

## To Create a Simple Pong Game Using Scratch

Remove the cat sprite. Either right click / delete, drag it to the middle of the screen, or click the scissors and then click on the sprite.

### The Paddle

Click the Paint new sprite button (paintbrush at the bottom of the stage).

Choose the rectangle drawing tool and draw a pong paddle.

Name the sprite by changing Sprite 1 to paddle, and drag it towards the bottom of the screen, leaving some space beneath it.

### The Paddle Script.

Drag these commands to the middle panel of your Scratch Screen and lock them together.

(control) when flag clicked

(control) forever

    Inside the forever block

        (motion) set x to 0

        (sensing) mouse x - Drag this block and replace the 0 on the set x to 0 block.

Push the green flag to test this sprite. It should follow the mouse from left to right.

### The Ball

Click the New Sprite folder at the bottom of the stage.

Find a ball sprite in the Things folder. Name the sprite.

### The Ball Script

Lock all of these commands together.

(control) when flag clicked

(looks) Set size to 100%. - Change the 100 to 30.

(motion) Go to x 0 y 0 - Change the y to 120. This places the ball in the middle to start the game.

(motion) point in direction 90 - Change the 90 to 170 to make sure the ball starts at an angle.

(control) forever

    Inside the forever block -

        (motion) Move 10 steps - Change the 10 to 5. Larger numbers make the ball faster.

        (motion) if on edge bounce

        (control) if

            In the hexagon on the if block

                (sensing) touching (drop down to) paddle

            Inside the If block

                (motion) point in direction 90. Change the 90 to (numbers) \_\_\_\_ - \_\_\_\_.

                Change the first blank in the numbers block to (motion) direction.

                Change the second blank in the numbers block to 180.

### The Stage

Double-click on the stage and then on the background tab. Click edit.

Using the rectangle tool, paint a thin colored line (different from the paddle color) across the bottom of the stage.

### Add to the Ball Script underneath the previous if block.

Double-click the ball sprite and click on the scripts tab.

(control) if

    Inside the hexagon on the if block

        (sensing) touching color – Click the color square and use the eyedropper to get the color of the line.

    Inside the if block

        (looks) say “Hello!” for 2 secs. Change the words to You Lose!

        (control) stop all

Click the green flag to play.