

My Scratch Work



Name:- _____

Scratch Introduction

Blocks



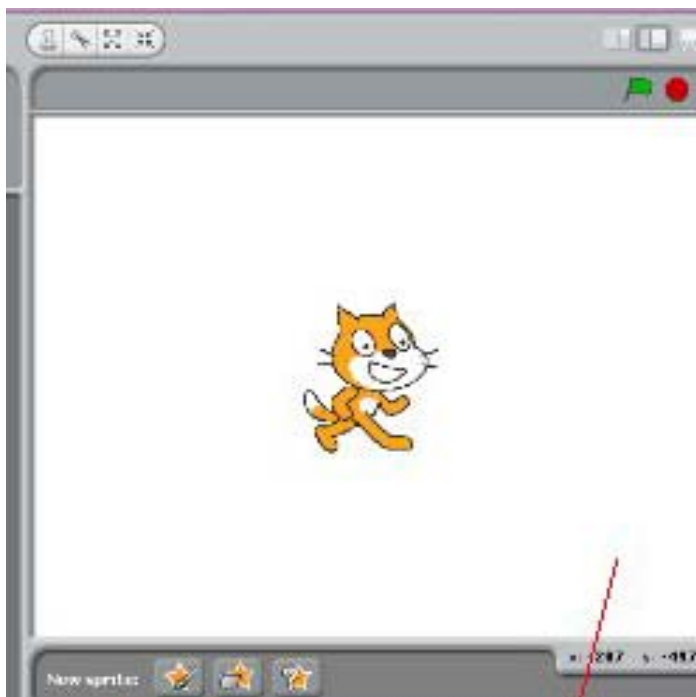
Put together they make up **SCRIPTS**.



These Scripts are used to control the **SPRITE**.



The Sprite can be seen on and is moved around the **STAGE**.



Sequence

A sequence is a set of instructions that is followed one after another.

1)Draw a Square.

2) Now write down the steps you took to make that square.

Try this in Scratch now.

Sequence 2

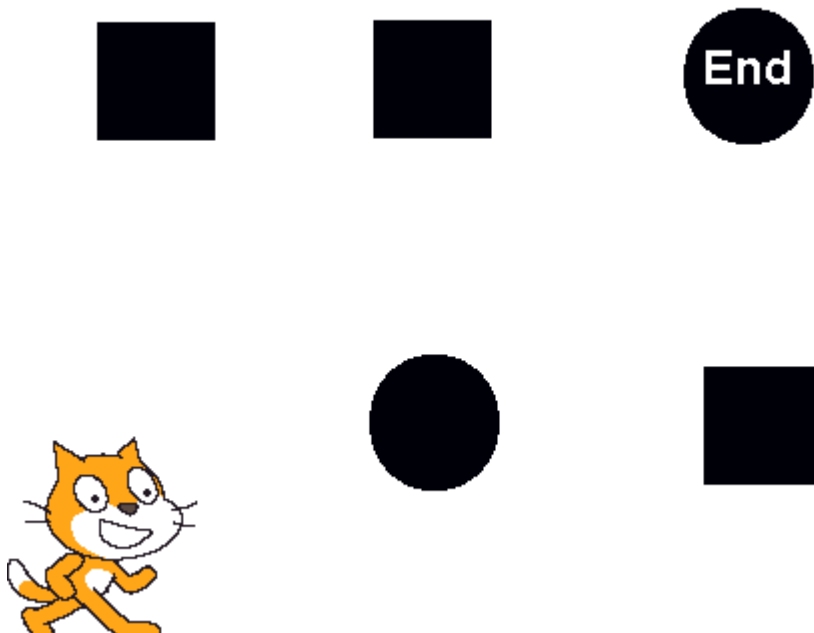
A sequence is a set of instructions that is followed one after another.

Scratch uses blocks that fit together to make Scripts . These are used to control the Sprites which you can see on the Stage.

Activity

Getting around Using only straight lines and 90 degree turns get the cat from the bottom left corner to the bottom right corner going through the shapes to the final circle.

1 Write down your instructions first before trying on the computer



```

pen down
turn ⤴ 90 degrees
move 100 steps
turn ⤵ 90 degrees
move 100 steps
turn ⤶ 90 degrees
move 100 steps
turn ⤴ 90 degrees
move 100 steps
turn ⤴ 90 degrees
move 100 steps

```

Iteration

Iteration means repeating a set of instructions.

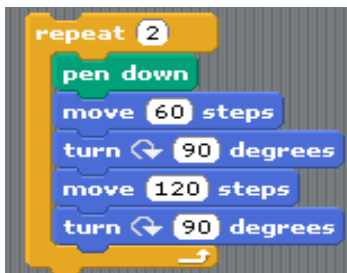
Scratch uses blocks that fit together to make Scripts . These are used to control the Sprites which you can see on the Stage.

1) Create the following scripts in Scratch, then draw what shape you see on screen

a)



b)



2) What shape would you now get if you changed the move 120 to move 60?

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- 3) Try changing the angle to create some different shapes? Here's one to get you started.
Write down at least one more shape that you make and draw it.



Conditions

A condition is when one instruction is dependant on another instruction.

Scratch uses blocks that fit together to make Scripts . These are used to control the Sprites which you can see on the Stage.

sprites scripts stage

1) Put the following script into scratch



2) What happens after a few moves?

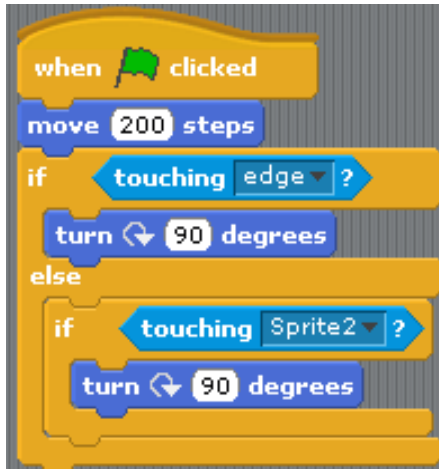
3) Click on new sprite and create your own sprite.

4) Change the touching block to the sprite you have just created rather than the edge. Put your sprite in line with the Cat sprite. What happens?

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- 5) Now sometimes the cat may not be at the same level as the sprite you have created so we are going to change what we write here in case we bump into the sprite or the edge. Use the script below to do so.



- 6) Try changing the number of moves or angles turned, and see what happens. Write down what you changed and what it did to your cat.

Broadcasting

Broadcasting means sending messages between the sprites.

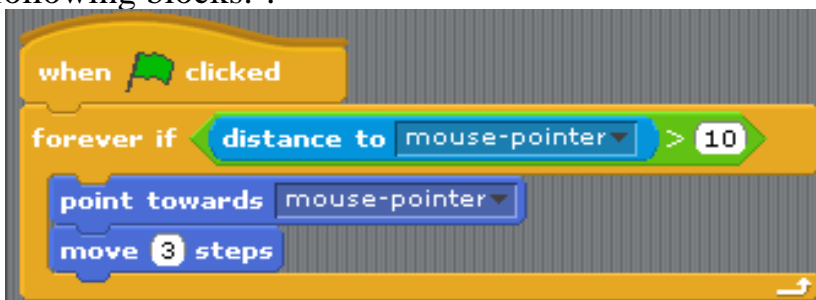
Scratch uses blocks that fit together to make Scripts . These are used to control the Sprites which you can see on the Stage.

Delete the cat sprite

Click on the stage and then background and the import the underwater background from the nature folder.

Now Select a new fish sprite

We are now going to get the fish to follow your mouse around the stage by putting in the following blocks:-

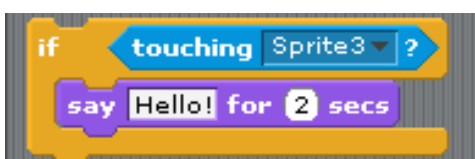


1) What happens when you do this?

Now add a crab sprite to the stage.

We are now going to add in some more blocks so that the fish can say hello if it bumps in to the crab.

Add in the following script to below the move 3 steps block



2) Can you describe what is happening now?

Now we shall add some scripts so that the crab can answer the fish back.

While still in the fish script area select broadcast message click on the little triangle and you will be asked to type in a message put in touch crab add this below the last script you put in.



Now go to your crab sprite. You will now see in the control area a block that says when I receive touch crab select this. Then add the following script underneath it.



3) Write down what is happening on screen now.

Now try getting different things to happen when the fish bumps into the crab.

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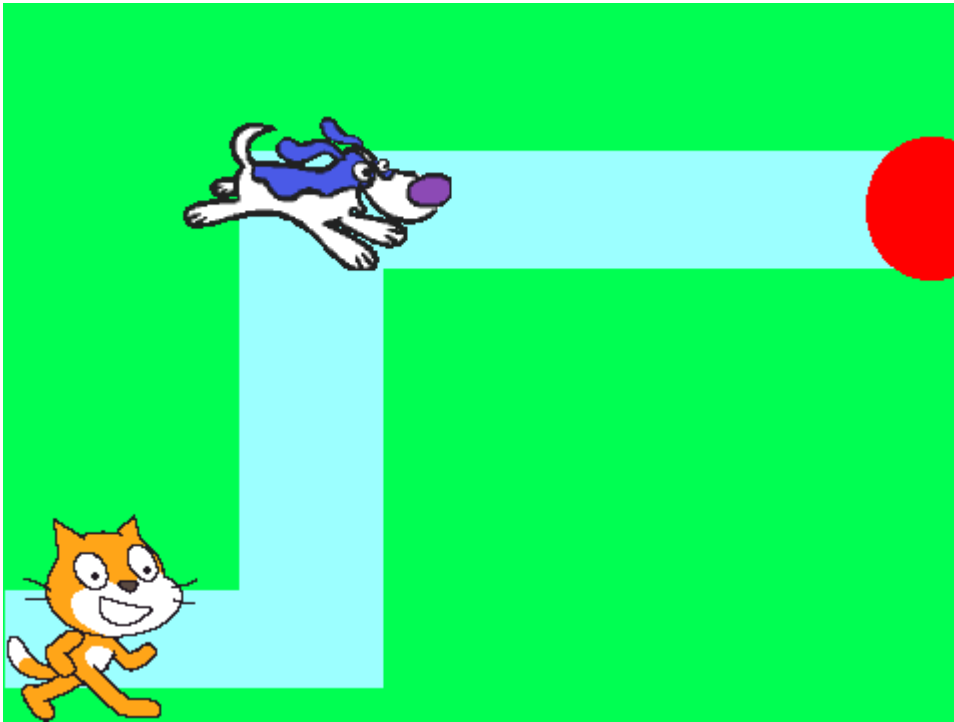
Date

Scratch Cards

Complete the tasks on the cards given once finished tick off on here that you have completed that card and swap with someone else. Complete as many tasks as you can.

Card Number	Complete(√)	Comments
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		

Can you help Scratch through the blue path to get to his ball?



To get to the first corner Scratch has to move 100 steps, however he can only move 10 steps at a time. What command would you use then to move Scratch the 100 steps if you cannot change the move 10 steps itself. After this Scratch then has to turn and move 200 steps to reach sprite 2, he will then collide with Sprite2 and then change colour. Scratch will then turn and move 200 steps to reach his ball. Picture 1 shows how to get to the ball without taking in any of the extra instructions. Picture 2 is the script with the extra instructions.

Picture 1



Picture 2

