

# Scratch



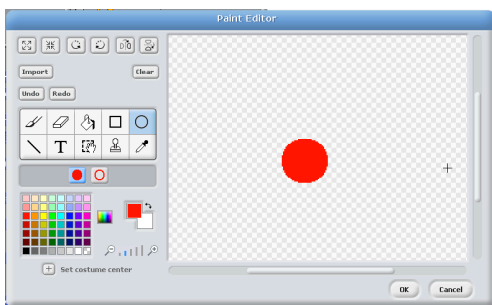
Example Games

# Ball and Paddle

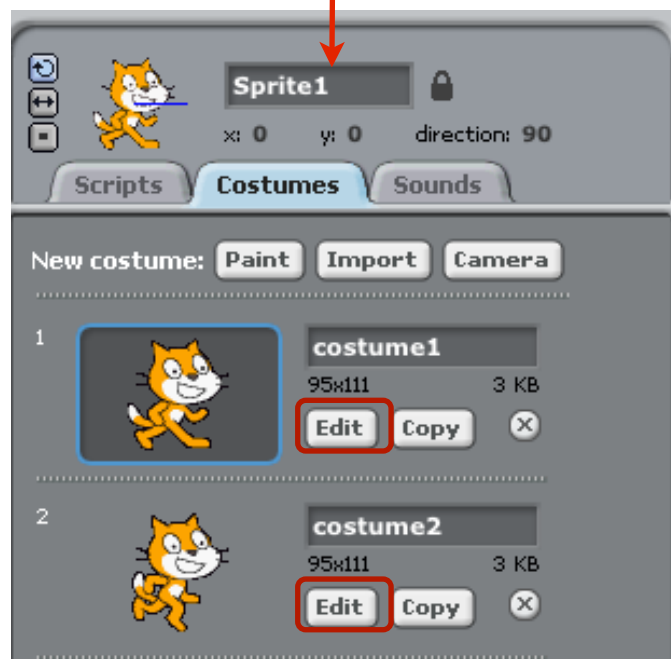
In this example you will program the ball and paddle so when the ball hits the paddle it will bounce off. You will also make it so if you miss the ball then the ball will explode.

1) You need to create your ball and paddle. Start off by editing costume one so that it looks like a ball don't make it too big. You then need to edit costume 2 and make that look like your ball exploded.

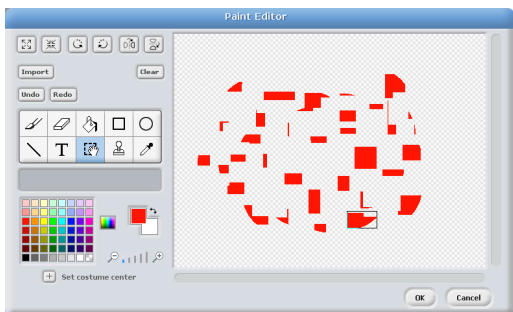
Costume 1



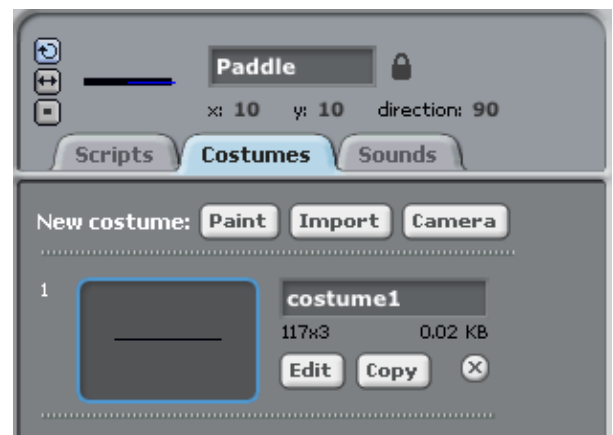
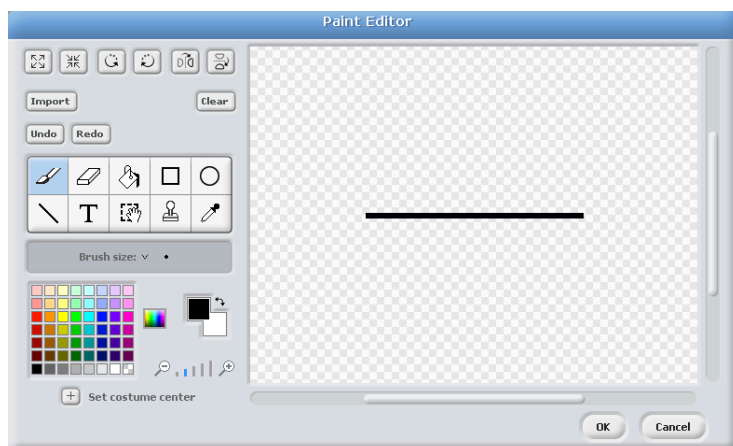
Rename This Ball



Costume 2



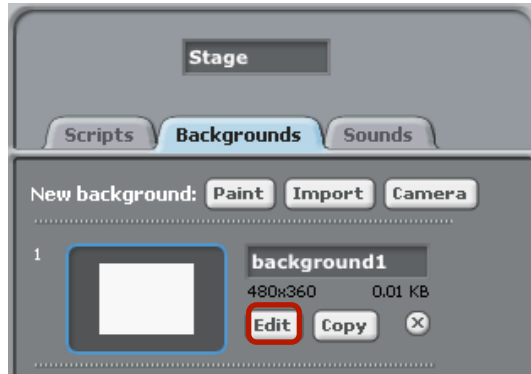
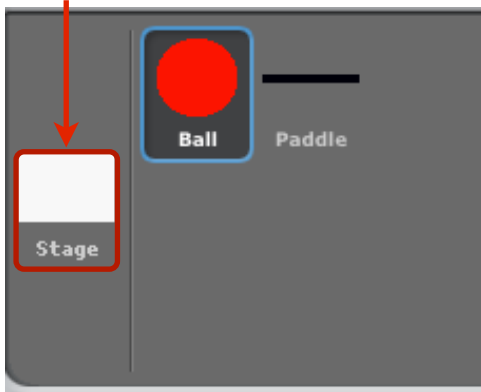
2) You now need to make your paddle. First you need to make a new sprite, click on the paint new sprite button. You should make it a straight line.



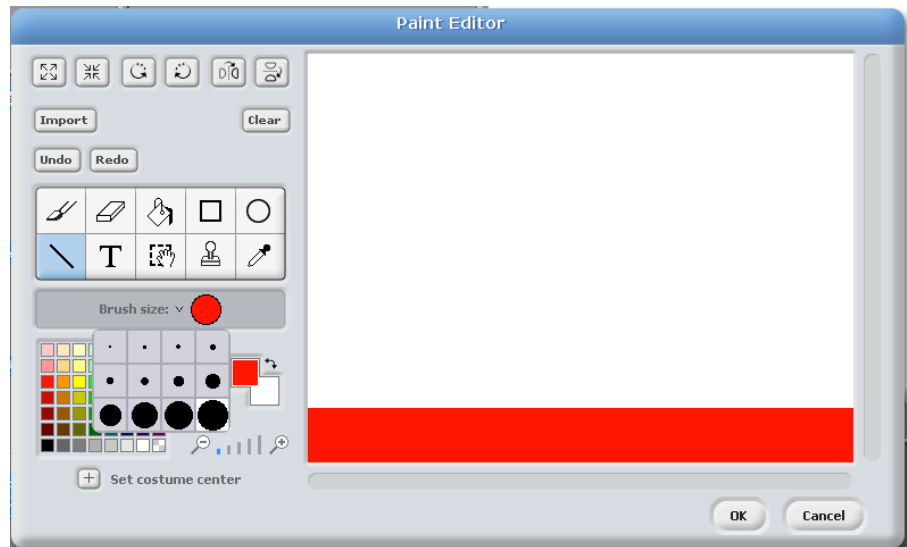
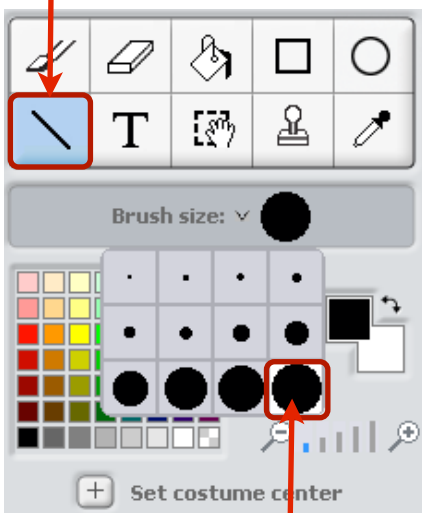
# Ball and Paddle

3) we now need to edit the background to add a solid red line along the bottom, this will allow us to detect if the ball is missed by the paddle. Click the edit button. **MAKE SURE THAT YOUR LINE IS RED.** You can also draw on a background at this point just make sure you **DO NOT** use red.

Click the stage button.



Use the line tool

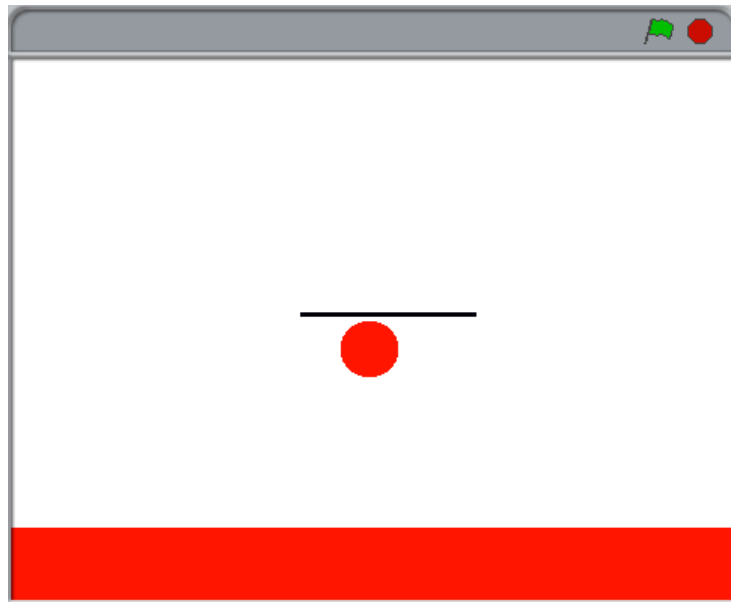


Use the largest Brush size.

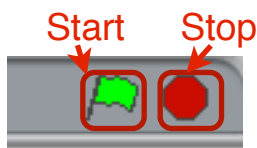
You Have now successfully Made all the part to your game. Next we are going to begin to program your game.

# Ball and Paddle

Your game should look something like the one bellow. Your Ball may still be in exploded mode we will sort that out later.



4) You now need to program your ball. Select the ball then lick scripts. First we are going to make your ball move. If you Click the green flag your ball will move, until it hits the side.



To speed up the ball make this number high and to slow it down make this number lower.

5) We are now going to make the ball go to the middle of the screen when the green flag is clicked. When you have done this the ball should go to the middle of the screen when the green flag is clicked.



Add this next to or bellow the first code we entered

# Ball and Paddle

6) We now need to make the ball travel downwards at the start of the game. Add the next piece of code next to or underneath the last piece of code we added.

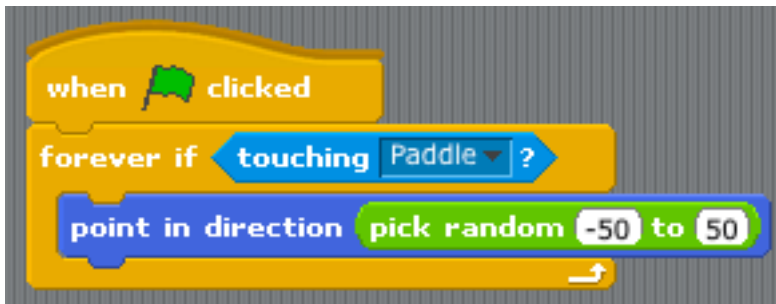


Make sure that it is set to 180

7) You now need to tell the ball that if it touches the edge then it is to bounce off. Add the next piece of code next to or underneath the last piece of code we added.



8) You now have to tell the ball if it touches the paddle then bounce off. Add the next piece of code next to or underneath the last piece of code we added.

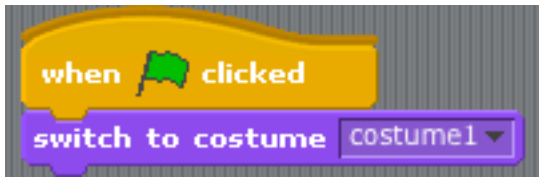


9) You now need to tell the ball that if it goes in to the red to explode. Add the next piece of code next to or underneath the last piece of code we added.



# Ball and Paddle

10) Now you need to do with the ball is to turn it back to an unexploded ball when the green flag is clicked. Add the next piece of code next to or underneath the last piece of code we added.



11) The last thing we need to do with the ball is to tell it when it explodes, it needs to end the game. Add the next piece of code next to or underneath the last piece of code we added.



You have finished programming the ball your code should look like what is below



# Ball and Paddle

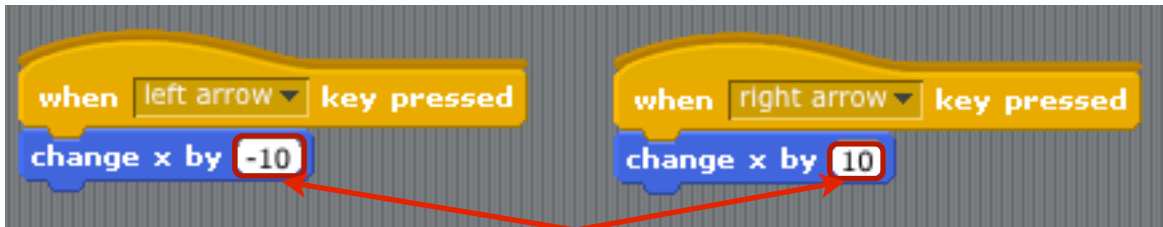
We now need to add control to the paddle.

12) You need to tell the paddle where to go when the green flag is clicked.



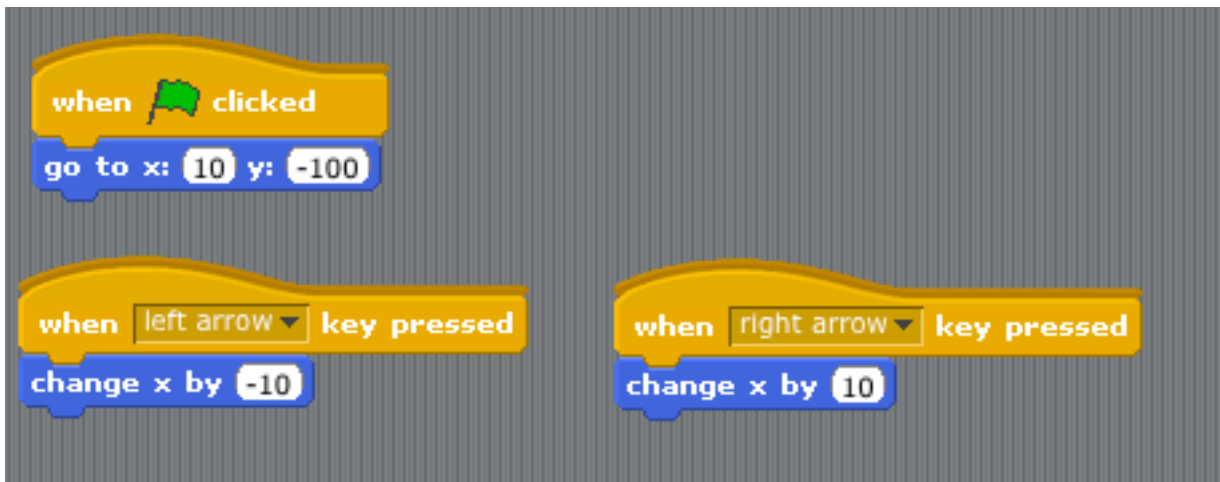
If the paddle is too low increase this number, if it is too high decrease this number

13) You need to make the paddle move left and right when the arrow keys are pressed.



Increase or decrease these numbers to change the paddle speed.

Your Paddle Code should look like this.



# Ball and Paddle

You Finished game should look something like bellow.

