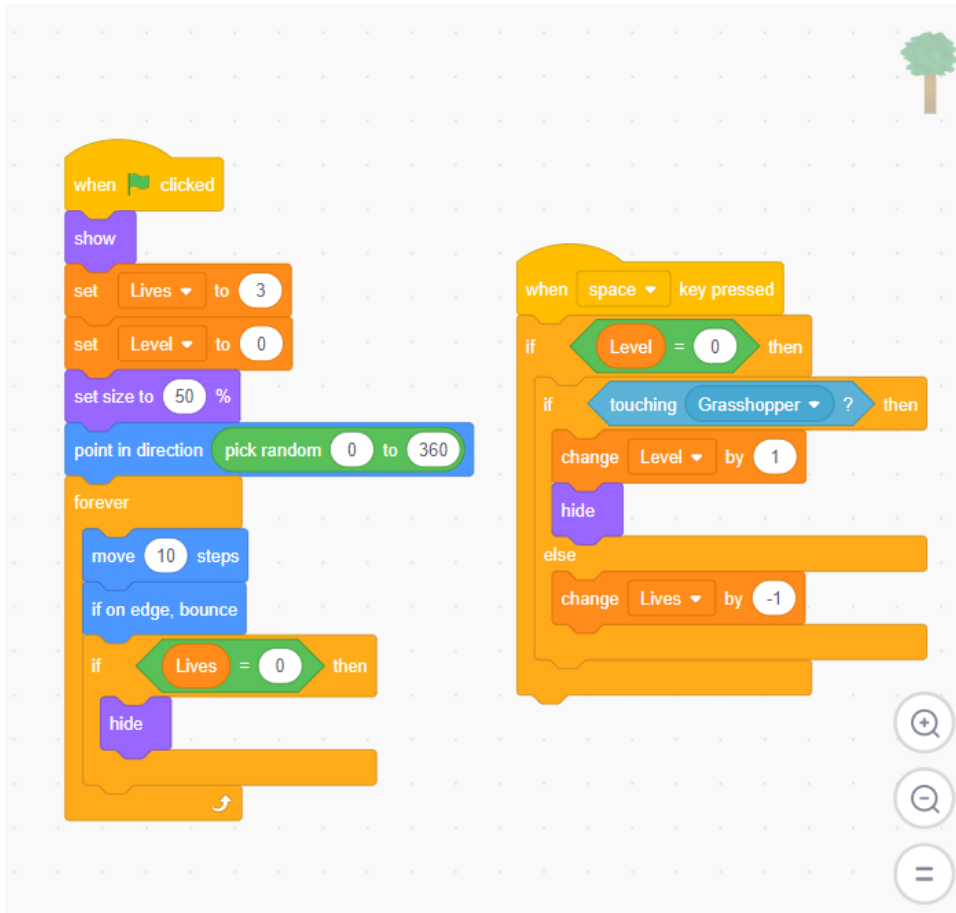
Coding a Food Chain	Grade 4, Habitats and Communities
Coding Handout: Extension	

Here's a link to the completed project: <https://scratch.mit.edu/projects/769766788>

Step 1: Re-Code the Tree

First, re-code the tree. Create a new variable named "Lives." Under the "When green flag clicked" code, add a "set lives to 3" at the top. Move the "show" to the very top. Then, delete the entire "if/then" statement to start fresh. Add an "if/then" statement at the bottom of the forever loop. In between the "if" and "then," add a comparison block. Drag a "lives" variable to the first spot, and change the "50" to "0." Inside the "if/then" loop, drag a "hide" statement.

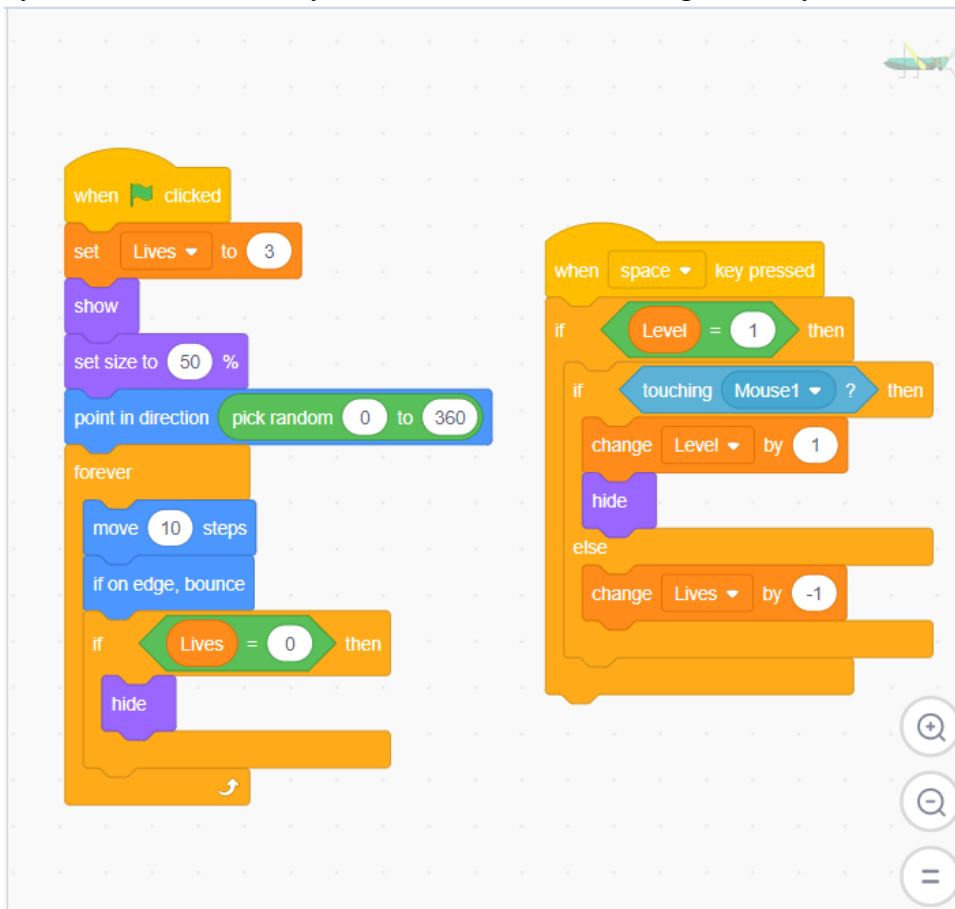
Start a new code with the "when the green clicked" block. Add an "if/then" statement. In between the "if" and "then," add a comparison block. Drag a "level" and change the "50" to "0." Inside the "if/then" statement, add "touching grasshopper." After the "then," add "change lives by 1" and "hide." Finally, after the "else," add "change lives by -1."



Step 2: Re-Code the Grasshopper

Next, re-code the grasshopper. Delete the entire “if/then” statement to start fresh. Add an “if/then” statement at the bottom of the forever loop. In between the “if” and “then,” add a comparison block. Drag a “lives” variable to the first spot, and change the “50” to “0.” Inside the “if/then” loop, drag a “hide” statement.

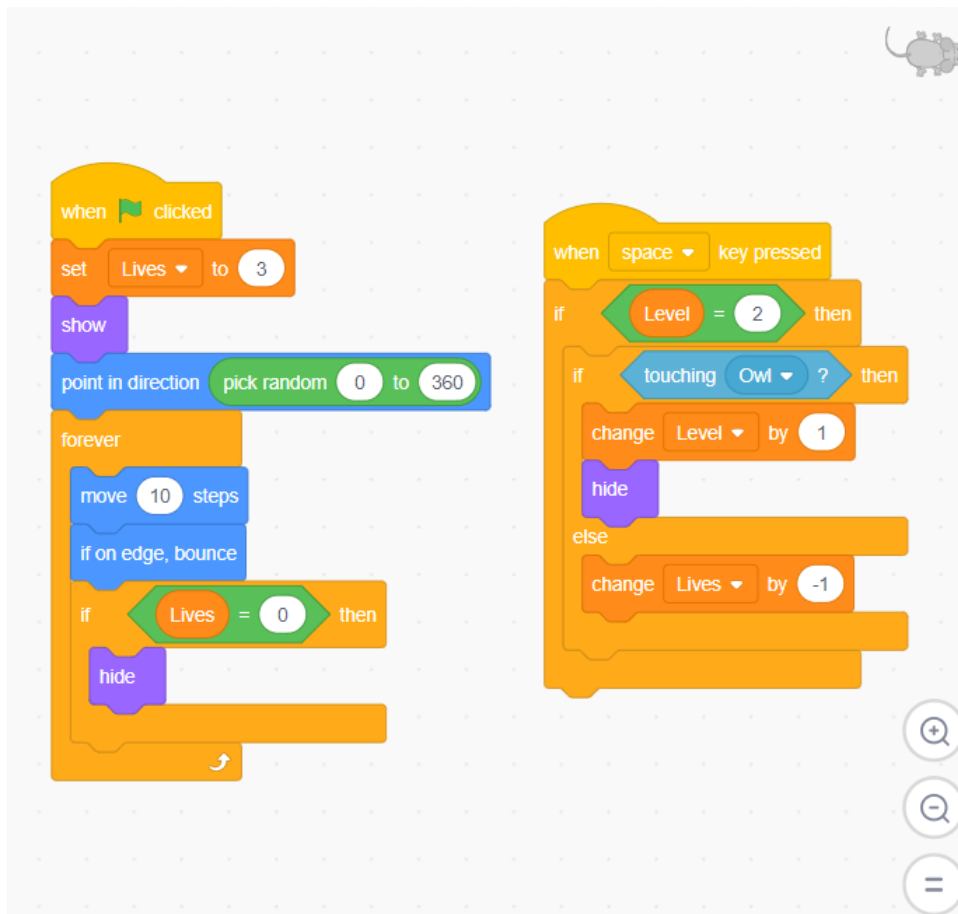
Start a new code with the “when the green clicked” block. Add an “if/then” statement. In between the “if” and “then,” add a comparison block. Drag a “level” and change the “50” to “1.” Inside the “if/then” statement, add “touching mouse.” After the “then,” add “change lives by 1” and “hide.” Finally, after the “else,” add “change lives by -1.”



Step 3: Re-Code the Mouse

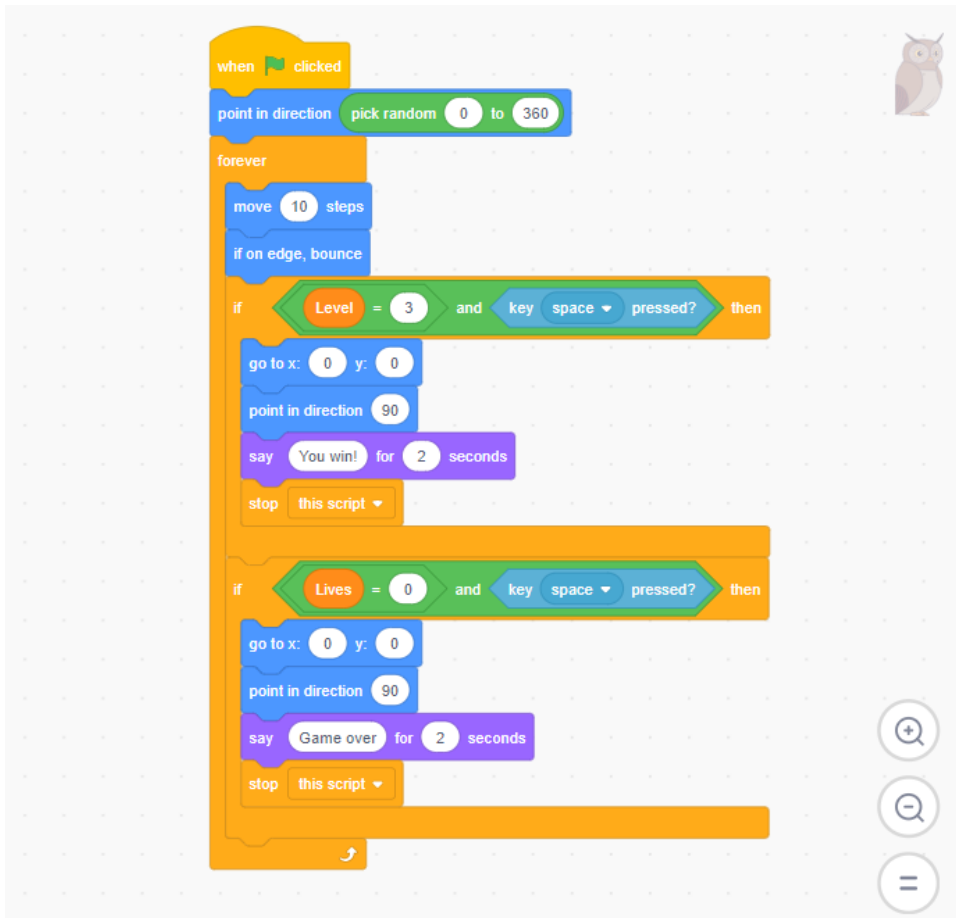
Then, re-code the mouse. Delete the entire “if/then” statement to start fresh. Add an “if/then” statement at the bottom of the forever loop. In between the “if” and “then,” add a comparison block. Drag a “lives” variable to the first spot, and change the “50” to “0.” Inside the “if/then” loop, drag a “hide” statement.

Start a new code with the “when the green clicked” block. Add an “if/then” statement. In between the “if” and “then,” add a comparison block. Drag a “level” and change the “50” to “2.” Inside the “if/then” statement, add “touching owl.” After the “then,” add “change lives by 1” and “hide.” Finally, after the “else,” add “change lives by -1.”



Step 4: Re-Code the Owl

Lastly, re-code the owl. Add a second “if/then” statement at the bottom of the “forever” loop. Add a comparison block between the “If” and “Then.” Drag a “Lives” variable to the first spot, and change the “50” to “0.” Inside the “if/then” loop, add “go to x:0 y:0.” Then add a direction block. Add a text block and change the text to “Game over.” Add a stop this script.



You're all done with the extension activity. Try it out and have fun!