

Code.org U3L21 Scroller Game (12 points)NAME: _____ BLOCK: _____

>>TURN THIS IN COMPLETED! THERE ARE QUESTIONS ON THE BACK <<

1. Use the animations already created in lesson 21 for this game.
2. You must use a background color and rect for the ground in the game. DO NOT use a sprite background.
3. You must complete EACH puzzle as instructed before you go onto the next. Not doing this will cause your code not to work correctly. If you come up and ask me questions and I see that you are not following instructions, I will tell you to start over.
4. For each puzzle READ all the instructions at the top. The instructions will point you to comments in the code. On each puzzle level, you will be placing the correct coding blocks underneath the comment that describes what that block is doing. Putting the coding blocks underneath the wrong comments and out of order will make your code NOT work correctly. **I REPEAT: put the blocks under the correct comments.**
5. **** Test and correct your code after completing EACH puzzle ****
6. BELOW I have created a "coding block" bank of all the coding blocks you will use today:
 - You will use all of them.
 - You might use 2 or 3 of the coding blocks below in the same puzzle.
 - I'm not telling you which puzzle they belong to. That is part of the challenge.
 - Cross off each set of blocks as you use them.
 - When they are all marked off your game should be complete.

<pre>if (player.isTouching(obstacle)) { health = health-1; obstacle.rotation = 45; } else { obstacle.rotation = 0; }</pre>	<pre>var player = createSprite(200, 325); player.setAnimation("frog"); var target = createSprite(425, 100); target.setAnimation("fly"); var obstacle = createSprite(425, 325); obstacle.setAnimation("mushroom");</pre>
<pre>target.velocityX = -2; obstacle.velocityX = -2;</pre>	<pre>text("Score: " + score, 20, 30);</pre>
<pre>if (target.x < -25) { target.x = 425; }</pre>	<pre>if (obstacle.x < -25) { obstacle.x = 425; }</pre>
<pre>background("lightblue"); noStroke(); fill("yellow"); rect(0, 350, 400, 50);</pre>	<pre>if (player.isTouching(target)) { score = score+1; target.x = 425; }</pre>
<pre>if (player.y > 325) { player.velocityY = 0; }</pre> <p>NOTE: this will be block 1 under // JUMPING</p>	<pre>if (player.y < 100) { player.velocityY = 5; }</pre> <p>NOTE: this will be block 3 under // JUMPING</p>
<pre>if (keyWentDown("up")) { player.velocityY = -5; }</pre> <p>NOTE: this will be block 2 under // JUMPING</p>	

Answer the following questions after you have finished the code:

1. What was one challenge you had while making this game?
2. What coding blocks put the fly and the mushroom “in motion” when you click Run?

3. What does this line of code output on the grid?

```
text("Score: " + score, 20, 30);
```

4. What is the difference between “**Score:** “ (with quotes) and **score** (without the quotes) in the line of code above?
5. Do you think you will need to remember how this works later in the semester when you write your own game??