How to use score in a game

This lesson assumes that the setup block contains "show score" and "set score 0".

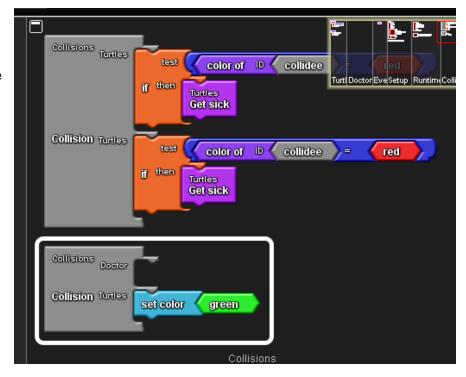
Score is a built-in variable in StarLogo TNG.

A pink block called "score" represents the current value of score. This block can be found in the Setup and Run drawer. A variable is a value that can change.



Identify where you want to change the score during the game.

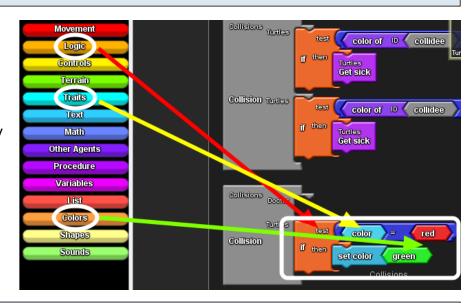
Think about when you want to increase or decrease the score during the game. For example, let's say that you want to increase the score by 10 points every time a player who's playing the doctor cures a sick turtle. The doctor cures a sick turtle when the they collide so first go to the collision page on the canvas and locate the collision block between the doctor and the turtles.



Increase score IF the turtle is sick during the collision

The collision block sets the turtle's color to green (healthy) even if the turtle is already green to begin with. Since you only want to increase the score if the turtle is sick (color=red) before the collision, you want to use an If statement to check if the turtle's color is red. If this is true, then you want to change its color to green (healthy) and also increase the score by 10.

Get an If block and an = block from the Logic drawer. Get the color block from the Traits drawer. Get the red block from the Colors drawer. Put them together like in the screenshot. Put the set color green block in the "then" part of the If block.



Increase the score by 10

Under the set color green blocks, attach an expression as follows: set score (score + 10), using blocks from the Setup and Run drawer and the + expression block and pink number block from the Math drawer. This code sets the new value of score to the old value of score plus 10 more points.

